28TH ANNUAL SYMPOSIUM

HERBALISM IN ACTION

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OCTOBER 5-9, 2017 | OREGON GARDEN RESORT | SILVERTON, OR

AMERICAN HERBALISTS GUILD

Event Proceedings
Introduction
This covers some of the basic considerations for herbalists interested in working in free or low-cost integrated clinics. There are a number of challenges facing the clinical herbalist working in these situations. These include; financial considerations, donations, acquiring equipment, storing medicines, patient compliance, working with other types of practitioners, helping patients new to herbal medicine, along with a number of other details and strategies.
These notes are based on my working at the Ithaca Free Clinic where I have been involved in planning and clinical practice since 2005.
It is very rewarding making herbal medicine accessible to those whom may otherwise have difficulty in finding these types of services and medicines. I hope this class inspires other herbalists to reach out to their communities.

Planning and Setting Up Considerations
Early stages
1. Who will be involved in the early stages of planning the clinic?
2. What types of people are you looking to work with for organizing, planning and practicing?
3. How will you structure your meetings and committees?
4. How much time do you have to commit to this project?
5. What finances do you have available?
6. As there is no licensing for western clinical herbalists in the US (as compared to TCM practitioners) this should be addressed early on, as some people might find this an uncomfortable situation.

Location
1. Will the clinic be stationary (located in a building), roving or in different locations?
2. How will you access supplies if there is not a central location?
3. Is the clinic easily accessible by public transportation?

Storage and Dispensing of Herbal Medicine
1. Herbal medicines can take up a lot of room (think large bags of dried herbs versus pills).
2. If you are working at a clinic, where will you be storing and distributing your medicines?
3. Will you keep all or part of the herbal medicines at the clinic or will some of the medicines be kept off-site such as at a home?
4. Will you be preparing the medicines on-site for the patients, or will they be made elsewhere?
5. If they are made off-site, how will the patients know where and how to pick them up?
**Working with Other Practitioners**
1. Understanding the basics of other types of health care practices is helpful in comprehending the diagnosis and treatment of other modalities.
2. Understanding the basics of other modalities also helps in making patient referrals.
3. Spend time with the other practitioners to know their specific strengths to be able to refer in-house. This is also an opportunity for them to understand more about herbalists and herbal medicine and what you offer.
4. When discussing patients with various practitioners, consider the word choices and language used, it should be comprehensible to all.
5. Practitioners may be sharing information and files with each other, consider this when writing up your patient visits.
6. It may be helpful to discuss possible interactions of herbal medicine with other practitioners.
7. Maintain a professional demeanor in the clinical setting or at least reflective of where you work.
8. Be open to new ideas, and reconsider herbal ‘doctrine’.

**Finances and Donations**
1. How to fund your services and medicines for the clinic?
2. How will you search for the donations?
3. Who will be the person(s) searching for donations?
4. What type of donations are you looking for; medicines, equipment, money or something else?
5. Who will keep track and hold on to the donations?
6. What resources do you have already to reach out for donations?
7. How to contact organizations and individuals looking for donations.
8. Will you be sharing medicines with other clinics? How will you arrange transport of the medicines amongst the clinics, especially if they are distant from each other (shipping can be very expensive)?

**Equipment**
1. Calculator
2. Dispensing equipment-bottles and bags
3. Labeling equipment-printer, software, labels.
4. Laptop-to keep notes and search information
5. Measuring equipment-scales and measuring cups
6. Notebook/paper-for practitioner and patients
7. Shelves
8. Storage areas on-site and off-site

**Skills**
1. Assessment
2. Counseling
3. Formulating
4. Physiology and pathophysiology
5. Specific plants
6. Treatment strategies
7. Understanding the drugs, medicines, diagnosis and treatment of other modalities.

Scheduling
1. How long will you be seeing each patient? How long will you see first time patients? How much time for future visits?
2. Who will schedule appointments? How will you remind patients?
3. How often will you be seeing each patient?
4. How long will you take to make prepare medicines and will this be factored into the consultation time?
5. How much time will be spent explaining how to take the medicines?

Clinical Considerations
Record keeping
1. Who will see your intake and other records?
2. Will the records be shared amongst practitioners?
3. How will you maintain confidentiality? HIPAA laws (Health Insurance Portability and Accountability Act)

Patient Compliance
1. Consider how herbal medicines may be very different than a patient’s previous medicines in taste, preparation forms, directions, and dosage.
2. Not overwhelming with too many medicines.
3. Factor in frequency and dosage of each medicine and if this works for an individual within their temperament and/or schedule.
4. Can different medicines be taken at the same time?
5. It is important to have the directions understandable, discussed verbally in the office and printed on the labels.
6. Is the alcohol in tinctures acceptable?
7. Can the patient tolerate the taste of the medicines?
8. Are they willing to take the time to prepare tea and do they have access to a stove?
9. Do they need other equipment such as a tea (French) press?
10. Before they leave, ask the patient if they understand the directions. Go over anything that seems worth repeating.

Patient Considerations
1. Tailoring diet, exercise, stress management and lifestyle counseling for the individual.
2. Are they currently on any other conventional or holistic medicines? Do these need to be taken into account with the herbal medicines?
3. It can be helpful to start light with herbal medicines and other suggestions to help them form patterns with taking them.
4. How can you fit herbal medicines and treatment strategies in already formed routines for the patient?
5. Will the patient need help navigating the health care system (i.e., getting nicotine patches, lab tests or drugs). Do you have people you can network with to help them get these things?
6. Do they need other social services such as housing, or rehabilitation?
7. Will you be providing all their short or long-term medicine or will they also be getting them elsewhere?
8. Is it possible to help a patient make their own medicine(s)? Are they interested in preparing their own medicines? Do they have the skills to gather the correct plant? Do they have the equipment to prepare various medicines such as tinctures? Is asking them to make their own medicine just going to cause more stress in their lives?
9. Help patients sort through the medicines (conventional and holistic) they are currently taking.
10. Let them know that herbal medicines are often only one aspect of their treatment.

Counseling Skills
1. Personal boundaries are important in establishing relationships with patients.
2. Trust and confidentiality are two cornerstones of practice.
3. It is important to listen to patient’s health issues and offer the best options for their health, whether from one’s own skills or from another practitioner.
4. It is more important to provide health services than promote an agenda.
5. Try to listen more than talk; this makes it easier for the patients to talk about themselves.
6. Key concepts when considering treatment; affordability and accessibility.
7. Avoid assumptions.

Educating patients
1. There is a fine line between educating and over-informing. Watch, listen and ask to make sure your patient is getting the right amount of information for them to take in.
2. Discuss why you are asking certain questions and making specific recommendations.
3. Suggest other resources such as books, Internet sites (websites and chat groups) and other practitioners.
4. Have brochures explaining various aspects of herbal medicine.
5. Explain dosages with each new patient. Use visual aids such a dropper to explain a dropper full or a tea press to show them how to use one. This can be done for each new type of preparation.
6. Be a bridge for your patient between conventional and holistic medicine.
   • If they ask about their drugs, medical procedures or lab results it can be very helpful to have them explained by someone with an understanding of these.
7. It can be helpful to explain how marketing often oversimplifies the actions of various herbal medicines and how your treatments may differ than then some popular remedies.
8. Consider word choices with your patients whether in educating them about their condition or why you are choosing certain herbal medicines and treatments. Is your language accessible and understandable?
9. It can be helpful for some patients to show them how to navigate the web and look for information or products online.
10. For interested patients, let them know resources to research their illness and the medicines they will be taking.
Affordability and Accessibility Considerations
1. If the patient is going to get their medicine outside of the clinic, are your recommendations obtainable and within their financial means?
2. If they are getting medicines and treatment outside the clinic, what are the comparative costs of herbs versus conventional medicines?
3. Does the patient have insurance and how will this affect your recommendations?
4. How will you the practitioner be able to afford the medicines given to patients?

Common Health Conditions
1. Allergies
2. Cardiovascular disorders
3. Chronic health conditions (i.e., Lyme disease, Chronic fatigue)
4. Conditions considered undiagnosable or untreatable
5. Dermatological conditions
6. Digestive disorders
7. General health check-up
8. Gynecological disorders
9. Idiosyncratic health disorders
10. Immunological disorders
11. Insomnia
12. Mental health (anxiety, depression, ‘stress’, cognition difficulties)
13. Pain
14. Respiratory disorders
15. Urinary tract disorders

Treatment Considerations
1. How many medicines will you be giving the patient?
2. What types of preparations will the patient be taking?
3. Consider treatments from other modalities that the patient may be doing (i.e., physical therapy, acupuncture) and how herbal medicine or other suggestions may interact with these.
4. Consider possible interactions of other medicines they are taking.
5. Suggestions
   • Ask before preparing medicines. Check with the patient to see if they are willing to take the types of medicines you are suggesting as well as the frequency. Do not give unwanted medicines.
   • Try to have the medicines taken at the same time, even if not ideal to make taking them easier.
6. Is there a way for them to get in touch with you if they have any questions?
7. Suggest resources for procuring their own medicines if possible.
8. Depending on the medicine and patient, let them know that they can alter their dosage and/or stop taking it if they have negative side effects.

Therapeutic Categories and some useful Plants
1. Allergies-Ambrosia, Euphrasia, Lobelia, Glycyrrhiza, Solidago, Urtica
2. Antiinflammatory-Curcuma, Glycyrrhiza, Salix, Zingiber
3. Antispasmodics - Garrya, Piscidia, Viburnum
4. Anxiolytic - Anemone, Ocimum, Piper
5. Astringents - Cinnamomum, Quercus, Salix
6. Bitters - Artemisia, Achillea, Berberis, Gentiana
7. Concentration/Memory aids - Acorus, Centella, Ginkgo
8. Demulcents - Althaea, Ulmus
9. Dermatitis aids - Arctium, Rumex, Stellaria
10. Digestive aids - Filipendula, Foeniculum, Matricaria, Nepeta, Ulmus
11. Flavoring - Aloysia, Cinnamomum, Cymbopogon, Elettaria, Mentha
12. Mental health aids - Acorus, Ginkgo, Hypericum, Leonurus, Melissa, Ocimum, Passiflora, Piper, Rosa, Scutellaria, Valeriana, Verbena
13. Sedatives - Humulus, Scutellaria, Valeriana
14. Respiratory aids - Achillea, Eupatorium, Glycyrrhiza, Ligusticum
15. Cardiovascular aids - Aesculus, Crataegus, Ginkgo
16. Gynecological aids - Actaea, Dioscorea, Paeonia, Vitex
17. Immunity and Infections - Achillea, Baptisia, Berberis, Echinacea, Eupatorium, Ligusticum
18. Nervines - Eschscholtzia, Hypericum, Melissa, Nepeta, Ocimum, Passiflora, Rosa, Scutellaria, Valeriana
19. Pain remedies - Humulus, Lactuca, Piper, Piscidia, Valeriana
20. Sleep aids - Humulus, Piscidia, Valeriana
21. Skeletal muscle relaxants - Actaea, Pedicularis, Piscidia, Scutellaria
22. Tonics - Astragalus, Ceanothus, Eleutherococcus, Ganoderma, Withania

Commonly Used Plants
1. Achillea millefolium - Yarrow
2. Acorus calamus - Calamus
3. Actaea racemosa - Black cohosh
4. Aloysia citrodora - Lemon verbena
5. Althaea officinalis - Marshmallow
6. Ambrosia artemisiafolia - Ragweed
7. Anemone spp - Anemone
8. Angelica sinensis - Don quai
9. Arctium spp - Burdock
10. Astragalus spp - Astragalus
11. Avena spp - Wild oats
12. Berberis spp - Barberry, Oregon grape
13. Ceanothus americanus - Redroot
14. Cinnamomum spp - Cinnamon
15. Curcuma longa - Turmeric
16. Cymbopogon citratus - Lemon grass
17. Dioscorea villosa - Wild yam
18. Echinacea purpurea - Echinacea
19. Eleutherococcus senticosus - Siberian ginseng
20. Elettaria cardamomum - Cardamom
21. Eschscholtzia californica - California poppy
22. Eupatorium perfoliatum - Boneset
23. Euphrasia spp - Eyebright
24. Filipendula ulmaria - Meadowsweet
25. Ganoderma tsugae/lucidum - Reishi
26. Garrya spp - Silk tassel
27. Gentiana spp - Gentian
28. Ginkgo biloba - Ginkgo
29. Glycyrrhiza uralensis - Licorice
30. Humulus lupulus - Hops
31. Hypericum perforatum - St. Johnswort
32. Lactuca spp - Wild lettuce
33. Leonurus cardiaca - Motherwort
34. Ligusticum porteri - Osha
35. Lobelia inflata - Lobelia
36. Matricaria chamomilla - Chamomile
37. Melissa officinalis - Lemon balm
38. Mentha x piperita - Peppermint
39. Nepeta cataria - Catnip
40. Ocimum tenuiflorum - Tulsi
41. Paeonia spp - Peony
42. Passiflora incarnata - Passionflower
43. Piper methysticum - Kava kava
44. Piscidia piscipula - Jamaican dogwood
45. Prunus serotina - Wild cherry
46. Quercus spp - Oak
47. Rosa spp. - Rose
48. Rumex spp. - Dock
49. Salix spp. - Willow
50. Scutellaria lateriflora - Skullcap
51. Solidago spp. - Goldenrod
52. Taraxacum officinale - Dandelion
53. Ulmus rubra - Slippery elm
54. Urtica dioica - Nettles
55. Valeriana officinalis - Valerian
56. Verbena hastata - Blue vervain
57. Viburnum opulus - Crampbark
58. Viburnum prunifolium - Black haw
59. Vitex agnus-castus - Vitex
60. Withania somnifera - Ashwagandha
61. Zingiber officinale - Ginger
Street medicine refers to the health care offered at protests, demonstrations, rallies and similar events. These are generally urban situations, sometimes planned well in advance and other times springing up spontaneously. They may last for just a few hours, or for weeks as with the Occupy encampments.

This handout is geared for ‘on the ground’ practitioners, meaning those herbalist’s who are in the fray of the protests, whether walking with the demonstrators or in a clinic set up for the event. Herbalists can offer a valuable service in these situations, as herbal medicines can be helpful as primary and adjunct treatments. Individual medics should know their skill limitations and pass along patients to more knowledgable persons if the situation is beyond them or if it calls for a different treatment modality. It is helpful to have a variety of health care practitioners to assess and treat. Working together is a boon for the patients as well as other staff.

It is common for street medics to need medical care themselves. This is because they will likely not be distinguished from other protesters and may also be hurt during a demonstration. It is also important to realize that many of the street medics at these events are new to practicing medicine and may have difficulty adjusting to their new role and situations.

The herbalist first aid bag should include numerous medicines to help out the protesters as well as other medics. These situations can be stressful and throw off people’s diets and sleep patterns. So as well as dealing with injured protestors, you will also be working with stressed-out medics. A cool head and critical thinking go a long way in these circumstances.

Treatment protocol conditions range from being in a stressful environment (which may induce anxiety and insomnia), injuries, asthma, gastrointestinal disturbances, and exacerbations of pre-existing health conditions.

Another consideration in that within urban environments many useful herbal medicines and other supplies are commonly found in supermarkets and shops. These include Turmeric for inflammation, Cayenne as a warming agent, Fennel for indigestion and rubbing alcohol as a wash.

It is important to consider preventative and post-event care. Preventative personal care means bringing along all the medicines (conventional and holistic) that are important to you, as well as items of comfort, such as favorite snacks or a stuffed animal. Also consider having a support network for after-care. This includes medicines for both physical ailments such as injuries, as well as medicines for emotional health.

**Common Health Conditions**

- Allergy
- Anxiety/Stress
- Asthma
- Cold/Frigid
- Cold/Influenza
- Dehydration
- Diarrhea
- Digestive disorders
- Emotional crises
- Exacerbations of pre-existing conditions
- Infections
- Injuries
- Insomnia
- Pain
- Skeletal muscle pain
- Soft tissue injuries
- Sun exposure
- Trauma
- Wounds
General Considerations
1. The majority of the herbal medicines listed below are tinctures (plants in an ethanol alcohol medium). There are a few reasons for this. They are convenient as they are ready-to-go with no further preparation required. As a concentrated plant medicine, less is generally needed. And they are easily dispensed for immediate use and can be put into a container to be given out for later use.
   There are a few disadvantages. One of the main ones is that some people cannot take alcohol. For this reason, it is helpful to have a few of the most common remedies in glycerin, capsules, tea or other non-alcohol forms. They are also strong tasting dissuading some people from ingesting them. And some plants are not best extracted in alcohol for their medicinal effect.
2. When working with people, ask if they are on any medicines. This can be especially important if they have forgotten to bring along essential conventional medicines or if they are vomiting and cannot hold down their medications.
3. For any specific conditions, ask the patient if there is any medicine that has previously helped with their condition. This can save a lot of time if you have or can obtain the medicine, whether herbal or pharmaceutical.
4. As you prepare for any event, consider what medicines would be most helpful in the situations you will be in.
5. Keep a backstock of medicines somewhere such as a clinic or home to refill the medicines you carry as well as in case of any them breaking or getting lost.
6. Have ‘to go’ bottles so folks can take their medicines with them. 1 oz plastic bottles with caps are a good size. You can use tape on the bottles to write what is in it so that medicines can be replicated and replaced later.
7. When giving medicines to go, write and let the patient know both how much (quantity) and how often (frequency) to take their medicines. Ask them to repeat this to make sure they understand. This is more important with stronger herbal medicines.
8. Street medics should be aware that they are often asked to ‘police’ situations at events where they may be violence or people are acting out in harmful ways. Medics are often seen as having quasi-official status and being a part of the community, rather than being an outsider. It is helpful for all staff to understand how to respond in these situations and know when to seek help, as they can be dangerous.

Tincture Considerations
1. Before giving anyone a tincture, let them know it has alcohol in it. For some people, no amount of alcohol is acceptable internally. Since many people do not know what tinctures are, it is helpful to say something such as “I would like to give you this tincture. Tinctures have alcohol in them, is that okay for you?” Many folks will be puzzled by this question, but for those who do not drink alcohol for health or religious reasons, they will appreciate you asking.
2. Below are approximate dosages for using these tinctures. There is a lot of individuality when it comes to how much to use of a specific medicine for an individual. To help establish personal protocols, ask if the patient has previously tried herbal medicines and/or if they are sensitive to any medicines in general.
3. For medium to larger tincture dosages, it is helpful to dilute the medicines in water or other fluid before administering. You can also offer a chaser.
4. It can be helpful to initially try small doses of a medicine to see if they help with acute conditions such as pain. Sometimes one can see/feel an immediate effect and this can help make decisions on which medicines are helpful as well as figure out how much of a specific medicine to use.

5. The below guidelines are recommendations for safety reasons and also to guide the hands for those newer to administering herbal medicines. It can be helpful to initially work with someone more knowledgeable to gain a finer understanding of how to use these medicines.


7. The term ‘plateau’ is used here to mean a medicinal effect has been reached from a tincture and more does not make the situation better. An example, someone takes 5 drops of Lobelia for their asthma, and finds some relief. They then take another 5 drops and feel better yet. They then take another 5 drops and there is no further change. They have reached their plateau dose.

8. Loading dose is a term that describes how much you may initially give of a specific medicine. It is often larger than later doses as you are looking to effect a bigger change. For instance, if you are giving activated charcoal for a gut infection, your first dose might be 1 teaspoon (in water), where future doses might be ½ teaspoon.

Tincture Calibrations
Below are some basic calibrations describing approximately how many milliliters (ml) and drops are in a half full dropper of the three most common sizes for dispensing tinctures. Half dropper full is being used here as a measurement as it is difficult to fill a dropper to the top, so this seems more practical.

- 1 oz dropper-½ full is about 1 ml (about 20 drops).
- 2 oz dropper-½ full is about 1 ml (about 20 drops). Yes it is the same as a 1 oz dropper.
- 4 oz dropper-½ full is about 1.5 ml (about 30 drops).

Tincture Dosage Key
- **Drop dose**—these strong medicines should be used with caution and in small amounts as they can have harmful effects. A possible dosage is 3-5 drops (not droppers) a few times a day. See low dose below for comparison.
- **Low dose**—these medicines often work well at lower dosages. While these work best at smaller doses, they usually cause minimum (if any) harmful effects if more is taken. 3-5 drops is often a useful starting dose with more given as needed until a desired effect or a plateau is reached. The difference between this and drop dose is about toxicity. More of the low dose medicines can be given immediately to reach a desired effect, while the drop dose tinctures have to be curtailed after a small amount is taken to avoid harm.
- **Medium dose**—these medicines are relatively safe and medium to larger doses can be taken. The plateau is often reached earlier then with large dose botanicals. ½-1 ml is usually a good loading dose.
- **Large dose**—these tinctures are very safe and often work best in larger doses. The loading dose is often around ½-2 ml and more is taken as needed. Many of the immune tonics such as Echinacea fit into this category so you would not be looking for a plateau response, as their function is not seen immediately.
Tinctures
1. **Anemone** (*Anemone spp*)-low dose. For panic and acute anxiety. A useful trauma and panic attack remedy.
2. **Arnica** (*Arnica spp*)-drop dose (use with caution). Antiinflammatory, useful immediately after soft tissue injury (sprains, etc.) to speed recovery.
3. **Chaparral** (*Larrea tridentata*)-low to large dose. For internal and external infections, bacterial, viral and protozoal.
4. **Echinacea** (*Echinacea spp*)-medium to large dose. Immune system medicine, useful for viral and bacterial infections and as a preventative.
5. **Eyebright** (*Euphrasia spp*)-medium dose. Antihistamine-type tincture for allergic reactions. See Ragweed for details.
6. **Immune combination tincture**-a combination of immune herbs for infections and as a preventative.
7. **Jamaican dogwood** (*Piscidia piscipula*)-medium to large dose. Good general pain remedy. Combines well with other pain remedies. Also helpful for insomnia and menstrual cramps.
8. **Kava kava** (*Piper methysticum*)-low to large dose. For pain and as a sedative. Good for frayed nerves and relaxing after a hard/busy day.
9. **Lobelia** (*Lobelia inflata*)-low dose. Asthma remedy, also helpful for some types of headaches and excess stress.
10. **Meadowsweet** (*Filipendula ulmaria*)-medium to large dose. General antiinflammatory but especially for digestive tract inflammation.
11. **Oregon graperoot** (*Berberis spp*)-medium to large dose. Helpful for a wide range of infections including viral, bacterial and protozoal.
12. **Osha** (*Ligusticum porteri*)-medium dose. Respiratory viruses and sore throats,
13. **Pain formula**-low to large dose. A combination of sedative and pain-relieving herbs for various pains and trauma.
14. **Passionflower** (*Passiflora incarnata*)-medium to large dose. A nerve tonic, useful when feeling edgy, and helpful to prevent it.
15. **Lousewort** (*Pedicularis spp*)-medium dose. A skeletal muscle relaxant, especially for back and shoulder pain.
17. **Ragweed** (*Ambrosia spp*)-low to medium dose. Antihistamine-like action for hypersensitivity allergic reactions such as hives, hay fever, and insect stings. This is not a substitute for injectable epinephrine (such as an EpiPen).
18. **Silk tassel** (*Garrya spp*)-low dose. For smooth muscle pain such as menstrual or digestive cramps.
19. **Skullcap** (*Scutellaria spp*)-low to large dose. Sedative, relaxing, stress and pain relieving. Also good for skeletal muscle pain. Works well in combination with other similar acting plants.
20. **Valerian** (*Valeriana officinalis*)-low to large dose. Sedative, pain relieving, relaxing, and a very useful sleep aid. Start with a very low dose to look for any adverse reaction, such as agitation or restlessness.
21. **Willow** (*Salix spp*)-large dose. An antiinflammatory for soft tissue injuries (sprains, etc.) and other inflammatory problems.
22. **Wild lettuce** (*Lactuca spp*)—low to large dose. Sedative, pain relieving. Good for a wide variety of physical pain.

23. **Wild yam** (*Dioscorea spp*)—medium to large dose. Smooth muscle relaxant, especially useful for digestive cramps.

**Other Medicines**
1. **Activated charcoal**—Drawing agent, internal for digestive infections, external for infected wounds.
2. **Chamomile herb** (*Matricaria recutita*)—for tea. Soothing, relaxing and for GI upsets. Well-liked.
3. **Lavender essential oil** (*Lavandula spp*)—burn medicine (dilute).
4. **Licorice root** (*Glycyrrhiza uralensis, G. glabra*)—antiinflammatory and moistening for internal mucosal conditions for the digestive and respiratory system.
5. **Osha honey** (*Ligusticum porteri*)—for sore throats and coughs.
7. **Salve**—external applications for a number skin conditions, including infections, burns and rashes. Helpful to have a few types for different problems. Also helpful to have smaller containers so people can take the medicine with them.
8. **Slippery elm** (*Ulmus rubra*)—powder as a demulcent for sore throat and digestive remedy.
9. **Tobacco** (*Nicotiana spp*)—spit poultice for insect bites and stings.
10. **Valerian glycerite** (*Valeriana officinalis*)—for pain and insomnia, can be used for those who cannot ingest alcohol.
11. **Yunnan paiyao** (Patented Chinese medicine)—hemostat to help stop bleeding.

**Supplies**
1. **Bands aids**—to cover small wounds.
2. **Basins**—for soaks
3. **Disposable gloves**—to work on wounds and avoid infection and contamination.
4. **Dressings**—an assortment to cover wounds.
5. **Elastic bandages** (ACE bandage, Sports wrap, etc.)—Used as a wrap for soft tissue injuries such as sprains and strains.
6. **Face mask/Bandana**—for protection when looking in people throats.
7. **Flashlight and Headlamp**—to work in low light and checking throats.
8. **Rubbing (Isopropyl) alcohol**—for washing infections.
9. **Self-adhesive bandages** (Vetwrap, Coflex and other brands). This is thinner than elastic bandages and useful for holding wound dressings in place.
10. **Small plastic containers**—to give patients medicines to go.
11. **Tape**—an assortment of sizes and types to hold wound dressings in place.
12. **Tweezers**—for splinters and similar.
# Building an Integrative Oncology, Chronic, and Acute Care Dispensary

The Herbalist's Basic Guide to dispensing herbs and nutritional supplements to people with chronic conditions and also providing short term needed essentials for acute care and first aid—building an expert dispensary

By Michael C. Altman, RH (AHG), CN, MIIS
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## Product Selection Criteria:
The Quadelle Principle & De-Amazonization—re-invest.

**Efficacy & Novelty**
- Tinctures & Topicals, EO's, and other liquids
- Branded Practitioner and OTC Supplements: nutritional, Ayurvedic, TCM, blended herbal, etc.
- Dispensary-made and blended powders & pow extracts: T10 Foutrify, Ashitaba
- Novelty Encapsulated Products: AnthoAdv, Tri Crown, Hep3, 5 Revive, Elixir Six, 7Teas, Be9, 11 Petals, Baker’s Doz. looking for partners: big cap batches to suppositories…and cooperative dispensaries, fields and tincture-prod. labs
- Protein and nutritional blended powders
- Infusions and Decoctions (Teas)

## What is local?  How can we support regional domestic businesses?  When to DIY?
- Is an herb shipped from Africa to be tinctured in rural Oregon and then shipped to Maine to be consumed sustainable?
- Is a tincture made in NJ out of W. Coast raw material and shipped to California sustainable?  Does any of it matter?
- Is bioregional herbalism enough for today’s healing and what’s needed to bring herbal medicine frontline? (Clinical research to support using bleeding heart, Devil’s Club, Nettle seed? Ceanothus? vs clinically studied extracts as example)
- The Epidemic of over-packaging: a colossal problem.  Amazon, Apple, etc. Supplement containers ¼ full
- Versus shipping $500 in a USPS padded envelope for $8
- Shipping: What to know to minimize the woe.  Drop shipping, fulfillment, and logistics, Art's story, Bastyr, DORwa.gov

## An Old is New Again Paradigm: Support Each Other
- Cooperative Dispensaries – hook up with farms, grow baby grow, and diversify the locations from latitude to elevation
- Collective Financing—suppositories anyone?
- Off the Grid Healthcare and Health Insurance
- Health Truck, RV, mobile model—disaster relief and long stay
- Value is a Virtue – if you want positive outcomes, you have to make the protocol affordable
- What are your favorite affordable pre-mixes you want to share?  Clinical pearls for the art…and the science...

## Minimize to Maximize

- 2016 was my first full year with no clinic affiliations
- Rent is rent, and I work from my home.  I have a porch for summer office and have large sales volumes from a 5 x 5 sq ft area of my 476 sq ft rental crack shack.
- Inventory what you must.  Re-invest in what will improve your clients’ health and yours, and your business.  When lead time to produce, you need to stock, but if you can receive and move, don’t stock.
- Stay on top of regulations.  Maintain quality and keep records.  Seek knowledge, not fame.  Back up everything.

## Q&A

SeattleCancerCareAlternatives.com
Email: michaelcoreyaltman@gmail.com

## My Practice in a Nutshell

- Herbalist for 20 yrs.  CN for 13
- Have taught herbalism for 18 and college nutrition for 12
- Had a limited practice all along, built with low cost classes at first in libraries and the IOOF hall—reinvent…you’re a work in progress
- Backed off "this" kind of teaching while I taught up to 22 college sections per year—Donna’s story
- Public and professional seminars at Rogue hospital group Asante
- From ‘01-’15 was dispensary manager, product selection coordinator and practitioner in multiple integrative clinics, had a nutrition column in regional newspaper, did radio features
- Long had an assistant as practitioner to minimize speaking to client about money, now I’m ok with that (because I can more easily be flexible and don’t work for someone else)
- Coordinated imports then, import now
- Follow up info more frequently by email now than verbally
- Do outdoor, café, and lakeside health client consults, manufacturer formulation consulting, product sales, Swedish hospitals presenter
Herbalism and Nutrition for People with Cancer and Chronic Health Concerns

By Michael C. Altman, RH (AHG), CN
SeattleCancerCareAlternatives.com

As herbalist and caregiver, set goals for client/pt to improve QOL

- Be kind, treat clients like family, be patient—do the right thing
- NANAHIM: Neo-Adjuvant Nutrition & Herbal Integrative Medicine
- Organ system support for treatment: chemos, targeted drugs, radiation, imaging and pre/post-surgical support
- Rx synergy and side effect management is one of the most frequent tasks as herbalist treating chronic concerns
- Energy and Sleep—Adaptogens by day and night
- Getting the person mobile and active
- On the other hand sometimes incremental QOL change: improving appetite, sleep, and botanical pain management to limit opioids are the most you can do, and that's still good
- Know your limitations and seek help from other practitioners
- “An educated consumer is (y)our best customer” — Sy Sims even if they aggravate you sometimes ;) Remember, you work retail in a deeply personal capacity. Lara. Lieb, Laura B

Treating the whole person while protecting key organ functions

<table>
<thead>
<tr>
<th>Immune</th>
<th>Hematologic</th>
<th>Lymph</th>
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<tbody>
<tr>
<td>GI</td>
<td>Neuro—sensory</td>
<td>Cardiovascular</td>
</tr>
<tr>
<td>Bone/joints</td>
<td>Respiratory</td>
<td>Skin</td>
</tr>
</tbody>
</table>

Lymph + Immune + Endocrine

- Red Clover, Ocotillo, Scrophularia, Ceanothus, Medicinal Mushrooms, Astragalus, Echinacea, etc.

The role of metabolism: overweight is the enemy. Interval training, muscle support, and dietary phytochemical and fatty acid fitness are critical — all my products have some role in promoting muscle gain, controlling fat cell development and lipid management generally

Person and Cancer Specific Approach

- Goes beyond Saw Palmetto for Prostate Cancer
- In my experience, at this point genetic testing is overrated
- Maybe obvious, the person is more important than the cancer
- Use tinctures, teas, and targeted use of extracts
- Many branded encapsulated products are underpowered and overpriced. Mass market OTC ones even more so… with fillers, dyes, and preservatives
- Learning about the challenges of cancer patients gives you the skills and toolkit to help people with almost any condition

Gastrointestinal Support

- Optimizing motility and increasing absorption potential is key
- Botanically uniquely suited to improving digestion: Slippery Elm, Marshmallow, Triphala, Psyllium, Aloe, DGL, Glutamine, (Quercetin, Mada, Greening) + Bitters and B9
- Crosstalk and multi-systemic benefits, for example quercetin is neuro-protective and prevents strokes, anti-inflammatory
- Probiotics and select foods such as raw ferments, fire cider
- Easy access solutions like Throat Coat by TM, mixes of fennel seed, cantaloupe, coriander seed

- Anarika (Embleo officinalis): Has a cooling effect that manages pitta, supporting the natural functions of the liver and the immune system.
- Haritaki (Terminalia chebula): Is particularly good for kapha, supporting the respiratory system as well as kapha accumulations in all systems.
- Bibhitaki (Terminalia belerica): Though having a heating nature, it is still good for all three doshas (vata, pitta, and kapha). Is known for its “scraping” effect, which removes toxins and helps maintain healthy levels of weight.
Digestion continued

- Turmeric, Ginger, Angelica root, Neem, Papaya leaf, Fennel seed, Peppermint, Cardamom, Gymnema sylvestre
- More crosstalk: anti-angiogenic, anti-metastatic, anti-inflammatory, myriad of molecular targets and provides an aromatic EO bouquet not available in most capsules
- Bitters and carminative agents: orange peel, wild yam, chamomile, artichoke, others listed above
- Cannabis as digestive aid and anti-nausea

Hematologic Support

- Dong quai and Astragalus nourish Qi and Blood
- Bone broth
- Chlorophyll
- Use known combinations of primarily Chinese herbs
- For platelets add red root
- Western blood building herbs: Yellow dock, Beetroot, Echinacea, Ceanothus

Cardiovascular Protection

- Key Botanicals: Berry anthocyanins, Flavone rich herbs and foods, Quercetin, Hawthorn, Sahra mili, Ginkgo, Reishi, Motherwort, Horsechestnut, Rose hips, Linden, Adaptogens, Coleus
- First rule: don’t let a client have a stroke or MI. have foresight to protect from acute preventable situations… do no harm— that’s the job...
- Nutrients: Magnesium, B’s, CoQ10, Carnitine, Taurine
- EFA also support brain and anti-cancer: EPA, DHA, ALA, GLA, etc
- Ummm, Exercise and diet

Rx + Surgery Avoidance

- PC, Melanoma, early BC, Lymph/Leuk/Liver, Squamous, all cancers at early stage chemo/Rx-avoidable
- Speak to surgeons and anesthesiologists about surgeries they’d recommend for family. Avoid elective surgery and procedures.
- Then again, surgery and peri-procedural prep and detox— back to NANA/HIM

Brain, Sensory and Nervous System Protection

- Overlap with cardiovascular but including nerves, cerebral tonics, nootropics, and systemic protectors: Bacopa, St.J., Centella, Melissa, Tutsi, Rosmarinus, Saffron, Schisandra, Avena, Scutellana lat
- Use brain support extract formulas in conjunction with tinctures specific to client need
- Anxiety: kava, linden, oat, adaptogens—American ginseng, Withania, men, maybe 5HTP, SAMe, etc...
- Beat the (brain) nits: “Blue and orange” approach, EFA/GLA, willow (Laura Kiss story of client side effects)

Anthocyanins Research

- Many of the clinical trials are on inflammation, oxidation, lipids/lipoproteins, and arterial endothelial function. Because mg cap.
- Most of these human and mammal studies include procedures.
- They’d recommend for family. Avoid elective surgery and procedures.
- In those, exercise and diet
- Boosts energy*
- Optimizes recovery time*
- Builds strength and endurance*
- Optimizes body composition*
- Provides seasonal respiratory support*
- Promotes healthy lipid metabolism*
- Maintains healthy blood pressure already in the normal range*
- Nourishes reproductive health*
- Encourages proper blood circulation*
- Provides antioxidant activity*
- Fights aging*
- Support mood and memory*
- Protects the aging eye*
- Supports cardiovascular and neurological health*
Other Systems, Eliminatory & Detox Support

- Liver: Many botanicals and plant pigments: Scute baicalensis, Silybum marianum, Cynara, (Hepatic 3) Sea veggies (Seven Seas), glucosinolates/sulforophane/crucifers (Triple Crown) Nutrients: NAC, Lipoic Acid, B's, Selenium, C
- Skin: Centella, Equisetum, Plantago, Curcuma, Calendula, Eleuthero, Quercetin, Aloe, Tonic 10 Demulcent Powder internally and externally, probiotics
- Kidney: Nettle, Rehmannia, Kidney support compounds
- Lungs: Poplar bud, Propolis, Ligusticum porteri, Inula, Crataegus, Panax quinq, Oplopanax, Lobelia, Amni visnaga,

Stand-alone & Backburner Oncologic Support

- Putting space between Rx treatments is key for QOL, and tolerating the next Rx treatment, if necessary (also for helping with unexpected medical situations along the way)
- Use cytotoxic herbs, high dose anthocyanins, Curcumin and tincture blend suited to person and condition, EO, Cannabis
- Formula examples: BC, PC, LC, Colon, Squamous, Hodgkin’s, Sarcoma, Renal, Melanoma, etc.

Joint and Bone Support

- Connective tissue tonic mineralizers: Equisetum, Plantago, Centella, Taraxacum, Urtica, Medicago, Avena, Trifolium
- Direct mineral supplementation: Calcium, mag, zinc, boron
- Vitamins: K, D, A
- Phytochemical support and extracts

End Notes

Q&A

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Red Flags for Herbalists: Working with Homeless & Substance Use Populations

Ingrid Bauer, MD, MS
American Herbalists Guild Conference
October 2017

Outline
1. Epidemiology of homelessness & health
2. Identifying Red Flags
3. Cases & Conditions
4. Benefits & challenges of referrals
5. Herb-drug interactions
6. Discussion

Epidemiology of homelessness
- On any given night, at least 600,000 Americans lack secure housing; over 1.7 million people are homeless at some point each year.
- 2/3 are sheltered, 1/3 are not
- 2/3 are single, 1/3 are families
- ¼ are under age 18
- The mortality rate for homeless individuals is 4-9 times higher than for those with secure housing
- Those without homes are at risk for infections, chronic illness, mental illness, and substance abuse.
- They are more often victims of violence and incarceration

Homelessness & health
Common emergencies
- Hypothermia
- Hypo/hyperglycemia
- Severe infections
- Exacerbations of chronic conditions
- Overdose
- Withdrawal
- Psychosis
- Assault or injury

Chronic conditions
- Obesity
- Hypertension
- Coronary artery disease
- Diabetes
- Nutritional deficiencies
- Infections
- COPD
- Depression
- Schizophrenia
- Substance use disorders
- Poor dental hygiene
- Foot care
- Lack of cancer screening

Barriers to Care
- No or limited health insurance
- No primary care physician
- Reliance on Emergency Room
- Chronic psychiatric condition(s) and/or substance abuse
- Social Isolation
- Client cannot afford recommended therapies
- No kitchen or home to cook healthy food, store remedies, bathe, wash clothes, do wound care, etc
- At constant risk of violence and/or theft

Figure 1.1 A Model of the Determinants of Health

Emergency Room Visits & Hospitalizations
- “Frequent Fliers” in the ER
- High rates of re-admission
  - Up to ½ are readmitted within 30 days
  - Nearly ¼ are readmitted within 90 days
- Discharge challenges & opportunities
  - Medical respite vs shelter
  - Availability of skilled nursing facilities

Doran et al 2013

Housing
- Shelter
- Medical Respite
- Board & Care
- Skilled Nursing
- Permanent housing

Differential Diagnosis
A systematic method used to generate hypotheses about the possible etiologies of the presenting problem(s)
1. Gather a good history
2. Create a list of all possible causes
3. Prioritize that list (What is most dangerous? What is most likely?)
4. Use further questions, physical exam, and tests to “rule out” possible diagnoses until cause is identified

RED FLAGS
- Altered mental status: depressed vs agitated
- Withdrawal or overdose
- Systemic infection
- Chest pain
- Shortness of breath
- Rash or abscess
- Environmental exposure
- Constitutional symptoms
  - Weight and/or appetite changes, fever, night sweats, fatigue, weakness

Key history questions
- Onset
- Provocation/Palliation
- Quality
- Radiation
- Severity
- Timeline
- Signs/Symptoms
- Allergies
- Medications
- Pertinent history
- Last intake/output
- Events

Vital Signs (are Vital!)
- Temperature
- Heart Rate (Rhythm)
- Blood Pressure
- Respiratory Rate
- Oxygenation
- Mental status
  - Alertness: awake, drowsy, responds only to pain, unresponsive
  - Orientation: person, place, date, events
Other critical information
- Bystanders: what did they see?
- Emergency contact information
  - Family or friends
  - Case manager or primary healthcare provider
- Living situation
- Medical alert bracelets or tattoos
- Meds? Allergies?

Level & Acuity of Care
- Severity: Life threatening vs bothersome
- Acute vs chronic issue
- Selecting the level of care:
  - 911
  - Emergency room
  - Urgent care
  - Primary care appointment
  - Specialist referral
  - Free clinic
  - Continuing with herbal &/or nutritional therapies

Case 1
- On your way to volunteer at the needle exchange you see a young man lying on a park bench.
  - You try to wake him up but he doesn’t respond
  - You notice that he is breathing very slowly and you can feel only a weak, slow pulse

Decreased mental status
- What not to miss
  - Overdose, withdrawal, head trauma, CNS or systemic infection, hypoxia, hypoglycemia, electrolyte abnormalities, hypothyroidism, seizures, hypothermia, psychosis
- Key history questions
  - Find a witness or someone who knows the person
  - When last seen normal?
  - Chronic medical problems?
  - Habits?
- Key exam findings
  - Vitals, breathing pattern
  - Medical alert tags or tattoos
  - Signs of trauma, track marks, dehydration, tongue biting, pupils
  - Scent of alcohol or fruity breath

Overdose: Opioids
- Signs: Decreased...
  - Mentation
  - Respiratory rate
  - Heart rate
  - Blood pressure
  - Bowel sounds
  - Pupil size
- Interventions
  - Try to wake up
  - Call 911
  - Administer Naloxone (nasal, subq, IM)
  - Assist ventilation
  - If pulseless → CPR
  - Stay with the person until help arrives

How to Give Nasal Spray Naloxone
1. Verify no other drugs
2. Open and remove cap
3. Hold nose flaps open
4. Administer 2 sprays
5. Allow all drug to be administered
6. Keep person steady and seated with head up
Metabolic derangements

- Hypoglycemia
  - Lack of access to food
  - Lacing of street drugs with metformin
  - Insulin
  - Hyperglycemia/Diabetic ketoacidosis
- Electrolyte abnormalities
  - GI losses
  - Inadequate water intake
- Hypothyroidism
- Organ failure: liver, kidneys, lungs, heart

Hypothermia

<table>
<thead>
<tr>
<th>Stage</th>
<th>Core Body Temperature</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Hypothermia</td>
<td>95.0° - 96.3°</td>
<td>Shivering, poor judgment, drowsiness, amnesia and apathy, increased heart rate, increased breathing, cold or pale skin</td>
</tr>
<tr>
<td>Moderate Hypothermia</td>
<td>92.9° - 95.3°</td>
<td>Progressively decreasing levels of consciousness and shivering; decreased heart rate and breathing; decreased reflexes and no voluntary movements; pericardial undulation</td>
</tr>
<tr>
<td>Severe Hypothermia</td>
<td>&lt;92.9°</td>
<td>Low blood pressure and bradycardia, no reflexes, loss of consciousness, coma, death</td>
</tr>
</tbody>
</table>

Case 2

A middle-aged woman is pacing and yelling in the park near where you are volunteering serving food. You have seen her before when she was able to wait patiently in line for dinner. Today she appears sweaty & tremulous; she does not make eye contact when you walk over to calm her down.

Agitation & Delirium

- What not to miss
  - Stimulant use, alcohol withdrawal, psychosis, head trauma, sepsis, meningitis or encephalitis, hyperthyroidism
- Key history questions
  - Last seen normal?
  - Mental health and/or substance use history?
- Key exam findings
  - VITALS: fever, high blood pressure, tachycardia
  - Signs of head or oral trauma
  - Focal pain or swelling
  - Track marks or drug paraphernalia
  - Hand tremor, tongue wag
  - Hallucinations

Alcohol withdrawal

- Signs/Symptoms: Agitation, confusion, tachycardia, hypertension, elevated temperature, hand tremor, tongue wag, hallucinations
- Complications: seizures, aspiration, alcoholic hepatitis (if preceded by binge), encephalopathy, electrolyte abnormalities
- Treatment: barbiturates &/or benzodiazepines, fluids, thiamine & electrolyte replacement

A moderate to high acuity patient with alcohol withdrawal, with a history of alcohol dependence and a recent change in behaviors.

Note 1: Clinical Manifestations of Alcohol Withdrawal

<table>
<thead>
<tr>
<th>Phase/Symptoms</th>
<th>Occur after Last Drink Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Withdrawal</td>
<td>Nausea, Vomiting, Anorexia, Nudity, Nausea</td>
</tr>
<tr>
<td>Withdrew Delirium</td>
<td>Tachycardia, Seizures</td>
</tr>
<tr>
<td>Metabolic Disarrangements</td>
<td>Hypoxemia, Visual, Acute, Alimentary</td>
</tr>
<tr>
<td>Delirium</td>
<td>Disorientation, Hypersomnolence, Disorientation, Delirium</td>
</tr>
</tbody>
</table>
Opioid Withdrawal

- **Signs/Symptoms:**
  - GI: cramping, diarrhea, nausea, vomiting
  - MSK: severe leg cramps
  - Nervous system: Secretions, shivering, dilated pupils, tachycardia, irritability, insomnia, yawning, fever

- **Evaluation:**
  - Underlying infection? Other substances?

- **Treatment:** methadone or buprenorphine, antiemetics, fluids

Stimulant intoxication

- **Signs/Symptoms:**
  - Agitation, paranoia, hallucinations, tachycardia, hypertension, hyperthermia, shortness of breath

- **Complications:**
  - Psychosis, hypertensive emergency, stroke, acute MI, “crack lung”

- **Treatment:** Benzodiazepines, blood pressure control, treatment of complications

Psychosis/Delirium

- **Risk factors:**
  - Underlying psychotic disorder, new meds or off meds, ETCH withdrawal, methamphetamine & other drugs, acute severe infection, electrolyte abnormalities, hyperthyroidism

- **Signs/Symptoms:**
  - Continuum of anxiety → agitation → aggression
  - Agitation, disorientation, hallucinations, tremor

- **Approach:**
  - Ensure safety of patient, bystanders, and first responders
  - Help the patient regain control of her emotions & behavior
  - Advocate for the patient and negotiate with law enforcement & emergency medical personnel

Case 3

- 67 year old man you saw last week at the free clinic for a cough returns 2 weeks later with fever, chest pain, shortness of breath and increased green sputum that is occasionally blood-tinged.

- He has been incarcerated multiple times and currently lives at a homeless shelter; he drinks 1 pt of vodka most days and smokes 6 cigarettes daily

- He appears ill-appearing, sweaty, breathing rapidly, coughing, and does not know what day of the week it is.

Verbal De-Escalation

Richmond et al 2012

Case 3
Cough & Fever

- What not to miss
  - Infectious: Pneumonia, aspiration, TB, influenza
  - Non-infectious: malignancy

- Key history questions
  - Onset, duration, alleviating factors, waxes & wanes
  - Associated symptoms: fatigue, muscle aches, cough, sore throat, rash, diarrhea, swollen glands, chest pain, weight loss
  - Habits: smoking, alcohol, other exposures
  - Immunization History
  - HIV status

- Key exam findings
  - VITALS: high fever (>101 for adults), low blood pressure, tachycardia
  - Dehydration: dry lips, concentrated urine, skin tenting
  - Swollen lymph nodes, pus visible on tonsils

Pneumonia

- Symptoms: Fever, productive cough, shortness of breath, chest pain; often preceded by viral illness

- Risk Factors: Age >65, immunosuppressed, recent viral infection, recent hospitalization, other healthcare exposure, aspiration

- Complications: sepsis, shock and death (8th most common cause in US)

- Treatment: ANTIBIOTICS (and fluids):
  - Urgent care/primary care: febrile but other vitals stable, no confusion, <65
  - Emergency room: unstable vitals signs, confused, and/or ≥ 65

Influenza

- Symptoms: Upper respiratory symptoms, fever, headache, muscle aches, weakness

- Transmission: Influenza A or B, spread by large particle droplets ≤2 μm, incubation period is ~2 days prior to symptoms, during which time viral shedding may occur, though more shedding once symptomatic.

- Risk factors for complications: Institutionalized, age ≥65, pregnant, chronic medical conditions including lung disease, diabetes, immunosuppression, morbid obesity

- Evaluation: screen with rapid antigen test ("flu swab") and confirm with PCR

- Treatment:
  - "Supportive care"
  - Neuraminidase inhibitors (oseltamivir, zanamivir, peramivir)

Pulmonary Tuberculosis

- Symptoms: Cough, weight loss, fatigue, fevers, night sweats, chest pain, shortness of breath

- Etiology: Primary or reactivation of infection by Mycobacterium tuberculosis

- Epidemiology: Deadliest infectious disease worldwide and leading killer of people with HIV; approximately 10,000 cases in US per year

- Risk factors: arrived from high-prevalence country in past 5 years; HIV positive; institutionalization or homelessness; drug use or tobacco

- Evaluation:
  - At risk, without symptoms: skin test or blood test; if positive get chest X-ray
  - At risk, with symptoms: hospitalized with airborne isolation, chest X-ray and sputum samples sent for microscopy and culture

- Treatment:
  - Active: 4 drugs ("RIF") for 2 months then 2 drugs for 4 months
  - Latent: 6-9 months of isoniazid (INH)

Case 4

- A 29 year old man comes to the herbal free clinic for fatigue, sore throat and upset stomach for 2 weeks. He already tried echinacea tincture and salt water gargle which hasn’t helped.

- He had unprotected sex with men & women in the past 3 months. He does not inject drugs.

- He appears tired, and on exam has a temp of 99.9, HR 90, and swollen cervical lymph nodes; no exudates on his tonsils. He has a diffuse red, raised rash across his chest.
Acute HIV

- Symptoms: 1 mo after infection
  - Fever, lymphadenopathy, sore throat, rash, muscle aches, diarrhea, weight loss, headache, oral ulcers
- Evaluation:
  - HIV test (many kinds)
  - Subsequent testing by HIV specialist includes CD4 count, genotype & resistance testing to target treatment
  - Test for other STIs & test partner(s)
- Treatment:
  - Start antiretrovirals ASAP no matter what the CD4 count
  - Newer medications have fewer side effects & fewer pills

Syphilis (early)

- Symptoms:
  - Primary: Painless chancre w/ in 3 weeks → heals after 3-6 weeks
  - Secondary: Fatigue, muscle aches, sore throat, weight loss, lymphadenopathy, diffuse rash involving hands, soles & mucosa, GI upset, headache, vision changes
- Evaluation: blood test; if concerned for neurosyphilis, lumbar puncture to test CSF
- Treatment: Penicillin!

Case 5

- A 56 year old homeless man with history of smoking meth & tobacco gets foot care from the herbal free clinic. He mentions that he has been feeling increasingly short of breath over the past 4 months and his shoes & pants are too tight.
- In addition to swollen feet & ankles, he gets short of breath walking across the room; you notice bulging veins in his neck. His abdomen is also distended.

Shortness of Breath/Edema

- What not to miss:
  - Pneumonia, lung cancer, TB, asthma, COPD, interstitial lung disease, congestive heart failure, kidney disease, liver disease
- Key history questions
  - Acute onset vs chronic problem
  - Sputum quantity and quality, presence/absence of blood
  - Associated symptoms: weight loss/gain, fevers, wheezing, chest pain, heartburn, swelling of the feet, sleeping propped up on pillows
  - Exacerbating and alleviating factors, exposures (chemicals), sick contacts
  - Allergies, medications
  - Smoking History
  - History of heart disease
- Key exam findings
  - Increased work of breathing, pale or blue skin
  - Wheezing, crackles, or decreased breath sounds to auscultation
  - Lower extremity or abdominal swelling
Obstructive Lung Disease

- **Risk Factors:**
  - Smoking
  - Also other exposures, interstitial dz
- **Signs & Symptoms:**
  - Shortness of breath, decreased exercise tolerance, wheezing, chest tight, frequent infections, chronic productive cough, barrel chest, tripod positioning
- **Evaluation:**
  - Vitals, lung exam (wheezing, air movement), chest X-ray, arterial blood gas, basic blood work, lung function tests
- **Treatment:**
  - Albuterol, inhaled or systemic steroids, anticholinergics
  - Oxygen
  - Antibiotics in acute exacerbation

Congestive Heart Failure

- **Risk Factors:**
  - Age, hypertension, coronary or valvular disease, arrhythmia, stimulant or alcohol abuse, hyperthyroidism, pulmonary embolus
- **Signs & Symptoms:**
  - Shortness of breath, decreased exercise tolerance, chronic cough, leg swelling, heart murmur, edema in neck veins
- **Evaluation:**
  - Chest X-ray, EKG, echocardiogram, blood tests
- **Treatment:**
  - Diuretics, beta-blockers, other blood pressure medications
  - Low salt diet
  - Treat underlying cause

Renal Failure

- **Risk Factors:**
  - Known kidney disease from diabetes, hypertension, or glomerular disease. Can be made rapidly worse by NSAIDs, dehydration, IV contrast, acute infection, uncontrolled HTN
- **Signs/Symptoms:**
  - Decreased urination, increased swelling, shortness of breath, confusion, elevated blood pressure
- **Evaluation:**
  - Vitals, cardiopulmonary, abdomen, extremities
  - CXR, complete metabolic panel, urine studies, renal ultrasound
- **Treatment:**
  - Treat underlying problem; if not reversible → DIALYSIS
**Case 6**

A 56-year-old homeless woman with history of diabetes has been coming to the park for foot care for the past few weeks for a small ulcer under her left great toe.

Today, you notice her left calf is red, swollen, warm, & tender. Her pulse is rapid and she appears hot & sweaty.

---

**Soft Tissue Infections**

- **What not to miss:**
  - Cellulitis, abscess, necrotizing fasciitis, osteomyelitis, retained foreign body, puncture wound, bite, burn

- **Key history questions**
  - Onset, duration, mechanism
  - Associated symptoms: Severe pain, systemic symptoms, loss of sensation

- **Key exam findings**
  - VITALS: high fever (>101 for adults), low blood pressure, tachycardia
  - Color changes over skin, deep puncture, large area affected, blistering

**Abscess**

- **Risk Factors:**
  - IVDU or "skin popping"; MRSA; immunocompromised

- **Signs & Symptoms:**
  - Painful, hot, raised area w/ or w/o "head" visible; may or may not be surrounded by red skin; less often fever

- **Evaluation:**
  - Vitals: fever, tachycardia?
  - Whole body exam for other abscesses, cellulitis

- **Treatment:**
  - Incision & drainage

**Cellulitis**

- **Risk Factors:**
  - Age, skin breakdown, edema, immunosuppression (especially diabetes), athlete’s foot.

- **Signs & Symptoms:**
  - Red, warm skin with or without obvious wound or abscess; often has obvious border. Systemic symptoms common.

- **Evaluation:**
  - Vitals, probe wound, blood tests including cultures; imaging of underlying body part
  - If affecting face, eyes, anus or genitals → SPECIALIST!

- **Treatment:** Antibiotics, fluids.

**Necrotizing Infections**

- **Risk Factors:**
  - Similar as cellulitis; may be complication of untreated soft tissue infection

- **Signs & Symptoms:**
  - Very red or dark skin ulcers, very swollen, painful out of proportion to exam; feels crunchy, inability to move distal portion of extremity

- **Evaluation**
  - Labs, cultures, imaging (CT)

- **Treatment**
  - Antibiotics, fluids & URGENT SURGERY
Case 7

- 58 year old woman with schizophrenia and diabetes you seen at the mobile clinic reports episodes of l shoulder pain, nausea and light-headedness with activity that improve with rest; today the pain is not going away.
- She gets a monthly shot of her antipsychotic and rarely takes any other medicines.
- She has smoked 1 pack a day for 35 years
- Her brother, age 50, had a heart attack last year; both of her parents had bypass surgeries
- On exam, she appears anxious and sweaty, pulse is rapid; lung, abdomen and shoulder exams are normal

Chest Pain

- What not to miss
  - Acute coronary syndrome, aortic dissection, pneumothorax, pulmonary embolism, pericarditis, endocarditis pneumonia, lung cancer
- Key history questions
  - OPQRST
  - Associated symptoms: sweating, nausea, shortness of breath, palpitations, sense of doom
  - Prior history: previous symptoms, known heart/lung disease, clots
  - Cardiac risk factors: diabetes, high blood pressure and/or cholesterol, smoking, family history of early heart attack
  - Pulmonary embolism: history of DVT, coagulation disorder, cancer, recent travel/surgery/bed ridden, smoking, estrogen use, pregnancy
- Key exam findings
  - Pale, sweaty, looks sick
  - Rapid heart rate, rapid breathing, hyppo- or hypertension; pulses not equal between wrists
  - Warm, swollen &/or painful lower extremity (unilateral)

What to do?

- Call 911
- Find safe comfortable place to rest while waiting
- If the person has aspirin or nitroglycerin prescribed, have them take it if they are awake & alert

Cardiovascular disease

- CVD is the leading cause of death among older homeless men in the US & Canada.
- Individual risk factors
  - Diabetes
  - Hypertension
  - Obesity
  - Dyslipidemia
  - Smoking & other substance use (cocaine, meth, etoh)
  - Mental illness & antipsychotics
- Structural factors... !!!

Lee 2005; Gedick 2015

Case 8

- A 72 year old homeless man with a history of smoking has been stopping by for a cup of tea at the free clinic for years. Lately you've noticed that he has been loosing weight.
- When you ask him about it, he says “I'm just not very hungry anymore.”
- Upon further probing, he endorses a chronic cough, abdominal pain, and occasional blood in his stool.
Weight Loss

• What not to miss
  • Malignancy, HIV, TB, uncontrolled diabetes, malnutrition
  2/z dementia or substance use

• Key history questions
  • Intentional or unintentional; appetite?
  • Timeline, associated symptoms, family history, exposures
    (travel, sex, chemicals/meds/drugs), screening
  • Systemic symptoms (fever, night sweats, frequent urination)

• Key exam findings
  • Vital signs abnormal, temporal wasting, pallor
    (conjunctiva, nail beds), lymphadenopathy, easy bruising

Benefits of Referrals

• Safety—don’t miss potentially dangerous conditions
• Building relationships with other healthcare providers
• Understanding Western diagnosis may help guide complementary therapies
• Avoidance of contraindicated herbs & other therapies
• Using medical data to trend outcomes of herbal treatments
• Access to preventive care

Challenges of Referrals

• Patient refuses referral or unable to follow through
• Services not available/accessible/affordable
• Conventional provider takes over
  • Tells patient to stop taking herbs
  • Does not provide reciprocal information or communication
  • Does not treat referring herbal clinician as a professional
• The patient does not get a diagnosis, or does not improve with treatment for the diagnosis

Herb-Drug Interactions

Mechanisms of Interaction
• CYP 450 induction
• CYP 450 inhibition
• Additive effects
• Counter-effects

Drugs to worry about
• Blood thinners and anticoagulants
• Antibiotics, antifungals, antivirals
• Antihypertensives
• Immunosuppressants
• Antidepressants, anticonvulsants, antipsychotics
• Statins
• Oral hypoglycemics

Citations

Doran KM et al. Hospital readmissions among patients who are homeless. Medical Care 2013;51(9):767-773.


Lichens

Andrew Bentley

Lichens...

- Are composite organisms with a fungal component and an algal component, as well as a microbiome, which all work together as a single organism
- Often live in harsh environments, and tend to have higher concentrations of secondary compounds than vascular plants

Lichen shapes

- Crustose: appears as a scale or crust, usually on stone but sometimes on bark
- Foliose: thin and flat, like a leaf or a scrap of paper
- Fruticose: branching, often looks like a miniature bush

Usnea

- Has wide-ranging antilinfective (antibacterial, antiviral, antifungal) and immune supporting properties
- Contains novel pain relieving substances

Icelandic moss

- Traditionally used as a remedy for sore throat
- Contains demulcent substances, as well as some of the same pain relieving and antilinfective substances as usnea

Rock tripe

- Used to support the digestive system
- Contains demulcent substances, enzymes, sterols, and antihistamines
- Can decrease inflammation from food sensitivities, increase absorption of nutrients, and promote healing of GI tract
As herbalist and caregiver, set goals for client/pt to improve QOL:

- Be kind, treat clients like family, be patient — do the right thing
- NANAHIM: Neo-Adjuvant Nutrition & Herbal Integrative Medicine
- Organ system support for treatment: chemo, targeted drugs, radiation, imaging and pre/post-surgical support
- Rx synergy and side effect management is one of the most frequent tasks as herbalist treating chronic concerns
- Energy and Sleep — Adaptogens by day and night
- Getting the person mobile and active
- On the other hand sometimes incremental QOL change: improving appetite, sleep, and botanical pain management to limit opioids are the most you can do, and that's still good
- Know your limitations and seek help from other practitioners
- "An educated consumer is (y)our best customer" — Sy Sims even if they aggravate you sometimes ;) Remember, you work retail in a deeply personal capacity. Lara Lieb, Laura B
- Find humor and "buffers" Joe Spinell / Willi Cicci — self care

Treating the whole person while protecting key organ functions:

- Immune
- Hematologic: RBC, WBC, Plt, etc
- Lymph
- GI
- Neuro — sensory
- Cardiovascular
- Bone/joints
- Respiratory
- Skin
- Lymph + Immune + Endocrine

The role of metabolism: overweight is the enemy. Interval training, muscle support, and dietary phytochemical and fatty acid fitness are critical — all my products have some role in promoting muscle gain, controlling fat cell development and lipid management generally.

Person and Cancer Specific Approach:

- Goes beyond Saw Palmetto for Prostate Cancer
- In my experience, at this point genetic testing is overrated
- Maybe obvious, the person is more important than the cancer
- Use tinctures, teas, and targeted use of extracts
- Many branded encapsulated products are underpowered and overpriced. Mass market OTC ones even more so... with fillers, dyes, and preservatives.
- Learning about the challenges of cancer patients gives you the skills and toolkit to help people with almost any condition.

Gastrointestinal Support:

- Optimizing motility and increasing absorption potential is key
- Botanicals uniquely suited to improving digestion: Slippery Elm, Marshmallow, Triphala, Psyllium, Aloe, DGL, Glutamine, (Quercetin, Maca, Ginseng) > Bitters and B9
- Crosstalk and multi-systemic benefits, for example quercetin is neuro-protective and prevents strokes, anti-inflammatory
- Probiotics and select foods such as raw ferments, fire cider
- Easy access solutions like Throat Coat by TM, mixes of fennel seed, cardamom, coriander seed
- Amalaki (Emblica officinalis): Has a cooling effect that manages pitta, supporting the natural functions of the liver and the immune system.
- Bibhitaki (Terminalia bellirica): Is particularly good for kapha, supporting the respiratory system as well as kapha accumulations in all systems.
- Haritaki (Terminalia chebula): Though having a heating nature, it is still good for all three doshas (vata, pitta, and kapha). Is known for its "scraping" effect, which removes toxins and helps maintain healthy levels of weight.

**Lungwort**
- Fairly rare, sustainability is an issue
- Traditionally used for a variety of pulmonary issues.
- Contains expectorant substances, antilinfective lichen acids, and antinflammatory sterols, among other substances

**Reindeer Moss**
- Mostly used as a diuretic
- Contains acids and sugar alcohols that have osmotic diuretic properties
- Also contains antilinfective & analgesic substances
- Has been used to help people with kidney stones

**Parmelia and Parmotrema**
- Two genera of very common gray and green foliose lichens with similar compositions and properties
- Contain a wide variety of lichen substances, including the usnic acid found in Usnea and the Lawson (antihistamine) found in rock tripe
- Oil extract is very useful topically for fungal infections
- these lichens can be taken as a decoction for their diuretic effect

**Dog lichen**
- Formerly sold as a remedy for rabies in people and animals; efficacy not well documented. (!)
- used as a powder for sores and other skin conditions
- Contains some substances with antibacterial and antifungal properties

**Pertussaria**
- A very small crustose lichen that grows on tree bark.
- Useful for coughs, seems to have antispasmodic and expectorant properties
- difficult to gather in meaningful quantities
Oakmoss

- Has a history of use in perfumery as well as medicine
- Is antifungal, without having a strong aromatic scent. Does not evaporate, and will slow the evaporation of volatile oils
- My personal favourite as a topical antifungal
**Opiate Cessation**

**Opioid Use and Addiction**
- Over 2.5 million people had an opioid addiction in 2015
- Deaths from opioid overdose have nearly tripled since the turn of the century
- Heroin is frequently used by those who have previously become addicted to prescription pain relievers

**Opioid mechanism of action**
- Opioids are chemically related to, and interact with, opioid receptors in the nervous system, which produce feelings of pleasure and decrease pain response.
- Cessation of opioids often results in a crushing sense of depression and isolation, as well as physical pain

**St Johnswort**
- Commonly used as an antidepressant
- Generally well-tolerated
- Induces CYP450 3a4 pathway, speeding up the metabolism of opioids.

**Hypothesis**
- That St Johnswort might help with clearance of Opioids from the system (detox) by shortening the process, and at the same time help to alleviate some of the mental distress that tends to accompany the process

**Procedure**
- Loading dose of 5ml. SJW tincture 3x/day for one week
- Maintenance dose of 5ml./day for 1-6 months (median 3 mo.)
- Other supportive measures as appropriate (e.g., management of original pain; laxatives; counseling)
Results

* Of 130 individuals: 4 lost to followup, 6 unsuccessful, 120 had ceased use of opioids by the end of week one and continued not using until the end of week 5. 83 remained opioid free at 6 months followup.

* Of the 37 individuals who resumed opioids by six months, 25 successfully quit after a second round of the above-described procedure.

Conclusion

* St Johnswort extract has the potential to aid and support individuals who are attempting to cease use of opioid drugs.
Northwest Nervines for the Chronically Agitated  
Howie Brounstein

**Tonic:** a substance used in the absence of disease to strengthen a system or an organ.

**Sedative:** A substance which strongly quiets the nervous system. This includes nervines, and most antispasmodics.

**Nervine:** A substance which is good for the nervous system in some way. Can affect the different types of nervous system. A useless term that includes muscle relaxants, tonics, antidepressants, stimulants.

Nervine herbs often work on two levels that are intertwined, body and mind. Quiet one level and the other will follow. Some herbs lean towards one level or the other.

**Mental and Emotional Level**

Over excitement, frustration, circular thoughts, grief, the holidays, sadness, anger, the blues, melancholy, irritability, frenzied daze, obsession, circular thoughts, fear, anxiety, emotional stress, tension, some depression, vague feeling of uselessness headaches, insomnia, hysteria, aspects of mental illness, or bad acid trips.

**Physical Level**

Antispasmodic: A substance that relives or prevents muscle spasms or cramps (muscle relaxants).

Menstrual cramps

Intestinal cramps

General muscle cramps

Hiccups (diaphragmatic spasms)

Cough (bronchial spasms)

Tight, sore muscles
Shakes resulting from excessive stimulants

Injured muscles and tendons

Sprains, strains,

Tendonitis, tenosynovitis, carpal tunnel, repetitive motion problems.

Seizures

Eye twitch, spasms, and weird ticks when in front of students
Northwest Nervines for the Chronically Agitated
Howie Brounstein

**Herbal Mixtures and Stress Related Problems**

Almost all health problems can be helped with some calming herbs. Dis-ease in not at ease. Calming herbs are often at least a small part of herbal mixtures to relax the body.

<table>
<thead>
<tr>
<th>Latin Name</th>
<th>Common Name</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avena sativa</td>
<td>Milky Oats</td>
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<tr>
<td>Corallorhiza maculata</td>
<td>Spotted Coral Root</td>
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<tr>
<td>Corallorhiza mertensiana</td>
<td>Purple Coral Root</td>
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<td>Corallorhiza spp.</td>
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<td>Corallorhiza striata</td>
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<tr>
<td>Cypripedium spp.</td>
<td>Lady Slipper Orchid</td>
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<tr>
<td>Epipactis spp.</td>
<td>Stream Orchid</td>
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<tr>
<td>Eschscholzia spp.</td>
<td>California Poppy</td>
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<tr>
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<tr>
<td>Hypericum anagalloides</td>
<td>Bog St. John's Wort</td>
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<tr>
<td>Hypericum formosum</td>
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<td>Hypericum perforatum</td>
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<td>Matricaria matricarioides</td>
<td>Pineapple Weed</td>
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<td>Melissa officinalis</td>
<td>Lemon Balm</td>
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<td>Nepeta cataria</td>
<td>Catnip</td>
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<td>Passionflower</td>
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<td>Cobrahead</td>
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<td>Pedicularis groenlandica</td>
<td>Elephant's Head</td>
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<td>Pedicularis racemosa</td>
<td>Parrot's Beak</td>
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<td>Piper methysticum</td>
<td>Kava Kava</td>
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<td>Stachys cooleyae</td>
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<tr>
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<td>Valeriana scouleri</td>
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<tr>
<td>Verbena spp.</td>
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</table>
Vaginal steaming is extremely useful for women experiencing dysmenorrhea (painful periods), clotting, pelvic congestion, fibroids, polyps, ovarian cysts, irregular cycles, uterine prolapse, endometriosis, and when experiencing dark blood at the onset or at the end of your menses.

**When is the Best time to use a vaginal steam?**

A vaginal steam can be used at any time during the month when a woman is not bleeding. If you are trying to remove old stagnant blood, steaming will help move it out of your womb. You can also administer one while you are experiencing unusual mid cycle cramping, pain, or to help relieve the pain of a UTI.

The most ideal time to prepare and use a vaginal steam is right before your monthly bloods.

**The Herbs**

**Red Roses Rosa Spp** (romantic and passionate love) and **Pink** (self-love, self-acceptance): astringes uterine and vaginal tissue, improving tone
~encourages healing, helps release trauma from the womb, encourages self-love and the ability to receive love
~aids in digestion, strengthens the stomach
~ used for the emotional body of the heart; roses are particularly good for people who feel unloved, who are grieving, or who have been abused.

**Yarrow Achillea millefolium**: stops excessive bleeding, promotes healing
~making peace with the part of the future you cannot control
~ improves the uterine tone which may correct bleeding when it is too heavy due to uterine atony
~ Yarrow can also reduce bleeding that is profuse due to uterine spasms (1)

**Oregano Origanum vulgare**: scouring pad to the uterus, cleanser, stimulates blood movement, for vaginitis and bladder infections
~improves digestion, relieve gas pain, and is a nervine (soothing to the nervous system)
~anti-bacterial, anti-microbial, anti-septic
~diaphoretic, stimulant used to bring on stalled menses *Chi, blood, body fluid move together
~used as a tea for colds and flus
Basil (*Ocimum basilicum*): helps to draw out; moves stagnant blood and infection
~ stimulant, nervine, aromatic
~ taken as a tea basil is divine to the senses. It is relaxing and soothing to the nervous system
~ drinking the tea hot is can bring on a suppressed menses
~ helps ease nausea and vomiting
~ aids in digestion; stimulates digestive juices prior to eating and when taken after eating it can reduce gas and bloating
~ historically used it topically to soothe a bee or wasp sting, drawing out the poisons

Peppermint (*Mentha piperita*): most stimulating, creates lots of activity in the uterus, moves blood, could *burn* if too much is used
~ great for indigestion, anti-flatulent, and stimulates digestive juices
~ the essential oils create a mild anesthetic (numbing) for the stomach (that is why it is used to help with nausea in pregnancy)
~ can be used for the common cold and the flu
~ it is a nervine (soothes the nervous system) and helps with anxiety and tension
~ anti inflammatory
~ used to aid in painful cramps of the digestive system

Lavender (*Lavendula officinalis*): soothing to the nervous system
~ the essential oil is an antiseptic
~ is calming and antispasmodic
~ nervine, helping to relax the nervous system
~ promotes deep restful sleep

Rosemary (*Rosmarinus officinalis*): Drink a cup of rosemary tea during a steam to increase sweating and improve circulation.
~ externally as a disinfectant
~ moves sluggish circulation
~ clearing to the mind and body
~ energizing

Other Herbs Used for Vaginal Steaming:
Monarda, Damiana, Uva Ursi, Juniper berries, Marigold, Rue, Hops, and Calendula.

How to Administer a Steam:
You will need an 8-10-quart soup pot, a plant stand, a 5-gallon bucket, or clean toilet. Fill pot ¾ of the way with water and bring to a boil. Lower heat to simmer and toss in herbs. Immediately cover and simmer for 5 minutes. Turn heat off and let sit another 2 minutes then place in toilet, stand, or bucket.

- Remove your clothes from your waist down and wrap your legs with a sheet, towel, or sarong. Please make sure to cover your inner thighs the steam can be very hot and burn your legs.
- Cover yourself completely with a large blanket so all the heat is trapped.
- Make sure your feet are covered and there is no draft in the room you are using.
- Open your legs to allow the steam to travel up into your vaginal canal.
- Sit and relax on the steam for 20 minutes or until water cools.
• When finished, immediately go to bed or go to a warm place, cover yourself with blankets and relax.

Caution: Always test the stem before sitting down Do Not Burn Yourself!

Some Side Effects: Steaming may increase the amount of bleeding (menstrual flow) during your period. It can also bring on your blood early.

Maya Abdominal Massage: Uterine Body Work

Uterine Bodywork facilitates the healing of numerous emotional, menstrual, spiritual, and physical conditions. The solar plexus is known in the Wise Woman, Mayan, Chinese, and other indigenous traditions to be our "power center", or the seat of our power. Incidents such as rape, incest, abuse, abortion, infertility, and traumatic childbirth can restrict the flow of necessary energy movement in the area and as a result we lose our sense of power. One very common side effect is poor digestion, this is an indication that our power source is lacking energy. Mayan uterine massage is a simple and effective therapy that shifts stagnation into positive flow once again.

The uterus is held in position by muscles and ligaments that connect it to the pelvis. These uterine ligaments are designed to stretch as a baby begins to grow or as our bladders and bowels become full (*). When the ligaments and muscles become weak and loose they no longer hold up the integrity of the uterus (*). Physically speaking, when the uterus is displaced, prolapsed or tipped the oxygenated blood (arterial flow) coming to the uterus is sluggish and venous blood flow moving out of the uterus is restricted. This sluggish condition hinders outward flow and results in the buildup of carbonic acid and other toxins in the tissues. The inability to excrete or dispose of these acids can lead to unpleasant symptoms and over a period of years, serious illness. Another symptom of a displaced, tipped or prolapsed uterus is clotting and brown blood during our moontime or monthly bloods. If this is something you are experiencing then circulation is stunted.

Many women are told that a tipped or prolapsed uterus is (a) an untreatable condition and (b) normal don’t worry. However, it is in fact not “normal” and it is treatable. When the uterus is incorrectly aligned, the normal flow of blood and lymph are constricted and can disrupt nerve connection. The circulation of blood to the uterus, ovaries, bladder, and bowel is stunted (*).

A prolapsed uterus, also called a "wandering womb" or a tipped uterus, can be corrected with Maya abdominal massage. This external, noninvasive massage strengthens the ligaments and muscles that support the uterus and ovaries. It can take anywhere from a few minutes to a few months or even longer to get the uterus to slide back into place (*).

A few of the activities that can cause the uterus to prolapse or to be retroflexed:

• wearing heels
• lifting heavy items
• falls
• car accidents
• overstretching during pregnancy/labor, weakening ligaments
• running on hard surfaces like concrete
• chronic constipation
• high-impact activities like dancing, aerobics, horseback riding, krav maga or gymnastics
• bungee jumping

Maya Abdominal Massage Self-Care Instructions

Create a quiet space, empty your bladder and lie on your back. Bend your knees slightly and place a pillow or rolled towel/blanket under your knees. Breathe deeply and slowly for a few minutes until you feel relaxed. Do whatever you need to do to feel centered.

Bring both of your hands together, tucking one thumb under the other and bring all eight fingers close together, slightly bent and relaxed so that your hands look like a hoe.

• With your index fingers, locate the pubic bone and rest your fingers against it. You may feel a slight indent. Close your eyes and feel around the top until you have found that indent, this will be your starting place. Place your index fingers on the indent and begin to sink deeply into the soft tissue of your pelvis just above the pubic bone. Dig deeply here. If your uterus is in position, you will feel a deep empty space with no resistance. The dropped uterus feels like a balloon filled with water and gives a good deal of resistance to your pressure. Keep massaging deeply in an upward motion toward the umbilicus 9-10 times. You only need to go up 2-3 inches.

• With your pinky fingers, put one on the pubic bone and the other on the hip bone. Start from hip bone with the same hand position, bring all eight fingers together, slightly bent and relaxed, stroke towards the midline and up slightly. You will be making a “J.”

• Repeat the same on the other side. Remember, you are not going all the way up to the belly button just right below. (the round part of a wooden spoon can also be used for self-massage)

• 7 strokes for each section and repeat each section 3x’s

Afterwards drink plenty of water to hydrate during your healing process.

This is a technique my teacher said to do every day for the health of your body. It is recommended to avoid the massage 3 days before and after your moontime. Post Birth wait one week after bleeding has stopped.

The massage is contraindicated while an IUD (intrauterine device for contraception) is present.

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Arvigo, Rosita and Blaick, Michael. Rainforest Remedies: One Hundred Healing Herb of Belize. Twin Lakes, WI.: 1993


Moore, Michael. Medicinal Plants of the Mountain West. Santa Fe, New Mexico.:1979

Waight, Beatrice. Fire Heart: The Life and Teachings of Maya Medicine Woman Miss Beatrice Torres Waight. 2012
1. Hoerhammer; Nissim; Tawari et al.; Zelylstra

**Recommended Reading List**

Herbal Healing for Women by Rosemary Gladstar
Hygieia: A Woman’s Herbal by Jeannine Pavarti Baker
Women, Hormones and The Menstrual Cycle: Herbal and Medical Solutions from Adolescence to Menopause by Ruth Trickey
Women’s Encyclopedia of Natural Medicine by Tori Hudson

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https://twitter.com/LauraClemmons3
Beneficial Herb-Drug Interactions
Renee Davis MA RH(AHG)

Pharmacology
Pharmacodynamics: the effects of the drug on the body
- When drugs act at the same or interrelated receptor sites, resulting in additive, synergistic, or antagonistic effects of each drug at the target receptor.
- Predictable if the practitioner has a basic working knowledge of the substances
Additive interactions
- Valerian plus benzodiazepene = increase in sedation
- Rhodiola plus caffeine = highly stimulating
Antagonistic interactions
- stimulant plus sedative
- An astringent herb for diarrhea and a laxative to increase bowel movements

Pharmacokinetics: the effects of the body on the drug
- how the body changes the metabolism of a substance
  - more complicated and difficult to predict - the interacting drugs often have unrelated actions
- when a substance alters the absorption, metabolism, or excretion of the drug (usually by affecting liver function or GI tract absorption)
  i.e. Hypericum (SJW) – hepatic herb
- CYP450 - enzymes in liver that processes drugs
- when something alters these enzymes, other substances going through those same pathways are affected
- potential for pharmacokinetic interactions
  - antiretrovirals
  - immunosuppressants after a transplant
  - anticoagulants (Warfarin)
grapefruit juice
- Pgp - protein pump cell membrane that pumps many foreign substances out of cells

Estimating an interaction? Ask yourself:
1. Is this information relevant to your client?
   a. Research drugs, see what they do in the body.
   b. Address research on interactions
      i. Herb, Drug, and Nutrient Interactions by Mitch Stargrove, Jonathan Treasure
2. How would this affect the herbal Rx or recommendation?

Red flags
Warfarin/coumadin (anticoagulants)
   do not use herbs - narrow therapeutic window
Psych meds
   combination therapy is common
   SJW - serotonin syndrome (excess serotonin)
   potential for interaction with SSRIs – additive
antiretrovirals
   SJW has been shown to decrease bioavailability of these drugs (clinical study)
cardiac medications
   caution with any life-saving or critical medications: common sense!
   polypharmacy caution
immunosuppressants
   caution with immune stimulants and modulators
surgery
   caution with herbs that have documented anticoagulant effects
steroids
   Licorice- steroid like compounds
Polypharmacy
   SJW
   Ginkgo

Beneficial HDIs – broad concepts
Liver/kidney support
Nutrient status (drug-induced nutrient depletions)
GI tract/microbiome

Antidepressants - SSRIs
- mechanism: blocks reabsorption of the neurotransmitter serotonin
- common side effect: low libido - treated with Ginkgo, Cordyceps
- chromium - supports glucose regulation and neurotransmitter precursors
- EFAs/fish oil - helps with serotonin and other neurotransmitter precursors
- B vits (esp. B12) - neurotransmitter synthesis
- withdrawal effects can be severe for people who have been taking it >6 weeks (irritability, insomnia, dizziness, fatigue, nausea) – treated with Hypericum, Rhodiola

Antipsychotics
- mechanism: binding to/blocking the D2 or dopamine receptor in the brain.
- side effects
  - brain fog, dull thinking (treated with black cohosh, bacopa, Lion’s mane)
  - feeling ‘disconnected from self’ (rose, flower essences)
  - tardive dyskinesia (Ginkgo)
  - Hyperprolactinemia in women (Vitex)
- caution with Kava and dopamine levels

Antibiotics
- antibiotic resistance, higher risk in chronic infections and other long term use situations
- Quorum sensing inhibitors
  - Berberine-containing herbs
    - Oregon grape root
    - Coptis/goldthread
- Biofilm - protective plaque developed by bacterial communities
  - enzymes: nattokinase, serrapeptase, lumbrokinase
- Complex antimicrobial herbs - adjuncts
  - Wormwood/sweet annie
  - garlic
  - cryptolepsis

Opiates
- mechanism: bind to the opiate receptor sites in the brain
  - very addictive
  - tolerance – need to increase dosing over time
  - severe withdrawal effects
- Cannabis
  - cannabinoid system “talks” to opiate system (receptor cross-talk)
  - synergistic interaction - can ease withdrawal and reduce the necessary effective dose
  - use w/ Skullcap (good for quitting patterns), Cal poppy, other pain-relieving herbs or nerviness as appropriate
  - prefer inhalation over ingestion

NSAIDs
• mechanism: inhibition of inflammatory “Cox” enzymes
• aspirin, ibuprofen, aleve/naproxen
• gastric ulcers
• Turmeric
  o anti inflammatory
  o antiulcer activity through scavenging reactive oxygen species, by regulating MMP activity, or both
• Slippery elm, marshmallow
  o classic demulcent herbs for irritated and damaged tissue
Initiating Lifestyle Change in Chronic Disease
Jenn Dazey, ND

Tips for the Practitioner

- Remember that humans are inherently flawed, including you!
- Be a sincere role model. If you are a hypocrite, it will be impossible to expect trust, respect, or even a continued therapeutic relationship (Hash 2003, Lobelo 2009).
- Create a positive and inspiring environment in your office. This may be in the photos you display, beverages and refreshments you offer, being fully present and attentive, plants you grow along the walkway.

Motivational Interviewing Skills (Rollnick 2008)

- Open-ended questions – e.g., “How are you feeling about your health these days?”
- Affirmation – e.g., “You may not be at your goal yet, but look at how far you've come.”
- Reflective listening – e.g., “It sounds as though you don't feel confident about making this change but you do want to change.”
- Summaries – e.g., “Let me summarize what we've just talked about.”
- Regular follow-up, education, and written information from the practitioner are shown to increase motivation to change (Pignone 2003).
- Ask “what are you willing to do? Take supplements or herbs? Change the way you eat? Get more exercise?” Make sure you begin on their terms. (Spink 2008)

Find Your Motivation

- Ask about their “Locus of Control”… Is it internal or external?
- Martin Seligman’s ‘Learned Helplessness’ may shed light on the problem
- Are you changing for yourself or is someone else pressuring you?
- What is important to you? If you were to change your lifestyle, how would it look? How would it affect what is truly important to you?
- Reflect on Prochaska’s Stages of Change together and determine where they sit on that continuum (Greene 1999).

Baby Steps

- Chronic disease doesn’t just happen all of a sudden. It is a slow and steady adaptation to a particular set of lifestyle choices. Resolution of chronic disease is also a slow and steady adaptation to a particular set of lifestyle choices.
- Small, incremental changes have been shown to be more successful than all-or-nothing methods (Elmer 2006).

Who is on Your Side? Find a Support Team

- Family, friends, and environment will all have to adapt to the changed person (Bylund 2017).
- Recruit one or two reliable support people. The ones who are there at first might not be the ones who stay by their side for the long term.
• Acceptance is a fundamental human need. Peer influence is effective in forming positive and negative lifestyle habits (Marsh 2017).

Measure Your Progress
• Be clear about what data will indicate success (weight, blood sugar, lab values, having ‘good days’). Have a reasonable goal, then measure it on a schedule that is appropriate.
• Weight should be measured monthly. More often may create discouragement as the number changes rapidly at first, then fluctuates or plateaus.
• Lab values (i.e. cholesterol, HgA1c, inflammation markers, bone density) may be measured annually or biannually.
• Journal entries should include a standard rating system (great day, good day, angry day, etc.) or include daily data to find correlations (what I ate today, physical activity, emotions).
• Most importantly, focus on the positive behaviors rather than the data (Dansinger 2008).

Setbacks and Failures are Valuable Lessons
• Falling down is not the same as failing
• Talking about what did not work will bring a deeper level of trust and understanding to your therapeutic relationship
• What action or choice might have led to a different outcome? How did you unknowingly place yourself in a situation where you were vulnerable?

Consistency for 66 Days (not 21) makes a Habit!
• In the 1950’s Maxwell Maltz popularized the saying “21 days makes a habit”. Research has actually concluded that it takes a MINIMUM of 21 days, most commonly 66 days, and sometimes even longer (Lally 2012).
• Be able to point out how they have progressed, as it is not usually obvious to the one doing the work.
• Empower, rather than parent. They should be making these changes in order to regain control of their health and their life. What seemed like a limited lifestyle at first, will turn out to be their ticket to freedom, happiness, and they’ll unknowingly give the gift of inspiring countless others.

Case History of Janice
• Janice is a 51 year old, overweight, type 2 diabetic with moderate depression, constipation, knee and hip pain, and hypertension.
• Janice eats for comfort, the same as her 2 sisters and her mother, who recently passed due to complications of type 2 diabetes (kidney failure, on Christmas eve).
• One sister smokes heavily to cope with depression. The other sister does not communicate with the family anymore.
• Janice is divorced but still endures harassment from ex, has no children because of radical hysterectomy at age 18, house was left halfway remodeled with lack of functional kitchen.
Let’s NOT Problem Solve for Janice!

- Janice needs to change many things in her life. If we do all the work for her, then we are actually harming her on a deeper level.
- Where, instead, do we begin?

References

A firsthand look at the elemental forces at work, and a possible outline of ways a person might elicit a healthy & sustainable process. Suggestions for supporters who might act as guides along the path. In lecture I will discuss the spiritual ceremonies and memorial celebrations primarily from an Earth-Spirituality perspective, the body preparation, moon cycle, seasons, and Earth elements that mark progress along the path, as well as an overview of foods and herbal formulas that assist in healing from the intense shock and brain trauma that accompanies sudden loss.

Death should not be medicalized; it’s not a medical problem

In the dying process, according to the Tibetans; first the Earth element breaks down (body structure deteriorates, bones may become very brittle and break, muscles atrophy). Then Water element recedes (bodily fluids, urinary system breaks down). Fire then rises to lift the Spirit (infection may occur, or body becomes suddenly hot and sweaty, skin is red-tinged). Air then diminishes (death rattles, raking, or last breath) Finally, Ether element spins away, this is where the Spirit rises on the last breath. In a sudden tragic death, this may happen within the span of 10-20 minutes.

Sorrow, like the river, must be given vent lest it erode its bank

The first week: VATA (air & ether elements) will be heightened/aggravated next 3 months
Day 1 & 2: Treat for SHOCK. Homeopathic Ignatia amara and Aconitum. Symptoms are very similar to a Traumatic Brain Injury(TBI). An attentive and grounded support person who can drive is essential. Coconut water, electrolyte replacement, magnesium, 5-flower essence. Gelsemium if needed, for the pulsing-pounding of the heart, the wild-eyed shock. Take note of moon phase.

Get Salt on board, HYDRATE! Tears are plenty. Rescue Remedy (spray, pastilles are great!) Employ Mugwort foot baths for grounding. Continue to treat for TBI: Gotu Kola, pure, light foods.
Herbal Electrolyte Recipe:
Mix: ½ cup sugar, ¼ cup sea salt in 2 cups water, store separate and add to tea to taste. Usually less than 1 oz is palatable and effective. Drink straight or dilute.

Day 5: Body Preparation, Cremation or Burial
Intensity drops briefly. Sleep and rest is super important to prioritize so people don’t get sick. Walking is helpful, go to the mountains and get up high and look around.
Questions: WHO handles your loved one’s body? Who leads ceremony?
Resins; copal, frankincense, Nag Champa, Sandalwood (S.album), Amber, Rose. Lotus, sage, cedar, mugwort. Ignatia amara for letting go, cutting the cord. Get hands & feet in the earth, roll in river mud.

Day 6 & 7: Prepare for Ceremony- small family memorial celebration
Do retail therapy, go to spa, get footbaths & nails done, receive massage, mud wrap, hot springs, swimming, bonfire. Go to Water- River, Lake, or Ocean.

The time to grieve is NOW. Do not suppress or ignore your mourning reactions. If you do, your feelings will be like smoldering embers, which may later ignite and cause a more dangerous explosion. Anguish, like ecstasy, is not forever.

For difficulties sleeping:
CALM Magnesium supplement
Natural Factors’ “Tranquil Sleep”; 5-HTP, Suntheanine, Melatonin.
Sesame or Coconut oil on soles of feet and scalp before bed.
Turmeric-Ashwaganda decocted milk with honey and ghee.

The Second week:
Day 8, 9, 10: rest, travel, rest, get massage. Get in Body, plan trip to the Sea.
Day 13: Memorial, ritual, ceremony.
Day 14: FIRE. Burn some things. Pitta may rise.
Day 15, 16, 17: rest, pay bills, take care of home, business, get massage, hike, walk in forest.
Secure connection/make future appointments with grief support; group, social worker, therapist.
HERBAL REMEDIES
Top three: Hawthorn, Rose, Motherwort.
With appearances by Blue Vervain, Skullcap, Oats, Lemon Balm...

Examples of possible Three-times-daily herbal formulas, rotated:

**Deep Heart** by Farmacopia, 4-5 droppersful 3X/day:
Silk Tree, Milky Oats, Hawthorn, Skullcap, Peony, Lemon Balm glycerite, ½ Motherwort, ¼
Licorice, ¼ Schizandra glycerite

**Cascade’s Apothecary-** Parrot’s Beak (Pedicularis bracteosa), Chamomile, Wild Oats, Hawthorn Cordial

**Grieving Formula** by Siskiyou Mountain Botanicals, 1-2 droppersful up to 6X/day. Aralia calif.
berries, Damiana, Lavender, Passionflower, Kava, Chamomile, with Rescue Remedy.

**Family Heart Healing** flower essence by Samantha Spikenard, 4 drops as needed:
Agrimony: Inner Peace from acknowledging and transforming pain
Devil’s Club: Support and comfort when your inspiration and joy is drained by life’s experiences
Hestia: (basil, mint, sage?) Finding stillness and grace to live calmly within your truth
Morning Glory: Vital forces awaken refreshed

**Grief Relief** spray by FES: “Solace and insight in times of sorrow and searching”
Myosotis, Borago, Gentiana, Amaranthus, Dicentra, Rosa, Achillea, Essential oils of lemon balm and myrrh

**Stabilizing Syrup** by Taproot Medicine
Starring:
Eleutheroococcus, Schizandra, Reishi, Ashwaganda, Licorice, Milky Oats, Nettles, Rosehips,
Chicory, Cloves, Cinnamon, Ginger, Nutmeg, Goji berries, honey, brandy.

**Anxiety Release Essential Oil Blend:**
Orange, Lavender, Clary Sage, Geranium, Vetiver, Roman Chamomile

**Galen’s Way Rose Glycerite**, voted the best by American Herbalist Guild, use freely.

**Pink Yarrow FE-** helps transform the crushing grief of the world. Stalk stands tall.
*Ignatia amara* homeopathic- if the heart is having difficulty letting go- helps cut the cord
*Nasya Oil*. 3 drops in each nostril in am, lubricates & nourishes sinus and eyes
*Netra Basti* if eyes are not flowing
*Shirodhara* if sleep or anxiety is issue.
**Week 3&4: JOURNEY to the SEA.**
Travel with a friend or partner who can support you and guide you, cook for you and make decisions. Go to the ocean to grieve, the waves pulse and cleanse our body and mind, the salt water is our blood of our mother and soothes us, heals us. Hawai'i ideal, islands or some remote coastline where you can be in solitude. Turtles remind us of having a hard protective shell on our backs.
Practice BREATHING. Breathe in the dark and breathe out the light. When you breathe out, imagine your chest cavity is filled with white light like the moon reflects, and breathe that white light back into the world.
The LEGACY of your loved one is what you must practice daily. All their best qualities must be put forth.

*In periods of stress, you need time to rest your body and your mind. You need to be by yourself or with a close circle of support. Solitude is the glory of being alive. In Solitude you find time to think and take stock of your life.*

**MOON CYCLE**
*When the phase of the moon returns to the phase it was at when your loved one departed, your body will remember and the pain may be physical.*

**First 3 moons - VATA.** Physical detachment from attachment to the physical form. Start and Beginning. Extreme lightness of body and deeply engaged spiritual connection but also spaciness, forgetfulness.
Attempt minimal work, brain functions are minimal. Try not to drive solo or operate heavy machinery. Oleanate often, sit on rocks, soak in ocean, watch the waves, do forest and moon bathing, sweat, sauna, receive bodywork, eat extraordinarily good food high in protein and magnesium, keep electrolytes up. Be close to the 5 elements, burn things. Release energy to the Spirit world. Sweep the home, cleanse the air, purge. Remove objects that trigger, refresh, renew. Bad time to get hooked on alcohol, “spirits” as you will fly to places unknown and possibly unable to return from. Numbing the pain for a while will only make it worse when you finally FEEL IT.
Memory will be vague due to the trauma. Make no life-changing decisions during this time.

*Because you loved, grief walks by your side.*
Moon 4- PITTA. Progression and ability to endure. Stability.
Anger and resentment may rise to the surface. Brain functions begin to return, begin re-integrating work schedule. Take a 2-week guided trip where your basic needs will be taken care of; logistics, food, etc. Adrenals are depleted from the shock and trauma so a guided Eco-tour to intact nature (ex: Island Hopping with Mar Y Adventuras in La Paz, BCS) with hard physical exertion like sea kayaking, or something deeply sensorial and immersive like snorkling or diving, stargazing or candle magic. Reset your circadian rhythm, acquire deep restorative sleep off-grid in the Dark and Quiet. Be close to the pulse and pull of the tides, sleep by the gently lapping sea or lake, the gurgling brook or creek (or a water fountain in bedroom). Keep “squeezing the towel”; go into the basement of the mind and sweep up any unresolved thoughts, feelings, emotions that linger there and release them into fire, wind, waves, earth, lava. Press into the hurt and pain like in deep tissue bodywork, breath out with the intention to release. Stare at a candle flame for 5 minutes at dusk.

The way to feel better isn’t to avoid the anger, it’s better to paint your heart onto the canvas of life and witness the crack leaking something so strong not even a bathtub of tea can mask the smell.
-Frieda Kahlo

By the 5th moon you should be fairly clear of the deep grief if indeed you have done your job well by putting your face in the wind and pressing in. Your thoughts & memories of your loved one may still visit on a daily basis but you can begin to divert your thoughts into affection and appreciation.

“If you want to sing with angels, you gotta dance with ghosts” -Danny Dollinger

Moon 6- Coming Together.
Be wary of anxiousness, triggers, PTSD symptoms developing. Get Grief support. Form and function can return to your life if you have adequately processed, or even if you haven’t, you should be able to perform most tasks and when encountered in the grocery store, the tears fall easily but dropping into the grief isn’t accompanied by a giant sucking sound requiring a day of bed rest to recover from.
Long walks or hikes several times a week are crucial.
At the end of this moon phase, you may find the strength to clean your loved one’s space. Physical reaction may hit 3-5 days later.

Darkness has a hunger that’s insatiable. Lightness has a call that’s hard to hear
-Indigo Girls
Moon 7- KAPHA Divine Realm, higher existence. Give other people your memories, pass on tangible items that they will infuse with love in memory. Energetic grieving- they do some of the work for you! Our intentions shape the world. Spiritual journeying, visiting sacred places, walking medicine trails, seeing amazing art, witnessing spectacular performances...these are all things we should do frequently anyway in our short time here in these human bodies. Be prepared for “slip outs”. Companion animals important- dogs, cats, bunnies, horses. Depression is a danger. There may be days you are under a heavy heavy wet blanket that’s hard to crawl out from under.

“It’s better to feel pain than nothing at all” -The Lumineers

Moon 8- Infinity, breaking barriers.
Fresh flowers upon the altar. Push into new territory. Make a photo collage of the loved one, replace photos on altar, create memories from trinkets or clothing? Energetic flow begins to return, you may feel like yourself on some days. RESTRUCTURING and HUMAN FREEDOM Planetary Essence Elixers by Stargazer Li.

Moon 9- Completion, Ending, Universe, Alignment. Oak tree.
First Grieving cycle complete. 82 more moons (6 years) to go. Perform a self-care healing ritual; 3-4 days at a hot spring or a series of sweats, saunas, bodywork, meals. If news of another’s passing arrives, take time to drop in with the emotion and be prepared to “go off the rails” for a bit. Take care of unfinished business. Formulas can stop. New ones can be made, but the herbs have done their work.

“Broken trees still seek the sun. Lean on friends, it’s what they’re for. Believe in your strength”
- song by Dana Lyons

Moon 10- Completion. Beginning Again.
Build and strengthen your body. Take a longer more strenuous hike than usual or 4-day campout. Ask for help with a lingering project, call on your community to check in in some way. Get hugs, your physical body will crave the presence of your loved one. Grief begins to take on a familiar form. Almost like a stuffy hidden inside your body that you can pull out, look at, wash off, placate and soothe, and replace.

Moon 11- Sweet memory moon.
Laughter comes more easily. Continue to reach out into the scary dark places. Remember breathing. Reset the electrical connection. Receive polarity, acupuncture, rolfing. Build Fires, acknowledge planetary seasonal cycles, continue to guard against physical injury- be aware of self-protection and the need to continue to rest and go slow. Do a yoga retreat, get on the water, or something similar where the mind can rest and integrate with the body. You may finally have a lock on what triggers and debilitates you.
Moon 12- Brain almost wants to forget, body wants to curl up in a ball. It’s been a long year.

Encountering community members
Our predominantly Christian culture is taught stoicism in general. When encountering a grieving person, it is helpful if you can look them in the eye and at least say something as simple as “I will miss (your loved one)”, or, “I’m sorry for your loss” or even a touch on the elbow rather than remaining silent. Silent is painful, because we know what you are thinking, and you are not expressing your pain, and our heart twinges. Without your expressed empathy, our grief is elicited but not given the space to process, to bloom outward and release from our body. Stuck emotions are the seeds of dis-ease. Words heal and mend our hearts because there is intention there. “How are you doing?” is an inauthentic question. Rather, getting to the point and being specific is simple and clear; “What can I help you with, anything?”, “How is your heart mending?” “Want to go hiking?”, “Can I feed you dinner?”

Moon 13- Turtle’s shell complete. Anticipate and plan for the cellular memory of the shock event to return. Carefully strategize and plan out the activities surrounding the days around the moon phase AND Gregorian date. Others in community will remember the date so make yourself empty that you may receive their grief. They have been holding space for you and now you must receive for them the “reach down and pull it out again”. The brain almost wants to forget, protectively. Continue with healing distractions. Looking ahead to the future, redefining life goals. Emotional exhaustion still a factor, take care to continue making time for deep quiet, reflection, rest. Taking another extended guided or supported expedition into designated wilderness, high altitude mountains or desert backcountry will elicit time and space for deeper healing and recovery from the life shock and trauma. Seek the vast silence and sit in it. Let the River’s voice wash away any lingering pain. Ex; Yoga retreat, hot springs or cabin in the middle of nowhere, Middle Fork Salmon wild hot springs float trip, Horse packing with 7LazyP Outfitting into the Bob Marshall Wilderness, or engage on a service trip with a group if possible.

Death brings you a choice. It can lead you to the edge of the abyss, or you can build a bridge that will span the chasm.

<table>
<thead>
<tr>
<th>Additional Herbal Allies:</th>
<th>Motherwort- anxiety, panic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ocotillo for the emotional heart</td>
<td>Borage- for courage, renews tears</td>
</tr>
<tr>
<td>Ailanthus Tree of Heaven</td>
<td>Sage</td>
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<tr>
<td>Violet</td>
<td>Limber Pine</td>
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<tr>
<td>Blue Vervain for visual hauntings</td>
<td>Willow</td>
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<tr>
<td>Osha opens the lungs</td>
<td>Juniper</td>
</tr>
<tr>
<td>Cedar</td>
<td>Mugwort</td>
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</tbody>
</table>
   Go to: Ocean
   Remember: Breathing
PITTA- month 3-6 Anger, Resentment. Bile.
   Go to: Desert
   Remember: Sensory immersion
KAPHA- month 6-9 Depression. Lungs
   Go to: Mountains
   Remember: Squeeze the towel

Let us not turn our eyes away from things that need to be seen

<table>
<thead>
<tr>
<th>Herbs to restore the tears, support the eyes:</th>
<th>Herbs to cut through Kapha, elicit Grief:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blueberries 1 cup daily to support eye health</td>
<td>Sage</td>
</tr>
<tr>
<td>Lonicera</td>
<td>Berberis repens</td>
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<tr>
<td>Prunella</td>
<td>Balsam root</td>
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<tr>
<td>Violet</td>
<td>Solidago</td>
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<tr>
<td>Evening Primrose</td>
<td>Monarda</td>
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<tr>
<td>Heuchera (Alum root)</td>
<td>Epilobium</td>
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<tr>
<td>Scarlet Globemallow</td>
<td>Blue Flag Iris</td>
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<tr>
<td>Black Elderberry</td>
<td>Anenome patens</td>
</tr>
<tr>
<td>Anaphylis (Pearly Everlasting)</td>
<td>Asarum caudatum</td>
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<tr>
<td></td>
<td>Aconitum colombianum</td>
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<table>
<thead>
<tr>
<th>Healing from Brain Trauma:</th>
<th>Additional Herbs for integration and adaptation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lion’s Mane</td>
<td>Pedicularis, all</td>
</tr>
<tr>
<td>Gotu Kola</td>
<td>Angelica</td>
</tr>
<tr>
<td>Bacopa</td>
<td>Green Gentian</td>
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<tr>
<td>Rosemary (caution)</td>
<td>Clematis</td>
</tr>
<tr>
<td>Turmeric</td>
<td>Spirea</td>
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<tr>
<td>Cypress</td>
<td>Valerian</td>
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<tr>
<td></td>
<td>Blue Vervain</td>
</tr>
<tr>
<td>Foods: Avocado, Coconut, Flax,</td>
<td>Schizandra</td>
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<tr>
<td>Vit A: Tropical Fruits, sweet potatoes, carrots, dried apricots, dark leafy greens, salmon</td>
<td>Hericium- Lion’s Mane mushroom</td>
</tr>
<tr>
<td></td>
<td>Ganoderma- Reishi mushroom</td>
</tr>
</tbody>
</table>
Potential comfort foods:
- Tapioca pudding-sweet, easy to digest, can make with coconut milk, add fruit.
- Coconut water- ideally from fresh, young coconuts
- Bone broth, warm casseroles, soups
- Electrolyte replacement- active grieving is a workout!
- Nut butters, tahini dressings, unctuous sauces like guacamole
- Thai salad rolls with almond butter dipping sauce
- Smoothies, fresh carrot-beet-orange juice
- Easy-to-digest power bites: soaked dates, cashews, figs, rolled in coconut.
- Avocado and whole grain toast
- Pasta, butter, lots of salt.
- Potato au gratin
- Chocolate chip cookies, cookie dough
- Battered mozzarella sticks

Natural Burial information & resources:
- Green Burial Council website for great guides and other resources: greenburialcouncil.org
- 300 providers in the US & Europe, since 1 in 2006.


The typical funeral home in the US costs around $6K. Families will often spend over $10K when you count up airfares, hotels, meals out or catering. You get death certificates, viewing room, gathering room, body transportation, etc. Different states have different requirements for refrigeration and handling or length of time before cremation or burial. In general, you don’t HAVE to use a funeral home and more natural burial outfits are opening as non-capitalistic green burial becomes a “thing” (again). It’s all too easy to succumb to making choices that end up being much more expensive than anticipated.
“Someday you will be faced with the reality of loss. And as life goes on, days rolling into nights, it will become clear that you never really stop missing someone special who’s gone, you just learn to live around the gaping hole of their absence. When you lose someone you can’t imagine living without, your heart breaks wide open, and the bad news is you never completely get over the loss. You will never forget them. However, in a backwards way, this is also the good news. They will live on in the warmth of your broken heart that doesn’t fully heal back up, and you will continue to grow and experience life, even with your wound. It’s like badly breaking an ankle that never heals perfectly, and that still hurts when you dance, but you dance anyway with a slight limp, and this limp just adds to the depth of your performance and the authenticity of your character. The people you lose remain a part of you. Remember them and always cherish the good moments spent with them.”

-Christopher Walken

“Try not to resist the changes that come your way. Instead let life live through you. And do not worry that your life is turning upside down. How do you know that the side you are used to is better than the one to come?”

-Rumi
Title
Herbs for Anger, Fear, and Trauma: Prevention, First Aid, and Aftercare
Co-taught with Greta de la Montagne, RH (AHG) and Samantha Roberts, Clinical Herbalist

Full Description
Intense emotions emerge during times of political and environmental change. When intense emotions persist, they can lead to imbalances or they can lead to increased resilience. When responding to disasters and protests, sustaining the volunteers, activists and medics themselves is critical. Recognizing the vitality of intense emotions can help the herbal medic provide support while taking steps to maintain personal resilience.

Two long-term herbal action medics will share clinical experiences helping people heal both first-hand trauma and secondary trauma frequently experienced by first responders and witnesses. *Materia medica* will cover commonly used herbal remedies by herbal street medics for emotional first aid, and additional strategies used to prepare the spirit, mind, and body before entering an intense situation. Learn energetic, first aid, and metaphorical approaches to herbal support to prevent burn-out and persisting emotional imbalances.

Short Description (70 words)
Intense emotions emerge during times of political and environmental change. When intense emotions persist, they can lead to imbalances or they can lead to increased resilience. Recognizing the vitality of intense emotions can enhance herbal protocols. Two long-term herbal action medics will share clinical experiences, case studies, and *materia medica* to help people heal and prevent first-hand and secondary trauma, burn-out, and persisting emotional imbalances.

Target Audience: all levels

Learning Objectives
1. Review strategies to heal and prevent burnout, trauma symptoms, and persisting emotional imbalances.
2. Review *materia medica* commonly used by herbal street medics.
3. Develop skills to cultivate post-traumatic growth.
The Shock of Trauma and Strategies for First Aid

Steps in Helping:
Helping someone be present with their injury is the first step in successful treatment. Any injury is simply a disturbance to the energetic flow. If the only thing you do is encourage proper or deeper breathing and thus restore their energetic flow, the nerve impulses will immediately calm. This is how you can help someone move beyond the "freak-out" and connect with their body. Then they can actually step away from the pain they are expressing with their mind to allow the body to focus on healing. When the energetic body is brought toward balance, healing will occur much more rapidly; blood will flow less copiously, pain will diminish more rapidly. We call this "holding space."

By acknowledging the intrusion and damage done, and seeking center, not sinking into fear, we can help avoid the inevitable freak out. Breathing with the patient is possibly the most helpful thing you can do to encourage this awareness. Breathing into the bottom of the lungs supports oxygen exchange at the alveolar membrane. Disconnection creates blockage, stoppage of the energetic flow which is essential for healing to occur. Awareness creates freedom of movement.

1. Scene Safety
2. Assessment
3. Breathing
4. Treatment

Preventative Care

*Prevention is always the best cure!*
Steps to prevent burn-out in extended campaigns and support the body and spirit with resiliency in the face of trauma. Healthy lifestyle routines are essential to practice in the weeks leading up to an action or demo. Mindful and regimented physical and mental self-care is critical.

- Sleep (8 to 9.75 hours minimum, and commencing before 10pm)
- Food (organic, fresh, vital, nutrient-dense, unctuous, warm, spiced, etc.)
- Water (pure, spring, filtered, Reverse Osmosis, lunar-or solarized)
- Adaptogenics
- Nervines
- Nutritives
**Immediate Care:** Steps to take immediately after someone has been traumatized (physically or emotionally), been in a very stressful situation, hit the burnout wall and had a break down, etc. This is same-day or day-after care.

- Assess for physical wounds
- Get them to a safer space
- Calm them down
- Get them back in their body
- Feed and water them
- Rest
- Encourage debriefing with others similarly affected

**After Care:** Steps to take once trauma has occurred to help rehabilitate, heal and build resiliency.

- Real food, water, sleep
- Limit re-exposure to traumatic events
- Continued care for physical wounds
- Manage emotional trauma symptoms
  - Panic Attacks
  - General Anxiety
  - Insomnia
  - Ungrounded/out of body
  - Circular/obsessive thoughts
  - Depression
  - Hopelessness
  - Fear
- Support digestive system
  - Neuro cells lining the gut wall
  - Liver is an organ of elimination (feelings, experiences, stress hormones, chemical weapons)
- Nervines
- Nutritives
Street Medic Materia Medica:

Flower Essences

The flower or herb is steeped in water and the water is preserved with a tiny bit of alcohol which will fix a FE for 100 years. The action is on the emotional, astral and/or spirit body. Small vials are lightweight and handy. Flower essences treat the emotional component of injuries: stress, pain, fear…and if they don’t treat the condition by themselves, they definitely assist other remedies to work more effectively and on deeper levels.

- **Rescue Remedy/Five Flower** – 4 drops under tongue for extreme trauma, 4 drops in 1 cup water for trauma with strong emotional component. Contains: Cherry Plum, Clematis, Impatiens, Rock Rose, Star of Bethlehem

- **Elm** – "psychological smelling salts", temporary conditions. Gives strength to the strong in moments of weakness.

- **Oak** – chronic conditions. Overachievers, overworked, inner pressure.

- **Hornbeam** – clears the head, stiffens the spine. Weariness and exhaustion in the Mind. Good for limp plants, too.

- **Olive** – no reserves left, deep inner tiredness, physical & mental fatigue.

- **Aspen** – best remedy for developing courage. Good Rx for timid cats, someone having fear-based vertigo on the knife ridge, pyramid or advancing militarized police force.

- **Pink Yarrow** – breakups, earth upheaval, climate crisis/apocalypse fears. Supports the open, protected heart.

- **Nasturtium** - over-intellectualizing, moves intellect out of head & into heart. (professor syndrome)

- **Borage** - for courage. For the heavy hearted, depressive behavior

“keep it simple”
Essential Oils

These oils have been chosen for their sustainability. Because so much plant matter goes into creating just one drop, it's imperative that we use essential oils in the most ethical manner possible, knowing their source and worldwide threats to their native habitats. Also, the plant material must be fairly traded, sustainably harvested and no risk of adulteration. We try to only use oils of plants that can be cultivated. Essential oils are highly concentrated; steam distilled "plant blood". They are used externally, and are not to be used internally unless specifically directed by a qualified aromatherapist. One drop can pack a massive punch, thus it's imperative know the proper amounts, and whether or not it's OK to use the oil neat (topically, on the skin without dilution in a carrier oil). Always check with your patient for skin sensitivities before applying. Be mindful of how much plant material goes into the finished product. They can be handy in first aid in that they can be stored in small glass vials, don't go spoil easily, and are relatively portable. They are often applied to pulse points in a carrier oil such as jojoba, which include: inside wrists, behind ears, ankles, inside knees, sternum, nabi (bellybutton), and sacrum. If we don’t distill the oils ourselves we prefer to purchase from companies we’ve extensively researched for ethical and sustainability reasons.

- **Lavender** (check for allergy)- diverse applications
- **Vetivert** grounding, cooling, headaches, stress (imported, difficult-to-grow grass)
- **Blue Yarrow** 2 drops:10ml carrier oil for SHOCK, similar to Rescue Remedy
- **Cannabis** C02 extract- high CBD strains, activate the Endocannabinoid system

Homeopathics

- **Arnica** – trauma, from minor swellings & sprains to horse or car wreck. For sprained ankle start with 200c then follow with 30c 4 tablets every 20 minutes. Major trauma: 200ck or 1M

- **Aconitum napellus** – 1M for shock

- **Gelsemium** – “bug-eyed” shock, apprehension, stage fright (good for long evacuation)
Nervous System Support

General strategies: We use herbs to sedate the nerves, quell inflammatory response, and interrupt the brain’s signals. Give the patient a round object to hold, such as a wool ball stuffed with lavender, a special stone, amulet, or cloth. For children, bubbles work well as a bit of distraction. Rub the soles of the feet with coconut oil, ghee, or sesame oil.

**Chamomile** *Matricaria chamomilla (German chamomile)* - 4-teabag strength for sleeplessness due to pain or trauma, anti-anxiety properties, CNS/sensory effects, binds to GABA receptors
**Milky Oats** *Avena sativa* - Reliable nervous system sedative, safe for babies to elders
**Skullcap** *Scutellaria laterifolia*
**Passion Flower** *Passiflora incarnata*
**California Poppy** *Eschscholzia* - calming, anti-inflammatory, non-addictive
**Corydalis** *Corydalis yanhuso* - 1% analgesic strength of that of opium
**Wild Lettuce** *Lactuca virosa* - Hypnotic sedative, opium substitute
**Catnip** *Nepeta* - essential oil, 10 drops transdermal in bellybutton

Other Strong Allies: Pedicularis, Kava, Lemon Balm, Vervain, Valerian, Licorice, Aralia californica, Ashwagandha

Additional therapies: Magnesium citrate to bowel tolerance, Accupressure points, Bodywork, Lithium Hot Springs, Long walks or hikes, Shinrin-Yoku (Forest Bathing), Coastal Retreat, etc.

Standing Strong in the Face of Fear:

Handy herbs: Pink Yarrow, Redwood, Rhodiola, Mugwort, Sage, Poplar Bud, Hawthorn, Blackberry, Mullein

Use the Doctrine of Signatures to come up with herbs from your bioregion that will lend strength. In the Pacific North and Mountain West we use:

- **Oplopanax**
- **Aralia californica**
- **Yarrow**
Quelling Anger (Liver Wind-rising, Pitta condition):
Handy herbs: Burdock, Dandelion, Milk Thistle, Marshmallow, Blue Vervain

- Dandelion
- Blue Vervain
- Peony (Bai Shao) - sedative and anti-spasmodic, softens and comforts the liver, increases circulation. 6-15g/day, tea or capsules.

Chologogues to enhance bile secretion:
- Gentian
- Barberry
- Bupleurum
- Fringetree
- Milk Thistle

Bodywork: Gall Bladder meridian: temples to corner of eyes, outside of leg, oil soles of feet and scalp.
Nasya oil, herbal snuffs.

Emotional, Psychiatric Crisis, Anxiety, Panic attacks, Organizer-itis
Handy herbs: Anenome, Passiflora, Oats, Lavender, Self-Heal, Pedicularis, Eleutherococcus, American Ginseng, Gotu Kola, Lion’s Mane

Considerations: trauma history, drug ingestion or overdose, stress intensity

Anxiety EO blend: Orange, Lavender, Clary Sage, Rose Geranium, Chamomile, Vetiver

Mother’s Little Helper for adrenal exhaustion: Eleutherococcus, Pedicularis, Skullcap, Blue Vervain, Skullcap.


Grief, Shock, rape and crime victims: PTSD Flower Essence: Green Gentian, Bleeding Heart, Five Flower Formula, Fireweed, Echinacea, Arnica

From Leah Wolfe, street medic: I use Yarrow for preventing and healing from trauma. I find it to be helpful as a wound healer, including emotional and psychological trauma. As a complex herb in both terms of constituents and actions, I find it particularly helpful for the varying emotional states that often occur with long-term symptoms of
trauma. I have found that in low to moderate doses Yarrow gently stimulates the digestion, the circulation, and the parasympathetic nervous system. It restores the spirit-mind-body so that people can sleep, digest, and relax: all the things we need to heal.

**Hospital Advocacy**

It's helpful to proactively learn how to navigate area hospitals in case you are allowed in with a potential patient. Bring your flower essences; they're easiest to gently place into water that you innocently administer without drawing suspicion under their nurse’s watchful eye. (Homeopathics are a sham and aren’t recognized by science, right?) Massaging the patient’s feet with therapeutic oils is another good method to get herbal medications to your patient in a hospital setting. Herbs and spices can be decocted in milk, soups and broths teeming with herbal ingredients can be delivered. Zoom balls are an excellent way to disguise herbal ingredients that might draw

**About the MASHH Clinic Collective:**

MASHH is a grassroots collective based in far northern California and Oregon. We are primarily Street and Forest Medics who are experts in herbal first aid. We offer our skills and help get medical supplies & clinical support to a variety of off-grid events including nonprofit gatherings of herbalists, primitive skills gatherings, forest defense campaigns, native lands rights actions, base clinics at social justice movements, as well as disaster zones around the world. We have set up remote clinics at events such as the Northern California Women’s Herbal Symposium, the Montana Herb Gathering, the Northwest Herbal Fair, the Buckeye Gathering, and are available for hire at large events that have been approved by the indigenous landholders.

Our mission is to provide accessible, sustainable, affordable, natural medicine for all people but especially those engaged in environmental and social justice, and particularly those engaged in nonviolent direct action campaigns to defend wilderness ecosystems and biodiversity. We take direct action against the industrial medical complex and provide traditional, plant-based first aid, preventative healthcare, and education meant to empower the people. Herbs First!
The neurodiversity paradigm is a way of perceiving neurological differences emerging from the work of Autistic thinkers rooted in the understanding that our neurobiologies and those of Schizophrenic, Bipolar, and other neurodivergent people are not disordered or impaired, but rather a natural divergence from the norm – that humans are an inherently neurodiverse species. Nick Walker lays out three core concepts that underscore the neurodiversity paradigm:

“1.) Neurodiversity is a natural and valuable form of human diversity.
2.) The idea that there is one ‘normal’ or ‘healthy’ type of brain or mind, or one ‘right’ style of neurocognitive functioning, is a culturally constructed fiction, no more valid (and no more conducive to a healthy society or to the overall well-being of humanity) than the idea that there is one “normal” or ‘right’ ethnicity, gender, or culture.
3.) The social dynamics that manifest in regard to neurodiversity are similar to the social dynamics that manifest in regard to other forms of human diversity (e.g., diversity of ethnicity, gender, or culture). These dynamics include the dynamics of social power inequalities, and also the dynamics by which diversity, when embraced, acts as a source of creative potential” (Walker 2013).

It makes evolutionary sense that our species would have evolved to have many different neurobiological configurations. Neurodiversity is to human culture and human consciousness what biodiversity is to ecosystems. The presence of neurodiversity increases the resilience of human communities. Throughout history, most cultures have depended on strange, solitary people, whose modes of perception and cognition were highly divergent from the norm, to provide novel insights about challenges they faced. The diminishment of neurodiversity and the restriction of the expression of neurodivergence reduce the presence of non-linear creativity in a culture, and thus the culture’s ability to respond to unusual and unexpected threats, just as a loss of biodiversity renders an ecosystem more fragile.

This is not to say that Autistic, Schizophrenic, and Bipolar people don't face some mental, emotional and physical health challenges at greater rates than the general population. Some of this is due to social factors – neurodivergent people have higher rates of heart disease and suicidality than the general population, something we share in common with other marginalized groups, the result of the stress of marginalization. Other conditions common in some groups of neurodivergent people present more difficult puzzles – for example a disproportionate number of Autistic women seem to deal with Ehlers-Danlos Syndrome, a degenerative connective tissue disorder.

As an Autistic person who works with many Autistic clients, Autism is the form of neurodivergence I am most familiar with. Nick Walker writes:

“Autism is a genetically-based human neurological variant. The complex set of interrelated characteristics that distinguish autistic neurology from non-autistic neurology is not yet fully understood, but current evidence indicates that the central distinction is that autistic brains are characterized by particularly high levels of synaptic connectivity and responsiveness. This tends to make the autistic individual’s subjective experience more intense and chaotic than that of non-autistic individuals: on both the sensorimotor and cognitive levels, the autistic mind tends to register more information, and the impact of each bit of information tends to be both stronger and less predictable.
Autism is a developmental phenomenon, meaning that it begins in utero and has a pervasive influence on development, on multiple levels, throughout the lifespan. Autism produces distinctive, atypical ways of thinking, moving, interaction, and sensory and cognitive processing. One analogy that has often been made is that autistic individuals have a different neurological ‘operating system’ than non-autistic individuals (Walker 2014).

There are indications that Autistic people may have more serotonin in our brains than the general population (Abramson, Wright, et al. 1989), possibly leading to the proliferation of synapses and the variations in sensory gating that are associated with Autism. There is some evidence that many of us have low levels of MAO (monoamine oxidase), which is responsible for breaking down dopamine, serotonin, and norepinephrine. (Davis, Hazlett, et al. 2008). It is worth nothing that, if true, this particular neurochemical balance – high serotonin and low MAO – is mirrored in the pharmacology of ayahuasca and its analogs, which combine a serotonin-like tryptamine with an MAO inhibitor. The effects of this combination include dramatic shifts in ways of processing, interpreting, and contextualizing sensory and emotional information…. This may partially explain the Autistic predilection for non-linear creative thinking.

The gifts and the challenges we experience as Autistic people tend to be closely linked – something that is true of neurodivergent people in general. Our differences in sensory perception are both part of the reason why we can often notice details and patterns that other people miss, and part of the reason that we tend to miss some of the details that other people tend to prioritize. For example, one of my greatest strengths as a clinician is my ability to see and understand the connections between seemingly discrete symptoms and experiences that other people miss, and to intuit levels of emotional distress that people may not be consciously aware of. Yet I have a difficult time remembering to pay attention to elements of language and body language that other people tend to prioritize in interactions. (In my experience, Autistic people are better at picking up the meaning of Autistic body language than we are at comprehending the non-verbal signals of non-Autistic people, and non-Autistic people are similarly better at reading the faces and gestures of each other than they are of reading ours. There also is often so much information autistic people are picking up from a social interactions that we can become overwhelmed to the point of missing additional social cues.) My tendency to see patterns in novel ways also seems similar to the way in which straight line connections between the steps of many day to day activities, which seem so intuitive and fluid to most people, are often baffling and overwhelming to me. Imagine drinking ayahuasca and then deciding it’s a good time to try to attempt navigating the process of opening a new checking account.

In rejecting the idea that there is one “right” way for a brain to function, most adherents to the neurodiversity paradigm also reject the hierarchies of “functionality” that are frequently applied to Autism. By the standards of the dominant culture, I may appear to be “high functioning” or “low functioning” at different times of day. Sometimes I can speak and sometimes I can’t. Sometimes I can navigate human interactions with a relative degree of grace, other times I inadvertently act in uncouth ways because I miss cues or misunderstand rules of etiquette. There are times when any interaction at all is completely overwhelming to me and I will curl up and close my eyes and hold my head. I am relatively lucky in that most of my “low functioning” moments occur in private, but there are times when I melt down in public, and only my white privilege and my professional status protect me from unwanted interactions with police and mental health professionals. The advent of assistive technologies has revealed that the inner worlds and lived experiences of non-speaking Autistics are remarkably similar to those of those us who speak.

Language about function and functionality also raises the question: what is the function of a human being? In a culture where the silent default assumption is that the purpose of humans is the production of wealth, then our current definitions of “functionality” fit and neurodivervent people are
disabled. But in a culture that believes that the purpose of humans is to perceive beauty or to sing the world into existence or to be the universe perceiving itself, perceiving patterns others can't see, hearing voices others can't hear, and going into alternating cycles of deep contemplation and intense externally directed activity might actually make someone super “high functioning.” Of course, in such cultural contexts, neurodivergent people would also not endure the same stigmas they do in our culture, and would likely have mentoring from elders of kindred neurobiologies to help them better navigate the world.

I have been close to a number of Bipolar people and worked with several Bipolar clients who regard their cycles of intense activity and deep withdrawal as fundamental aspects of their being which give them unique perspectives on the world. It is within the context of life in this culture, and of the pathologization of those responses that they become identified only as mania and depression. Azzia Walker writes:

“Bipolar people naturally have rhythms that go up and down. In an up state, bipolar people tend to feel expansive, engaging, creative, and full of life. In a down state, we integrate, rest, and hunker down. The sleep, temperature, and social needs of bipolar people vary a great deal depending on whether we are high or low.

“We tend to be creative, loving, sensitive creatures. Our needs change frequently, which can be a blessing as it leads to sophisticated attunement. Approached as a mindfulness practice, living bipolar is a beautiful thing”.

One Bipolar artist I know uses the down cycles as contemplative periods in which she gathers ideas and the up cycles as times for intense periods of creative output, and structures the rhythms of her life accordingly. She uses herbs as a gentle rudder in these states rather than as agents to medicate symptoms. To be sure, not all Bipolar people identify themselves as neurodivergent or see the tides of their consciousness and expression as beneficial, and I support helping those who find these tides overwhelming find ways to diminish that overwhelm – and looking at the ways in which these tides can be ridden to the person’s advantage is one way to make them potentially less overwhelming.

Schizophrenia is the form of neurodiversity I have the least experience with. It is important to remember that in other times and places the ability to commune easily with entities not accessible to most people and the ability to see unusual patterns in the world were treasured gifts. Much of what is terrifying about the schizophrenic experience involves the lack of context a person has for what they are experiencing and the disconnect between their experiences and those of the people around them. The “Hearing Voices” movement is pioneering exciting work around creating settings where people who hear voices can get peer support in a non-pathologizing environment.

In working with neurodivergent people of all stripes, I tend to follow these three guidelines:

1. Don’t pathologize us
Our neurodivergence is not a health condition to be treated, but a fundamental aspect of our being, not unlike someone’s gender or sexuality. Be curious about what it is like to be your client living in the world as it is, and let your client take the lead in terms of what they do or do not want to address or change.

There are, in fact, connections between attempts to “cure” Autism and attempts to “cure” people of their sexual and gender identities. The primary “treatment” recommended for Autistic Children is Applied Behavioral Analysis (ABA), a punishment and reward based training system developed by Ivar Lovaas, a disciple of the behaviorist B. F. Skinner. Lovaas convinced Skinner to endorse his use of punishment techniques not normally used on humans by convincing Skinner that, from a psychological perspective, Autistic people are not human. Lovaas succeeded in getting children to suppress behaviors that were outward expressions of their experience, or ways of regulating sensation and emotion, like stimming – the practice of creating a strong physical sensation through repetitive movement or firm self-touch that is strong enough to override overwhelming outside sensory stimuli or release energy – or rocking back and forth, which helps to calm the nervous systems. For many autistic children, this “therapy” has serious long term consequences, because of the tremendous increases in stress that we experience when we lose access to our means of self-regulation. Based on this “success,” Lovaas went on to partner with George Rekers and began using the same techniques to try to eradicate “feminine” traits in boys (Silverman 2015). Those techniques would become the basis of “conversion therapies” designed to “turn people straight.” Thankfully, is now illegal in the U.S. to subject minors to such techniques in an effort to force them to change the expression of their gender and sexuality. But such techniques remain not only legal, but the most prevalent response, to Autism.

2. Explore the use of subtle nervines

The nervous systems of neurodivergent adults are constantly engaged in a level of activity that most people would experience as overdrive. Nervines are hugely important in helping us manage sensory overwhelm – especially given that many of us have health conditions that are exacerbated by such stress. Autoimmune conditions, severe digestive disruptions, and blood pressure issues (either recalcitrant hypertension or postural orthostatic tachycardia syndrome), are common among Autistic adults in my practice, heart palpitations and digestive distress are common in my Bipolar clients, Schizophrenic people also commonly have stress related cardiovascular and digestive issues. But many of us also have very strong reactions to even very small doses of nervines, and sometimes those reactions can be quite different from what your experience and your training may predict. It is best to give us a chance during the consultation to try whatever herbs you are considering sending us home with, so we can see how our bodies respond while we are in a relatively self space. In general, I tend to steer away from high doses of herbs with direct psychopharmacological impacts (eg. GABAnergic herbs) and instead favor small doses of bitter herbs for grounding, acrid herbs for vagal reset, and aromatic herbs to educe parasympathetic states.

3. Most of us are trauma survivors, address unhealed trauma

Most neurodivergent people experience trauma early on. Pressure from family and teachers and health care professionals to change our way of being in the world, in ways that are painful or impossible for us, is often experienced as a fundamental rejection of who we are that makes love feel unpredictable and highly conditional. Many parents and caregivers respond to behaviors and expressions they don’t understand with verbal, emotional, and physical abuse. We are commonly
ostracized and bullied (both as children and as adults, and in childhood by both children and adults.) Young Autistic People of Color often spend long hours in detention cells in schools. All of this trauma is being experienced by nervous systems that have a very high baseline of emotional and sensory activity and that can easily become completely overwhelmed, especially when in fear.

Many experiences that are commonly thought to be inherent parts of the Autistic, Bipolar, or Schizophrenic conditions may actually be rooted in trauma. Kirsten Hale writes that “hyperarousal, which can look like sleep disturbances, anger outbursts, trouble concentrating, hypervigilance, exaggerated startle response, changes in eating, and struggle to meet basic needs such as eating” can be the result of Complex Post Traumatic Stress Disorder (CPTSD), which is the result of repeated traumatic experiences, especially early in life, including neglect (Hale 2015). I have seen these kinds of symptoms in nearly every Autistic adult and many Bipolar and Schizophrenic adults I have known. Unresolved, unhealed trauma also increases the stress that causes and exacerbates many of the health conditions we are most prone to. Addressing trauma and its effects is usually my top priority with neurodivergent clients.

What neurodivergent people fundamentally need from our herbalists is compassion, empathy, curiosity, and respect. Work with us to make it easier for us to live and authentically express ourselves by helping us address our physical, mental, and emotional health challenges. Work with us to change the culture around us to make it a more welcoming place for everyone. Just don’t work to change who we are.

References


**Methylation, Clinically**
How common methylation defects impact clinical practice and how to manage them

**What is Methylation?**
- Change gene expression
- Detoxify the liver
- Prevent viral infection
- Moderate inflammatory cascade
- Form neurotransmitters
- Check histamine production
- Reproduce healthy building blocks
- Allow remyelination, etc

**Epigenetics**
- Epigenetics is the “post translational modification causing heritable but reversible changes in gene expression”.
- This includes DNA methylation, histone modification, nucleosome formation, or non-coding RNA.
- Yasko loosely says “the way the environment affects the molecules in your body”.

**How do Genes work?**
- Genes are the codes of the DNA that allow proteins to be made
- …..this is the hardware of the cell
- Genes can turn on and off by a variety of stimuli - foods, moods, therapies and toxins
- …..this is the software of the cell
Most Therapies.....

- .....focus on manipulating the software with drugs, chiropractic, behavioural therapies, counselling, diet and exercise
- If the hardware is functioning you can do this

BUT:

- Methylation is largely a hardware problem
- Because the genes may not be correctly structured, they cannot be turned on and off by the normal methods and at the needed rate.

How does it work?

- The two strands of DNA are banded together with sets of nucleotide pairs
- Adenine should bind to thymine (A-T)
- Cytosine should bind to guanine (C-G)
- The unique patterning of these pairs gives rise to the ~20,000 genes in the human genome
- Not all of our genes are expressed at any time and some may never be expressed
- Expression is regulated by many factors including methylation

Methylation defects are like

Riding a bike with the chain off!!!:

Methylation flaws

- Most methylation flaws are caused by single polynucleotide polymorphisms (SNPs)
- Which means, A did not pair with T or C did not pair with G
- So, one single SNP can cause celiac disease or make you prone to Type 1 diabetes.....just 1!

Genetic Receptor Problems

- Defects can cause a protein component not to be able to dock properly
- The receptor may be the wrong shape...
- Or may attract the wrong co-factors...
- It may not release the products...
- Or work really slowly...
- Or too fast!

These can be minor issues or devastating....
Overview of Methylation Cycle

- Over 20 genes involved
- 5 major biochemical cycles are linked together
  - Kreb's cycle, transcarbamalase (OTC), dihydropteridine reductase (DHPR), serine hydroxymethyl transferase (SHMT), betaine homocysteine s-methyl transferase (BHMT)

Specifically:

- These are vital for:
  - energy, urea and neurotransmitter production, formation of nucleotides and B12 recycling, metabolising methionine, repairing DNA and regenerating glutathione

Genes and Activity

<table>
<thead>
<tr>
<th>Gene</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACAT</td>
<td>Acetyl Co-A transferase</td>
</tr>
<tr>
<td>ACE</td>
<td>Angiotensin converting enzyme</td>
</tr>
<tr>
<td>AHCY</td>
<td>Adenosylhomocysteine</td>
</tr>
<tr>
<td>BHMT</td>
<td>Betaine-Homocysteine S-methyltransferase</td>
</tr>
<tr>
<td>CBS</td>
<td>Cystathione betalyase</td>
</tr>
<tr>
<td>COMT</td>
<td>Catechol-O-methyl transferase</td>
</tr>
<tr>
<td>DHR</td>
<td>Dihydropteridine reductase</td>
</tr>
<tr>
<td>G6PDH</td>
<td>Glucose-6-phosphate dehydrogenase</td>
</tr>
<tr>
<td>GAD</td>
<td>Glutamate decarboxylase</td>
</tr>
<tr>
<td>GST</td>
<td>Glutathione S-transferase</td>
</tr>
<tr>
<td>MAO A</td>
<td>Monoamine oxidase</td>
</tr>
<tr>
<td>MTHFR</td>
<td>Methylenetetrahydrofolate reductase</td>
</tr>
</tbody>
</table>

Major gene functions 1

<table>
<thead>
<tr>
<th>Gene</th>
<th>Major Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACAT</td>
<td>Cholesterol metabolism, steriodogenesis, Kreb's cycle, ketone body formation, GLA pathogenesis, energy metabolism from mitochondria.</td>
</tr>
<tr>
<td>ACE</td>
<td>Regulates blood pressure.</td>
</tr>
<tr>
<td>AHCY</td>
<td>Regulated conversion of adenosine to adenosine and homocysteine and biological methylation, gene expression.</td>
</tr>
<tr>
<td>BHMT</td>
<td>Activity affected by stress. Affects adrenaline and noradrenaline levels, converts homocysteine to methionine.</td>
</tr>
<tr>
<td>CBS</td>
<td>Limits the homocysteine pathway, elevates epinephrine and decreases norepinephrine, regulates ammonia metabolism.</td>
</tr>
<tr>
<td>COMT</td>
<td>Decreases dopamine and norepinephrine, needed for ADD/ADHD, mood swings.</td>
</tr>
<tr>
<td>DHR</td>
<td>Calcium ion transport, muscle contraction, skeleton, axon guidance, neuromuscular junction, metal ion binding, tubules. Affects BH4 levels.</td>
</tr>
<tr>
<td>G6PDH</td>
<td>Normal processing of carbohydrates, protects red blood cells from oxydation, nucleotide formation, production of NADPH for protection from reactive oxygen species.</td>
</tr>
</tbody>
</table>

Genes and Functions 2

<table>
<thead>
<tr>
<th>Gene</th>
<th>Major Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD</td>
<td>Converts excitatory glutamate to inhibitory GABA, mood disorders, energy metabolism.</td>
</tr>
<tr>
<td>GST</td>
<td>Regulates oxidative stress, controls reduced glutathione for detoxification of xenobiotics and carcinogen, extragenic structure.</td>
</tr>
<tr>
<td>MAO A</td>
<td>Regulates serotonin production, ability to deal with stress, flaws may cause mood disorder.</td>
</tr>
<tr>
<td>MTHFR</td>
<td>Promotes SAM availability for healthy mental function and mood, CoQ10 formation, maintaining protein synthesis.</td>
</tr>
<tr>
<td>MTR</td>
<td>Folate metabolism. Low folic acid function diseases.</td>
</tr>
<tr>
<td>MTRR</td>
<td>Homocysteine function. Low folic acid function diseases.</td>
</tr>
<tr>
<td>NOS</td>
<td>Regulates nitric oxide, controls nitric oxide production.</td>
</tr>
<tr>
<td>OTC</td>
<td>Promotes neural damage, tremor and panic attacks, brain fog, memory loss.</td>
</tr>
<tr>
<td>SHMT</td>
<td>Regulates formation of cysteine, cysteine, glutathione, repair damaged DNA.</td>
</tr>
<tr>
<td>SOD</td>
<td>Transporter for energy, repair damaged DNA.</td>
</tr>
<tr>
<td>SLXOX</td>
<td>Glutathione oxidase. Protects neurological health, allows ATP formation in mitochondria during oxidative phosphorylation.</td>
</tr>
<tr>
<td>VDR</td>
<td>Moderates and regulates tetrahydrobiopterin (BH4), mood disorders, autism spectrum disorder.</td>
</tr>
</tbody>
</table>
Example: Biopterin

- Very important energy molecule
- In the NOS pathway
- Enables CoQ10 to work
- Gets blocked by nano quantities of lead or aluminum
- MTHFR 1298 mutation blocks

Consequences of BH4 Block

- Increased production of ammonia
- Which burns up even more BH4
- Decreases serotonin
- Decreases glutathione, which lowers dopamine, increases neurone loss and elevates inflammatory cascade.
- NB: upregulated CBS increases NH4... 

SO what does this look like clinically?
We all have them...

Clinical Picture

- Client with paradoxical reactions to drugs/supplements
- Clients super sensitive to tiny changes
- Little or no recovery after reasonable changes
- Family history of cancer
- A multivitamin/B complex makes them worse
- B12 injections don't help
- Cannot throw off/resist common infections
- Increased pain sensitivity in FM

What do you do?

- Get blood work from MD
- Check for parasites, fungal infection
- Check copper levels
- Check heavy metals
- Get gene testing - cheapest option is 23andme.com, then run Sterling app on data using MTHFRsupport.com

<table>
<thead>
<tr>
<th>Gene</th>
<th>Significance</th>
<th>Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD</td>
<td>Great difficulty in converting excitatory glutamate to GABA. Fatigue, weight</td>
<td>Resveratrol, curcumin and GABA</td>
</tr>
<tr>
<td>MAOA</td>
<td>Increase rate of breakdown of serotonin and dopamine, mood</td>
<td>Precursors, homeopathics</td>
</tr>
<tr>
<td>MTHFR</td>
<td>Great difficulty in processing folate. Pushing folate or folinic acid does not help</td>
<td>5-methyl folate plus cofactors</td>
</tr>
<tr>
<td>MTR</td>
<td>Increased need for lithium as carrier for B12</td>
<td>Lithium orotate, low dose</td>
</tr>
<tr>
<td>MTRR</td>
<td>Need for high levels of adenosyl cobalamin and hydroxocobalamin</td>
<td>Adenosy cobalamin and hydroxycobalamin</td>
</tr>
<tr>
<td>VDR</td>
<td>Vitamin D resistance, blood sugar regulation</td>
<td>Push the Vit D3, Gymnema</td>
</tr>
<tr>
<td>BHMT</td>
<td>Pathway to faithful reproduction of DNA/RNA, protein synthesis, cell production</td>
<td>Phosphotidyl serine complex</td>
</tr>
<tr>
<td>COMT</td>
<td>Hormone balancing interruption, mood swings, esp. with VDR, MAOA, MTHFR, B12s, folinic acid</td>
<td>SAMe</td>
</tr>
<tr>
<td>SHMT</td>
<td>SNPs shift pathway to homocysteine and away from good DNA synthesis</td>
<td>Proline, hydroxycobalamin, folinic acid</td>
</tr>
<tr>
<td>CBS</td>
<td>SNPs upregulate, draining many nutritional factors, esp. biopterin, lowering energy</td>
<td>Manganese with cofactors</td>
</tr>
<tr>
<td>AHCY</td>
<td>Flaws in regular methylation, forms adenosine and homocysteine</td>
<td>Push the VIT D3, GYMNEMA</td>
</tr>
<tr>
<td>NOS</td>
<td>Increased free radicals, NO, insomnia, worse with CBS and some MTHFR SNPs</td>
<td>Cofactors, turmeric, resveratrol</td>
</tr>
<tr>
<td>ACAT</td>
<td>Makes Kreb cycle less effective</td>
<td>Choline</td>
</tr>
<tr>
<td>SUOX</td>
<td>Rare: “stiff body syndrome”. Strained when methylation cycles begin to move</td>
<td>Hydroxy &amp; adenosyl B12, Mb</td>
</tr>
</tbody>
</table>
**Protocols**

- Yasko’s Simplified Pathway to Recovery (11 pages long…)
- Fidler’s Flowchart (26 pages long…)
- Very Complicated!

**Protocols 2**

- Lifestyle support
- Reduce glutamates in diet
- No gluten
- Sleep hygiene
- No foods/supplements that contain B12 or folate
- Get drugs that rob these methyl donors replaced
- Dairy may generate auto-antibodies in some

**Overmethylation?**

- Muscle Pain
- Irritability
- Anxiety
- Depression
- Joint Pain
- Nausea
- Headache
- Insomnia
- Stomach Pain
- Seizures
- Vomiting
- Sweating
- “Herxheimer Reaction”
- Rash
- Palpitations

**Food sources of Methylators**

- Add new methylators “Low and Slow”
- TINY amounts of niacin will abort over-methylation
- COMT mutations need methyl donors added the most slowly
- If in doubt, BACK OFF!
- Heavy metals block B12 and folate pathways even without SNPs (viz Al in vaccines…)
- Infection and dysbiosis will interfere with methylation
- High copper levels block glutamate conversion and perpetuate infection
- Methyl defects prevent remyelination after heavy viral infection or heavy metal detox
Summary

- Read
- Gather data
- Read some more
- Begin slowly and layer in order
- Read again
- Monitor results
- Read
- Retest
- Adjust SLOWLY with tiny amounts
- And, you got it! keep reading....
**NEUROLOGIC ASPECTS OF GLUTEN INTOLERANCE**

What do these have in common?

- Gluten

Gluten intolerance may cause:

- Multiple allergies
- Frequent infections, cancer
- Auto-immune diseases (10x more likely)
- Secondary anemia
- Spinal cord disease; demyelination
- Crohn’s disease
- Migraines
- ADD/ADHD
- Hearing loss
- Osteoporosis

And...

- Restless leg syndrome
- Autism
- Chronic Fatigue Syndrome
- Fibromyalgia
- Dyspepsia
- Diabetes
- Thyroiditis
- Vitamin deficiency, esp. D and K
- Miscarriages, infertility
- Dental enamel malformations
- Arthritis
- Irritable Bowel Syndrome
- Colon cancer...etc.

Celiac Disease

Gluten associated enteropathy that affects up to 10% of the U.S. population.

- Gluten is a protein naturally occurring several grains, the most common being wheat, rye, barley, rye, spelt and kamut.
- Gluten content is expressed by the kinds of gliadins or glutenin present.
It’s in the genes...
- HLA-DQ2 and HLA-DQ8 group
- Production of inflammatory antibodies
- Erosion of villi
- Serious diarrhea and other digestive disturbance
- A jejunal villous biopsy reveals loss of villi
- Worse with genes for high cytokines or:
- Lifestyle that increases inflammation
- Variability in the innate response to gliadins
- Crohn’s disease is often associated with celiac genes, plus non-Crohn’s ulcerations

Associated Lactose Intolerance
- Lactose gene close to the HLA-DQ2 gene locus
- Lactose intolerance may be secondary to primary gluten intolerance
- A GF diet allows gut healing and then lactose
- Can sometimes be tolerated
- The only way to be certain is to have the gene test

Celiac Disease Testing
- Positive anti-gliadin antibodies
- Positive HLA-DQ testing
- Positive transglutaminase
- Positive Endomysial antibodies
- Positive fecal fat microscopy
- HLA-DQ2 positive
- Anti-gliadin antibodies only positive with high level of damage. Negative/low with long term GF diet
- Flattening of villi with jejunal biopsy

Gluten Intolerance testing
- Anti-gliadin antibodies only positive with high level of damage. Negative/low with long term GF diet
- HLA-DQ1 positive
- Transglutaminase, endomysial antibodies, fecal fat microscopy, villous biopsy will all be negative

Neurological Implications
- The brain is way more susceptible to inflammation than the gut
- Gluten may produce lesions mimicking ALS, MS, MG, CFS
- Increasing chance of neuropathy
- Impaired mental states
- HLA-DQ1 targets neurological tissue

The good and the bad...
- Villi can regenerate.
- Neurones don’t grow back
Localised hyperpermeability of the BBB

- Worsened by poor glucose control, prolonged stress, toxins (haptens), elevated homocysteine, high prostaglandins and excessive oxidation.
- Prescription drugs.
- Prescription drugs - containing gluten!

Location of Brain Lesions

- Foggy thinking, poor concentration and memory, uncontrollable depression, ADD/ADHD or psychotic conditions
- Wide variety of outcomes dependent on location – ADHD, raging rashes, gait disorder, gastro-paresis, PD-type disorder, IC, uncontrolled hypertension, etc.

BUT, with HLA-DQ1 clients:

- 65% have NO gastrointestinal symptoms

Primary Treatment

- A totally gluten free (GF) diet.
- Forever.

Managing Celiacs 1

- Gut healing herbs – *Calendula*, *Glycyrrhiza*, *Ulmus fulva*, *Matricaria*
- Probiotics
- Adaptogens – usually a blend
- Anti-inflammatory herbs – *Tanacetum parthenium*, *Curcuma longa*, *Filipendula*
- *Hypericum*, *Achillea*, *Zanthoxylem*, *Capsicum* for circulation/nerve support as needed
- Probiotics

Managing Celiacs 2

- Nutritional supplementation due to longterm malabsorption
- Vit D3, usually with Vit A, Calcium, copper
- Mineral rich tea – *Medicago*, *Urtica dioica*, *Equisetum arvense*, *Stellaria media* etc.
Managing HLA-Dq1’s

- Nourish the nervous system
- Heal the BBB
- Balance the HPA-axis
- Check endocrine function
- Target inflammation
- Control blood sugars
- Improve nervous stimulation,
- Manage anxiety, serotonin

Case Study 1

- Teenage girl with lifelong digestive issues and malaise. $1000’s spent on trying to cure her IBS
- GF diet, gut healing herbs, adaptogenic mix
- Symptom free and doing well now without herbs.

Case 2

- M. male, 40’s, residential care for bipolar disorder, hypertension and anxiety
- Disturbed sleep
- Had previously been able to work
- Very well read
- Was medicated whenever he asked about meds that were making him less aware

Case 2 continued...

- 1st visit: agitated and harassed, but lucid. Accompanied by a nurse. Not tolerating meds well, easily frustrated, volatile but not violent.
- Ankles edematous
- No other obvious clinical signs other than mental state.

Plan

- Discuss GF with chef
- Increase vegetables and good quality protein
- Adaptogenic blend of herbs with Silybum
- Good fish oil
- Gluten digesting supplement

Next Visit

- Very compliant with diet!
- Much more mellow
- Requested Valeriana to take prn
- He (and the nurse), thought that medications could be reduced soon
Last visit

- M was leaving the facility, flying home, was cheerful, wanted to get a job, was able to withstand aggravating circumstances much more easily, had improved cognition.
- Medications had been substantially reduced
- Had needed the Valeriana more during the changes of the last few months, but no more psychotic episodes
- Sleeping well and feeling good

Follow up by Phone

- Herbs have continued much the same
- Pt has added Lithium orotate and been able to reduce Respiridol
- Reduced Respiridol has helped reduce BP
- Has held a part-time job for a while.

Case 3

- Woman in late 40’s, IBS, foul flatulence, osteopenia, hot flushes for 7 years, poor sleep since puberty, joint stiffness, some memory loss.
- Other family members suspected gluten intolerance – 6 had had bowel cancer and 12 had IBS sx.
- Urinalysis showed high oxidative stress and malabsorption, kidney stress and poor mineral status.

Treatment

- GF diet with 8 veg a day, 3 fruit
- Tincture for inflammation, stress, kidney support, circulation and bile flow.
- Kelp for minerals, low thyroid, detoxification and mucilage.
- Vitex agnus castus for hot flushes
- D3 for gut healing, bone health and mood
- Probiotic for dysbiosis
- Fish oil for inflammation
- Digestive enzymes until symptoms improve
- High mineral tea to increase calcium absorption with gut healing herbs

The next few months:

- Less anxiety
- Improved sleep, though still wakeful
- Flatulence gone, except with cheating!
- BM’s normal
- Found her headaches much reduced (had not realised how many she had been having)
- DTX test showed she was now laying down bone, but still sub-optimal
- Joint stiffness gone except in 1 injured joint
- Can hike 15-19 miles without stiffness!

Treatment Changes:

- More liver herbs in tincture
- Dioscorea and Cynara removed
- Add Calcium citrate or lactate with Vit.C
- Tea intermittent now
- Use Valeriana if stressed
Case 4

- Active lady in 30's with EXTREME red rash
- Medications unsuccessful
- Poor sleep, pain and itching
- Very overwrought
- Poor diet, long stress, several small children at home

Protocol

- GF diet
- High doses gluten-reducing enzymes
- Anti-inflammatory herbs
- Fish oil
- Strong adrenal blend
- Aloe juice spray
- Calendula/Glyceriza/Stellaria/Melissa
- Tea of to drink and to splash

Next Visit

- Rash much better though not clear.
- Drainage herbs added - Galium
- Increased anti-inflammatory herbs
- Added nervines

Next visit..

- All was well!
- Pt takes the digestive enzymes with accidental exposure

Case 5

- Hyperactive 5 year old boy with recent onset Tourette’s syndrome.
- Diet poor, finances tight
- Parents divorced and not amicable

- Suggested GF diet and a healing tea

Next Visit

- Mother delighted! All new symptoms abated with GF diet.
- However, they returned when the child visited his father.....
Case 6

- Active lady in 60’s who prepares school lunches
- Uncontrollable hypertension – very labile, unpredictable surges.
- Usual anti-hypertensive or anxiolytics did not help either.

Management

- Suggested she keep a food diary with BP measurements
- This showed a BP spike whenever she ate gluten
- GF diet and anxiolytic herbs
- There was “nothing at school she could eat!”

.....but her Bp went down.

Conclusion

- Gluten intolerance presents in a variety of forms depending on the area of brain lesions caused by the gluten.
  Treatment consists in a totally GF diet, anti-inflammatory herbs, support for the key body systems affected, nutritive herbs and supplements to redress years of poor assimilation.
- Rebuilding adaptability to stress, general stamina and improving immunity may take some time but can go a long way to restoring the health of an affected individual.
- The long term effects of chronic inflammation must not be minimized and need to be monitored consistently after the more immediate symptoms are under control.
- Educating the patient is key to long-term success – understanding that “cheating” causes neuron loss is very motivating.
Community Herb Clinic - training practitioners and serving the people
Margi Flint RH HM
Earthsong Herbals 10 Central Street, Marblehead MA 01945 tel. 781-631-4312

Basic Training

Herbalists attending Clinic pay a mentorship fee (mine is $120 for the day)
Dress appropriately

Clients have sliding scale ($70-$200 plus herbs)
Two new clients daily at 10 and 2
Possible re-visits

When booking clients for Clinic explain that they will be seen by a Practitioners Circle, a group of up to 5 practicing herbalists who will be present and contributing to their session.

Establish fees with clients and ask them to arrive with current blood work, a list of Rx and why they are taking them and the number of years taken.

Ask them to come without make-up, contacts, or nail polish.

Record their birth date, mailing address, phone and email. Enter their information into QuickBooks Pro,

Prepare a folder with intake form, extra paper for a timeline and recommendations.

No one is turned away including Vets or anyone in need not being served.

Arrange the order and expectations of the day

Clean entry, office, bathroom, and consultation room.

Clear space
Prayer, directions, windows open
Protection
Armor of Light
Heart of jewels
Boundaries
Discuss being non-reactive.
William LeSassier’s “love wash” when judging.
Being “empty” as Karyn Sanders and Sarah Holmes teach.

Go over job assignments
Recommendation Page & Note-taker

Practice begins with your first client and continues for the rest of your days.
Final Recommendation page: this practitioner keeps track of all pertinent recommendations that are mentioned through the session.
The extras; exercise, dietary changes, referrals, etc.
Good and bad Doctors/practitioner list for the office.
Phrase catcher
   Negative statements. Interesting perspectives.
Timekeeper
Pulse tester
Herb gatherer

All hold space, observe body language
   Breathing
   Facial expressions
   Voice

All create a timeline.
   Creating a timeline is essential. Divide a blank piece of paper with a vertical line.
   Write their birth date at top in 5 to 10 year divisions, year on one side of line, age on the other. Keep track of deaths, traumas, marriages, births, moving, jobs, divorces, atmosphere of childhood home, all with high or low impact. Point system.

Digital photo of face, nails, tongue for file.

Sitting with Clients

Haven’t observed me in consultation? I will proceed.

People who have attended for a few sessions are kicked out of the nest and perform a supervised intake. Practitioners must create their own intake form and manage the papers.
   Notes between them are first run by, and approved by me.
   They develop the relationship.

One person greets client at the door. All others stand and allow the client to choose their seat.

I sit opposite the chosen practitioner so the client focuses on them not me.

All are quiet until invited to speak at end of intake and practitioner has made their suggestions.
   Keep suggestions from circle to a minimum to not overwhelm client.

Is the practitioner performing the intake floundering?
   Discreetly take the file from the practitioner and continue with questions.

Practice begins with your first client and continues for the rest of your days.
I take notes on strengths and suggest improvements, as does the circle, as well as final formulation and suggestions for client. Be kind. I note who else was present in circle.

Formulation choices agreed to with client, note for next time options.

**Preparation of formulas**
When the intake is finished different jobs are assigned to prepare herbs for the client from the apothecary.
- Tea maker
- Tincture maker
- Aromatherapy, flower essence, topical applications or sprays
- Invoice and computer - only me

To wrap up the session, the client is presented with herbal preparations, notes, a phrase they spoke reversed and an invoice. Ask for donation (mine is $70 to $200).

Payment and hugs

**Review with Circle**

Once client has left, review the session with practitioners
- How did it feel?
- What were unsaid insights?
- Share observations, both from the group and me, gently critique and ultimately build confidence for practitioners.
- Share observation of client’s entry into the room as well as body language.
- Note the importance of client’s phrases.
- Reminder notes for the next visit.
- Place all papers into file, (timeline, intake form, recommendation sheet, phrases, extra notes) last name fist, year on tab, into file cabinet.

The gift is to hear the process and to be able to discuss how it felt.
- What was comfortable?
- What questions were hard to ask?
- What felt awkward and why?
- What did the other practitioners observe?

**Close the circle**

Everyone helps clean up all spaces and journey home safely.

Closing prayer.

Smudging of all spaces.

Join me in the Marblehead Clinic as an observer or practitioner. We all have so much to learn from each other. I give thanks to Kay Parent who facilitated clinics with me in

Practice begins with your first client and continues for the rest of your days.
Marblehead for so many years. Do attend her clinic in Newport, RI to see another viewpoint and hone your skills further.

In the abundance of Nature, Margi Flint.

**Links**

http://earthsongherbals.com/ My facebook page
@earthsongherbals LinkedIn
https://www.linkedin.com/in/margi-flint-rh-abg-mentor-a154b58/


Diagrams for time wheels, diagnostics and more
https://www.pinterest.com/margiflint/

twitter Margi Flint @margiflint

Practice begins with your first client and continues for the rest of your days.
Practice begins with your first client and continues for the rest of your days.
The Armor of Light

Breathe deeply, with eyes shut, and visualize as you say

“Before me I see the mists
   (gently billowing toward you over the rolling hills)
from the mists emerges the Arch Angel Michael.

He comes toward me, wearing his robes of blue and carrying his sword of truth.

He merges with me.
   (Feel him merge into your body)
and together we sever all chords of negativity from anyone anywhere at time on any
plane
   (visualize a sword circling from each side, back and front, over head, and under
the feet, creating a protective circle around you)

I see the chords return to the senders in a ball of pure White Light, so that love, joy and
truth is all that exists between me and the universe now.”

Heart of Jewells
Thanks to Blue Otter School

Sit quietly and comfortably…..

Imagine all the beautiful colors of jewels, red, yellow, green, blue, purple, clear, pink and
more…..

They pulse with your heartbeat…..

Breathe in, on the out-breathe hesitate 2 seconds…..
(this stimulates your vagus nerve)

The vagus nerve is one of 12 cranial nerves. It is the longest of the cranial nerves, extending from the brainstem to the abdomen by way of multiple organs including the heart, esophagus, and lungs. Also known as cranial nerve X, the vagus forms part of the involuntary nervous system and commands unconscious body procedures, such as keeping the heart rate constant and controlling food digestion. Electrical stimulation of the vagus nerve, called vagus nerve stimulation (VNS), is sometimes used to treat people with epilepsy or depression.

Breathe as long as you like and come back refreshed.

Margi Flint 781-631-4312

Practice begins with your first client and continues for the rest of your days.
Instructions for better health.

Permanent marker, Ingredients, dosage, additional tape if needed

Item: Tincture
Directions:

1 - 2 - 3 drops /squirts at a time
1 - 2 - 3 times a day
Morning / Night
With/without meals

Tea

Infuse
Decoct 1/2 cup in 1 Quart boiled water
Let steep covered for 10-15 minutes
cup in morning
cup at night
sip all day
with/without meals

Flower Essences:

2, 4, 7 drops under the tongue
Morning / Night / When it feels right.
away from meals

Supplements:

With 8 ounces of water
1 - 2 - 3 times daily
Between meals
With meals
1 - 2 - Morning / Evening

Exercise

Affirmation

Practice begins with your first client and continues for the rest of your days.
Honoring my teacher David Bruce Leonard.

Practice begins with your first client and continues for the rest of your days.
Taking Herbalism out of the Broom Closet
Candace Hunter and Sue Sierralupé
of The Practical Herbalist

Facebook - Twitter - Pinterest

1 Introductions
   1.1 Real Herbalism Radio is a weekly podcast on herbalism, plants, homesteading, and Health and Wellness. We’re reaching a growing audience of folks who love plant medicine.
   1.2 The Practical Herbalist is an educational website on herbs, homesteading, and integrating plant medicine and natural living skills into daily life.
   1.3 Candace Hunter is a member of The Practical Herbalist’s team and co-hosts Real Herbalism Radio. She also educates families and individuals on using plant-based medicine and natural living skills to support their health and wellness.
   1.4 Sue Sierralupé is a member of The Practical Herbalist’s team and co-hosts Real Herbalism Radio. She is involved in herbal activism as Clinic Manager for Occupy Medical in Eugene, Oregon.

2 History of Herbalism: How did Herbalism end up in the Broom Closet?
   2.1 Plant medicine was the only medicine…until chemistry began to revolutionize medicine in the 19th to early 20th centuries. Herbalism was increasingly vilified, and it retreated into the Broom Closet.
   2.2 In the closet, teaching was direct and through word of mouth.
   2.3 In the 1970s, Herbalists like Rosemary Gladstar, Michael Moore, and Paul Bergner opened the door. They developed tools and language that worked with their era and their audience. They also discovered a few pitfalls.

3 Today…the door’s been ripped off its hinges. There’s no going back.

4 Our audience has changed.

5 We have new and larger challenges.

6 The need for us to integrate, educate, and reach out is greater than ever before.

7 How do we take herbalism out of the Broom Closet?
   7.1 We learn a new language.
   7.2 We expand our reach.
   7.3 We use and enhance tools for managing pitfalls.
   7.4 We watch for new pitfalls…and develop tools and strategies to manage those, too.

8 Our Mandate going forward…
   8.1 We need to finish the work our elders started - Let’s Destroy the Closet.
   8.2 The Revolution is happening…Let’s drive the conversation.
   8.3 The Tools are there - It’s up to us to take them out of the Closet and Use Them.
9 List of Organizations

These are a few organizations our Elders have created to help us mitigate the pitfalls.

**United Plant Savers** - United Plant Savers' mission is to protect native medicinal plants of the United States and Canada and their native habitat while ensuring an abundant renewable supply of medicinal plants for generations to come.

**Occupy Medical** - Since the first Occupy Eugene encampment, Occupy Medical has evolved from a loosely knit association of volunteers providing first aid in the camps into a cohesive team of primary care practitioners delivering no cost, high quality medical services to the Eugene-Springfield community at large.

**American Botanical Council** - At the American Botanical Council, also known as the Herbal Medicine Institute, we are passionate about helping people live healthier lives through the responsible use of herbs, medicinal plants. ABC is an independent, nonprofit research and education organization dedicated to providing accurate and reliable information for consumers, healthcare practitioners, researchers, educators, industry and the media.

**American Herbalist Guild** - The American Herbalists Guild was founded in 1989 as a non-profit, educational organization to represent the goals and voices of herbalists specializing in the medicinal use of plants. Our primary goal is to promote a high level of professionalism and education in the study and practice of therapeutic herbalism.

**Free Fire Cider** - The Free Fire Cider blog is run by herbalists working together with herbalist Rosemary Gladstar, who coined the phrase “fire cider” and started sharing the recipe over 25 years ago, to protect the name Fire Cider from trademarks. We are committed to providing information and materials for the herbal community so that together, we can fight to keep traditional remedies free and available to everyone!

**Herbalists without Borders** - Herbalists Without Borders is a nonprofit local to global network of volunteers devoted to providing compassionate care to communities and countries in need impacted by natural disasters, violent conflicts, poverty, trauma and other access barriers to health and wellness. Herbalists Without Borders humanitarian aid and actions center around health justice: Borderless Medicine, Free People's Clinics, Street Medic Workers, Trauma Trainings, Education, Advocacy, Technical Assistance and more.
10 List of Legal Resources

Know the Law. Here’s a list of resources to help you ensure you’re using best practices for your own safety and that of others:
- Free Clinic information
- FDA 101 on Dietary Supplements
- Doctors on the Internet - Legal and Practical Implications
- HIPAA
- Code of Ethics for Sale of Supplements
- Paul Bergner's Herbalists Rights
- American Herbalist Guild Legal and Regulatory FAQs

11 Rationale for Taking Herbalism Out of the Broom Closet

There is no other time in the history of the world in which bringing herbal medicine out of the shadows has been so important. Our society spent a small piece of our history categorizing natural healing as an "old wives’ tale" perpetuated by the poor and the "uncivilized." In retrospect, it is easy to see how this view perpetuated classism, racism and sexism. This was a comfortable viewpoint for an America that no longer exists. In 21st century America, health insurance is expensive and limiting. Many citizens have learned to rely on herbal supplements to help them weather illness. Herbal medicine is not an option—it's a necessity.

With this in mind, it is clear back alley herbal medicine must become a thing of the past. Herbalists are called to perform at the top of their game. Gone are the days of guessing at conditions and playing a game of chance with plant-based healing. We must do our homework about a growing number of topics: Medicine, botany, cultural sensitivity, the law, politics and science to name a few.

The world has expanded with the age of the internet. Many eyes follow our actions. We do not have the luxury of hiding herbs in the dark. We need to bring our skill sets to a public in despair. We need to work with other healers in settings we never thought would welcome us. We need to educate folk we never thought would want to learn. We can't wait for the golden ticket to arrive. As healers, we hear the call. Now is the time to answer it.
1. **What is medicine?**
   - What is healing?
   - What is the purpose of using herbs?
   - How do we define a “successful” herbal treatment?

   *Idea of medicine as applied philosophy.*

2. **What is cancer?** Generally speaking, from western view, the over proliferation of unhealthy cells.

   a. From a Chinese medicine view, a major issue of cancer includes *heat*, and heat is very treatable.

3. **How does the language we use reflect our beliefs/assumptions about the world and medicine?**
   - War on cancer
   - War on diabetes
- War on obesity
- War on drugs
- War on Iraq, Afghanistan, maybe Iran?

a. What are the consequences of waging war on cancer? And if we believe in peace in the world, why would we wage war with medicine?

  - One reason is that this is the view we’re encouraged to have—warfare with medicine and warfare in interacting with the world.

b. What does it mean when we study if pharmaceuticals or herbs “kill cancer cells?” Is killing cancer cells necessarily a good thing?

  - What happens to the cancer cells when they die?
  - Where do these cells go when they die off?

4. **Western medical view in general, and about cancer, also influenced by a fear of death.**

a. More than moderate fear creates either contraction or scattering of Qi (from fright.)

5. **Classically, Chinese medicine emphasized a genuinely holistic view**

a. Assumption in Chinese medicine that humans are nature, that humans are the universe. A holographic understanding of the world.

b. What is it like to wage peace with a cancer diagnosis? About clearing things out (including heat) and bringing things in (Yin, Yang, Qi, Blood). Often both approaches needed.

c. The importance of clearing through the skin, bowels, and bladder—need to give things are way out. Sometimes using all three outlets at once.
• If things are not cleared out, this creates auto-toxicity—internal toxicity and poisoning from things not being cleared from body

6. Many perspectives/traditions/lineages in Chinese medicine, from the 5,000 years of continuous development. The Wen Bing specializes in heat, so this is a particularly good view to apply to cancer, so this is the one we will use.

a. Cancer as a form of epidemic: a serious condition spreading quickly through the country and culture.

• Not a bacterial or viral epidemic, but an epidemic nonetheless

7. Data about cancer--from chapter 9 of The Yin and Yang of Climate Crisis:

• For those of us currently in US, 1 in 2 men and 1 in 3 women diagnosed with cancer: about 136 million cancer diagnosis

• For those of us currently in US, 1 in 4 men and 1 in 5 women will die from cancer: about 77 million cancer deaths

• According to the NIH, in 2010, about $125 billion spent on cancer treatments in US

• Same study indicates that by 2020, this will increase to at least $160 billion and could be $200 billion annually—for the treatment of one diagnosis in one country for one year

• The more cancer diagnosis, the more money there is to be made.

• No financial incentive to reduce cancer diagnosis.

• Radiation and chemotherapy are known carcinogens. The western medicine used to treat the condition can cause the disease.

• Something is very out of balance with our medical system and with the economics of medicine.
8. **There are 4 levels of heat:**
- wei level (surface immunity level)
- qi level (transition from external to internal, level of big symptoms/big heat)
- nutritive level (fluids/nutrition and day-to-day energy level)
- blood level (deepest level).

Different herbs, foods and treatments go to these different levels. Important to address heat at the appropriate level.

9. **Basic treatment principles with treating cancer:**

- 1st level: *Wei Qi level*-- clearing heat through the skin (clearing heat through the Wei Qi level), via **COOLING diaphoretics** because we’re assuming that everything comes from heat from Wen Bing view.

- This level corresponds to skin cancer, but skin issues are very likely connected to deeper, more internal issues as well.

*Chinese formula:* Yin Qiao Wan/Honeysuckle and Forsythia Formula, to vent wind heat invasion (ie acute bacterial infection)

*Cooling diaphoretics:*
- **Spearmint/Mentha spicata** More cooling than peppermint, mild diaphoretic. (*Peppermint, Mentha piperita* more warming diaphoretic than spearmint.)

- **Elder Flower/Sambucus Canadensis and Nigra** Promotes eruption, medium strength diaphoretic, bitter, cool, drying.

- **Boneset/ Eupatorium perfoliatum** Very bitter, acrid, strongly venting, strong diaphoretic

- **Yarrow/ Achillia millefolium** Bitter, acrid, mild diaphoretic
• **Echinacea spp**, I use purpurea. FLOWER is more venting outward, more about “release exterior”, more up-and-out, medium strength diaphoretic, and ROOT is more about deeper internal heat, more about down-and-out, a mild diaphoretic. Bitter, acrid, cooling.

• **Burdock seed, Arcticum lappa**. In Chinese called Niu Bang Zi, goes to throat, root used in western herbalism, clears fire toxins internally and externally, promotes eruptions, medium diaphoretic.

10. **2nd level/Qi level**: Stage of the creation of significant heat, “bigger” and more internal symptoms. Treatment focus still includes venting, and also includes draining heat downward (“strengthening Yin”) and increasing coolant (“tonifying Yin”) **without** creating dampness

*Chinese formula example: Bai Hu Tang/White Tiger Decoction* (Treats the “four bigs” of big fever, thirst, sweat and pulse, as well as heat in Stomach and Large Intestine

• With cancer, could use for Stomach, Large Intestine and Skin Cancer in particular and for other cancers in general.

Venting Herbs: **Emphasizing herbs that vent heat at both deeper and more external levels.**

• **Elder Flower/Sambucus Canadensis and Nigra** Promotes eruption, medium diaphoretic, bitter, cool, drying.

• **Boneset/ Eupatorium perfoliatum** Very bitter, acrid, strongly venting, strong diaphoretic

• **Yarrow/ Achillia millefolium** Bitter, acrid, medium diaphoretic

• **Echinacea spp**, I use purpurea. FLOWER is more venting outward, more about “release exterior”, more up-and-out, medium strength diaphoretic, and ROOT is more about deeper internal heat, more about down-and-out, a mild diaphoretic. Bitter, acrid, cooling.

• **Burdock seed, Arcticum lappa**. In Chinese called Niu Bang Zi, goes to throat, root used in western herbalism, clears fire toxins internally and externally, promotes eruptions, medium diaphoretic.

*Cold and draining herbs*: that help protect fluids by clearing heat and tonifying fluids themselves: CAUTION: Using too much bitter herbs for too long can weaken the Qi in general and the digestive system in particular—use with caution.

• **Goldenseal, Hydrastis canadensis** Very bitter, cold
• **Barberry, Berberis vulgaris** bitter, cool

• **Oregon Grape, Mahonia spp, formerly Berberis spp.** (The above are 3 of 4 western “yellows”, very bitter and strongly draining heat. Other one is Goldthread, Coptis trifolia.) Bitter, cool, draining.

• **Echinacea spp,** I use purpurea. FLOWER is more venting outward, more about “release exterior”, more up-and-out, medium strength diaphoretic, and ROOT is more about deeper internal heat, more about down-and-out, a mild diaphoretic. Bitter, acrid, cooling. Both flower and root appropriate at this stage, but I would emphasize root more.

• **Dandelion/Taraxacum officinale:** Western herbalism often uses root, Chinese herbalism uses whole flowering plant and calls it Pu Gong Yin. Goes strongly to Liver and Gallbladder, also to Bladder. Bitter, cooling, draining. Diuretic to clear heat downward

• **Burdock root/Arctium lappa:** clears heat and tonifies fluids, for heat and Yin deficient heat, cooling, draining. Diuretic to clear heat downward

• **Chaga/Inonotus obliquus:** in my opinion, it strongly clears heat and treats fire toxins (it looks like a scorched mass), in Chinese herbalism call Hau Jie Kong Jun or Bai Hua Rong. Bitter, cold.

*Purgatives and laxatives:* To strongly clear heat and fire toxins through the intestines. CAUTION: Using too much purging herbs for too long can weaken the Qi in general and the digestive system in particular—use with caution. (Can use Qi tonics/most adaptogens to protect Qi as needed.)

• **Cascara Sigrid bark, Rhamnus purshiana** Purgative, strong, cold, use with some caution as it can weaken energy/Qi of intestines and digestive systems (Spleen Qi)

• **Rhubarb root, Rheum spp/Da Huang** Purgative, very strong, cold, bitter, use with caution as it can weaken intestine and digestive energy.

• **Aloe vera gel (dried)/Lu Hui** Purgative, very strong, very bitter, cold, strongly draining, tonifies Kidney Yin, use with caution as it can weaken intestine and digestive energy.

• **Senna leaf, Senna spp,** Laxative, mild, bitter, warm (not cold), OK to use in longer term as it is not so harsh and not cold.

• **Cannabis seed/Cannabis sativa/Huo Ma Ren,** Laxative, mild, moistening, neutral, safe to use in longer term, neutral, moistening to intestines
11. **3rd level: Heat in the Nutritive Level** (level of nourishment) Treatment strategy includes those from above two levels, and adding more emphasis on tonifying Yin (increasing coolant) without creating dampness.

    *Chinese formula example: Qing Ying Tang/Clear the Nutritive.* Can use with breast cancer and many other organ cancers.

**Mucilaginous/demulcent herbs:**

- **Asparagus root/Asparagus officinalis/Tian Men Dong.** Moistening, cooling, to Kidney, Bladder, Lung.

- **Solomon’s Seal root/Polygonatum spp.** Neutral, moistening, sweet. Kidney, Lung, Spleen, maybe Heart.

- **Marsh Mallow root/Althea officinalis** Sweet, cool, moist, softening. Use with caution as it is very mucilaginous and sticky

- **Slippery Elm Bark/Ulmus fluva** Sweet, neutral, cool, moistening

- **Burdock root/Arcticum lappa:** clears heat and tonifies fluids, for heat and Yin deficient heat, cooling, draining. Diuretic to clear heat downward

- **Raw and prepared Rehmannia/Sheng Di Huang Shu Di Huang (being grown in VT):** Sheng Di is more cooling and somewhat moistening while Shu Di is more moistening and somewhat cooling. Use Shu Di with caution as it is sticky

- **California Figwort/Scrophularia californica and lanceolata** Garran and Holmes say clears heat at blood level, and Garran says tonifies Yin as well. I say cold and moistening. Similar/same use as Xuan Shen/(Chinese) Scrophularia.

**Venting Herbs:** Emphasizing herbs that vent heat at both deeper and more external levels. See stage 2/Qi level above for specifics. *Elder flower, Yarrow, Boneset, Burdock Seed, Echinacea root and flower*

**Cold and draining herbs:** See stage 2/Qi level above for specifics. *Goldenseal, Barberry, Oregon Grape, Echinacea root in particular.*

**Purgatives and laxatives:** To strongly clear heat and fire toxins through the intestines. CAUTION: Using too much purging herbs for too long can weaken the Qi in general and the digestive system in particular—use with caution. (Can use Qi tonics/most adaptogens to protect Qi as needed.) *Cascara Sigrid bark, Rhubarb root, Aloe vera gel (dried), Senna leaf, Cannabis seed/Cannabis sativa*

For fire toxins/extreme heat:
• **Chaga/Inonotus obliquus.**

CASE STUDY: Treating women in her early 60s with stage 2 ½ breast. Two tumors in one breast. No western treatments though periodic western diagnostic tests performed.

**Chinese diagnosis of:**
- heat and fire toxins in the nutritive level
- dampness and clumping, mostly in the Qi level, as heat is cooking the fluids to create the tumor (ie dampness from heat)
- congealed blood from heat (ie heat is cooking the blood)

**Treatment approach, with acupuncture and herbs**
- clear Nutritive, Qi and Wei level heat
- purge accumulation and fire toxins through intestines
- increase fluids and coolant (Yin)
- strengthen Qi, especially to protect energy with cooling and purging herbs

**Lifestyle changes:**
- reduced work significantly
- simplified life significantly
- limited significantly all sweets (as they create dampness)
- limited significantly all process foods
- eliminated eating all birds (chicken and turkey) as they are warming
- increased amount of pork and some beef, as pork is neutral and beef is somewhat warming
- eating lots of mung beans, which clear out heat and fire toxins.

**Results to date:**
- lost 30 pounds
- increase in energy
- tumor that was deeper and harder is more on surface and softer
- 50% reduction in size of tumor (1st time western oncologist has seen this without chemo and radiation in 20 years of practice)

12. **4th level: Heat in the Blood Level.** Treatment strategy changes here
- no longer venting heat up and out
• focus is on increasing fluids and clearing heat down

• moving stagnant blood (from the heat cooking the blood) and purging.

• With cancer, can use for leukemia, bone cancer, Kidney cancer, as well as other organ cancers. Blood level heat is a very good match with the western diagnosis of leukemia (ie blood cancer.)

*Chinese formula example: Xi Jiao Di Huang Tang/Water Buffalo Horn and Rehmannia Decoction* (Shui Niu Jiao substituted for Xi Jiao Rhino horn) for treating heat in the blood, moving stagnant blood, and clearing toxicity.

*For heat in blood and to nourish Yin (coolant):*
  • Raw and prepared Rehmannia/Sheng Di Huang Shu Di Huang (being grown in VT): Sheng Di is more cooling and somewhat moistening while Shu Di is more moistening and somewhat cooling. Use Shu Di with caution as it is sticky

  • California Figwort/Scrophularia californica and lanceolata Garran and Holmes say clears heat at blood level, and Garran says tonifies Yin as well. I say cold and moistening. Similar/same use as Xuan Shen/(Chinese) Scrophularia.

  *For moving congealed blood (from blood being cooked by heat):*
  • Crampbark/Viburnum opulus: moves blood and Qi, bitter, acrid, slightly cooling.

  • Motherwort/Leonurus cardiaca Yi Mu Cao in Chinese medicine. Bitter, slightly cold, moves blood stasis.

  • Dandelion/Taraxacum officinalis Root in particular to move congealed blood. Not a common or Chinese view about this herb. Bitter, cooling, liver, bladder, gallbladder

  *For fire toxins/extreme heat:*
  • Chaga/Inonotus obliquus: in my opinion, it strongly clears heat and treats fire toxins (it looks like a scorched mass), in Chinese herbalism is Hau Jie Kong Jun or Bai Hua Rong. Bitter, cold.

  *Purgatives and laxatives: To strongly clear heat and fire toxins through the intestines. CAUTION: Using too much purging herbs for too long can weaken the Qi in general and the digestive system in particular—use with caution. (Can use Qi tonics/most adaptogens to protect Qi as needed.) Cascara Sigrid bark, Rhubarb root, Aloe vera gel (dried), Senna leaf, Cannabis seed/Cannabis sativa

  CASE STUDY: treating “pre-leukemia”. Patient male in early 50s, farmer.
• western practitioner ordered blood test after continued issues with fatigue, fever, night sweats, swollen glands on back of neck, weight gain

• similar blood work done 5 years earlier with white blood cell count of 22,000.

• recent white blood cell count was 42,000, with patient reporting that according to western practitioner a doubling of blood count in 5 years is a confirmation of Chronic Lymphocytic Leukemia (CLL).

• western practitioner advice was to wait to see if blood count reached 44,000, then start chemotherapy.

• patient chose to begin with regular Chinese medicine treatments.

**Chinese diagnosis:**
• Heat in the blood level
• Kidney Yin deficiency
• some clumping of heat in Large Intestine
• Fire toxins also in Large Intestine
• congealed blood from heat

**Treatment approach, with acupuncture and herbs**
• clear heat at blood level
• purge accumulation and fire toxins through intestines
• increase fluids and coolant (Yin)

**Lifestyle changes**— at least as important as the acupuncture and herbal medicine.
• worked less: as a rancher, hired more help, reduced work to about 35- 40 hours/week from 60 or more hours weekly.
• worked less hard physically: has others on ranch do more of the demanding physical work. More than a mild sweat as a sign of too much work.
• stopped eating beef: beef is warming, substituted pork
• stopped eating birds as they are warming
• stopped eating refined sugar: no sweetened iced tea, no ice cream, no cookies, no da etc.
• started eating more leafy green vegetables: which are cooling generally
• increased sleep: to 9-10 hours night, from about 6-8 hours nightly.

**What were the results in 8 weeks of herbs and acupuncture?**
• Lost 30 pounds, returning to same weight from high school 30 years earlier
• Significant diminishment or elimination of night sweats, fevers and swollen glands in neck
• Significantly increased energy
• Increased mental clarity— “head fog” went away
• Improvement in home life and marriage
• Felt better overall: “I haven’t felt this good in 30 years.”
• White blood cell count dropped from 42,000 to 10,800, which is about a 75% reduction in 8 weeks.
• Above reduction was to about 50% reduction in white blood cell count from 5 years prior.
• Patient and family in the waiting room crying and hugging each other.

13. **Cancer and climate change:** the little picture and the big picture is the same picture. There’s a direct link between the warming of the planet and the rising rates of cancer—both are about heat, and a loss of yin.

   a. **Overview of the sickness of climate change:**
      • From the burning of fuel, greenhouse gases created, which traps sunlight reflected off plant’s surface, increasing temperature. Western science has understood this dynamic since the 1890s.

      • More recently, western science has come to understand that with rising temperatures has come a global decreasing ability to sequester greenhouse gases. In particular, the oceans may be close to saturation levels, there are decreasing forests to hold gases, and the bogs/marshes are thawing releasing more gases. From the view of Chinese medicine, this is a decreasing of Yin with the increasing of heat—ie Yin deficient heat.

      • Connected to Yin being coolant, Yin is also about latency, about keeping pathology from begin expressed fully. Loss of Yin individually and globally is when sickness begins to appear more clearly and more on surface—*loss of Yin is a loss of latency.*

      • Where is climate change coming from? From an overlying busy people and an overlying busy culture—i.e. *from us, and our institutions.* Our own pathology as gotten so severe that it has gone systemic, has gone global.

      • What is the medicine for the sickness climate change? Clearing heat and bringing in coolant, individually and collectively

   **Overview of cancer:**

   • What is cancer? Heat that has gotten so severe internally that it is significantly affecting the body. When cancer metastasizes, it has spread systemically, which is a loss of latency. Climate change is advanced heat globally and cancer is advanced heat individually—*both are advanced stages of heat with a loss of latency/ loss of Yin.*

   • What is a major part of the medicine of both of these scales of heat—to reduce and clear the heat, and bring in the Yin.
• What is the opportunity of cancer and climate change? Motivation to change, as with all advanced symptoms. Both can provide motivation to look at and address the underlying, root causes of the conditions.

REFERENCES:

Contemporary texts:
• Dan Bensky texts: Singles and Formulas of Chinese Herbalism
• Peter Holmes, *The Energetics of Western Herbs, vol 1 and 2*
• Thomas Avery Garran, *Western Herbs According to Traditional Chinese Medicine.*
• Paul Unschuld, *Medicine in China: A History of Ideas*
• Brendan Kelly, *The Yin and Yang of Climate Crisis* (chapter 8 on “Cancer and Climate Change”)
• Personal notes from 10+ years of study with Dr Jeffery Yuen.

Classical Texts:
*School of Cold: Shang Han Lun*—Nigel Wiseman and Steven Mitchell co-translation

*School of Heat: Wen Bing Xue*, Jian Min Wen and Garry Seifert co-translators.

*The Yellow Emperor’s Classic of Medicine: Nei Jing.* Translation by Maoshing Li,
1. **What is medicine?**

   healing?

   How do we define a “successful” treatment, with herbs or with pharmaceuticals?

   *How we see the world affects fundamentally how we practice and receive medicine.*

2. **What is Lyme disease?** From western view comes from tick bite: from Chinese medicine starts with *heat*

   a. Heat is very treatable.

3. **How does the language we use reflect our beliefs/assumptions about the world and medicine?**

   a. What are the consequences of waging war on diagnosis:
      - war on Lyme
- war on cancer
- war on diabetes
- war on obesity
- war on (non-prescription) drugs
- war on other people (Iraq, Afghanistan, maybe Iran?)

And if we believe in peace in the world, why would we wage war with medicine?

b. What does it mean when we study if pharmaceuticals or herbs “kill Spirochetes” or “kill Lyme co-infections? Are killing cells necessarily a good thing? What happens to these cells when they die?

c. What can be the “collateral damage” of waging war on Lyme? Effects on
  - energy (Qi)
  - long-term, deep strength (Yang)
  - a sense of peace and internal coolant (Yin)
  - digestive health, immune health etc
  - significant quality of life issues.
  - sometimes loss of will to live

4. Western medical view can encourage fear.

a. More than moderate fear creates either contraction or scattering of Qi (from fright).

b. What are other motivations for addressing Lyme, other than fear?

5. Classically, Chinese medicine emphasized a genuinely holistic view.

a. Part of bigger and deeper issue of Lyme is imbalance in the environment and climate change in particular.

b. More ticks carrying Lyme because less cold winters are killing off less of the ticks. More Lyme diagnosis coming from the climate crisis.

c. We’ll talk more later about how the progression of Lyme is a mirror of what is happening to the climate: research and ideas from The Yin and Yang of Climate Crisis.

d. As we’ll talk about later, assumption in Chinese medicine is that first we treat the person and second condition/disease. Understanding someone’s internal condition is essential.

e. What is it like to wage peace with a Lyme diagnosis? About clearing things out (including heat) and bringing things in (Yin, Qi, Blood). Often both approaches needed.
6. **Many perspectives/traditions/lineages in Chinese medicine.** Sheng Hua/To Nourish and Engender is a very good match with Lyme as it presents a progression of imbalance/disease

   a. Haven’t seen anything written about *Sheng Hua*. May be more of an oral tradition. Learned about it from my teacher, Dr. Jeffrey Yuen.

   b. *Sheng Hua* is to Nourish Yin and Engender Fluids, includes the importance of the liquids in the body in treating progression of disease. Has four stages of progression: *Heat—Dryness—Phlegm—Wind*

      • 1st stage: **Heat:** This occurs with tick bite. The redness on skin, fever, pain and joint stiffness are all signs of heat.

         • As heat being introduced from outside via tick, at the beginning, the heat is on the outside, surface level.

         • *The way to prevent Lyme disease is to decrease internal heat. Ideas of waging war with DEET and insecticides is based on belief in killing things off/medical warfare.*

      • 1st treatment principle: **Vent/clear heat.** Initially this likely includes diaphoretics, which from the Chinese view release exterior (i.e. open the pores, venting things up and out, creating sweating.)

      *Cooling diaphoretics:*

         • *Spearmint/Mentha spicata* More cooling than peppermint, mild diaphoretic. (*Peppermint, Mentha piperita* more warming diaphoretic than spearmint.)

         • *Elder Flower/Sambucus Canadensis and Nigra* Promotes eruption, medium strength diaphoretic, bitter, cool, drying.

         • *Boneset/Eupatorium perfoliatum* Very bitter, acrid, strongly venting, strong diaphoretic

         • *Yarrow/Achillia millefolium* Bitter, acrid, mild diaphoretic

         • *Echinacea spp,* I use purpurea. FLOWER is more venting outward, more about “release exterior”, more up-and-out, medium strength diaphoretic. Bitter, acrid, cooling. ROOT is more about deeper internal heat, more about down-and-out.
• **Burdock seed/Arctium lappa.** In Chinese called Niu Bang Zi, goes to throat, root used in western herbalism, clears fire toxins internally and externally, promotes eruptions, medium diaphoretic.

  Topically applications: Applying dried plants, either chewed or mashed with extracts, to affected area.

• Dried **Yarrow/Achillia millefolium** Bitter, acrid, mild diaphoretic. Can combine with Yarrow extract or other herbs from above. Change 2-3x daily, continue until all redness gone.

  • Importance of treating the unique person and the effects of Lyme simultaneously. Many of us have *heat internally*, so in order to treat the heat of Lyme often important to treat this internal heat.

**Cold and draining herbs:** that help protect fluids by clearing heat and tonifying fluids themselves: CAUTION: Using too much bitter herbs for too long can weaken the Qi in general and the digestive system in particular. Bitter, cold herbs like those below can have similar affect as antibiotics so they should likely be used in small amounts in a formula (about 5-15%). Use these herbs cautiously and sometimes with Qi tonics below

• **Goldenseal/Hydrastis canadensis** Very bitter, cold

• **Barberry/Berberis vulgarus** bitter, cool

• **Oregon Grape/Mahonia spp, formerly Berberis spp** Bitter, cool, draining. (The above are 3 of 4 western “yellows”, very bitter and strongly draining heat. Other one is Goldthread, Coptis trifolia.)

• **Echinacea spp,** I use purpurea. *Flower* is more venting outward, more about “release exterior”, more up-and-out, medium strength diaphoretic, and *root* is more about deeper internal heat, more about down-and-out, a mild diaphoretic. Bitter, cooling. Both flower and root appropriate at this stage, but *I would emphasize flower at this stage.*

• **Dandelion/Taraxacum officinale:** Western herbalism often uses root, Chinese herbalism uses whole flowering plant and calls it Pu Gong Yin. Goes strongly to Liver and Gallbladder, also to Bladder. Bitter, cooling, draining. Diuretic to clear heat downward

• **Burdock root/Arcticum lappa:** clears heat and tonifies fluids, for heat and Yin deficient heat, cooling, draining. Diuretic to clear heat downward

• **Chaga/Inonotus obliquus:** in my opinion, it strongly clears heat, for fire toxins (it looks like a scorched mass). In Chinese herbalism call Hau Jie Kong Jun or Bai Hua Rong. Bitter, cold.

  • Importance of treating this internal heat is that without this internal focus, condition can progress internally quickly. (When we have an internal condition that matches with something that’s introduced from the outside, things can quickly move internally.)

  • Antibiotics are cold and damp, and are not releasing exterior. *Both cold and damp are Yin, and Yin descends downward and inward, which can potentially push things deeper into the body.* (Will talk about damp as 3rd stage.)
• 2nd treatment principle: strengthening Qi to make sure someone has the resources to vent things out.
  • when things are vented out, they are released through the Wei Qi/Lung Qi (ie surface immunity) and out through the skin. Person needs the Qi/vitality to do this. They also need the blood, Yin and the fluids to do this, as all of these are used to create the Wei Qi/Lung Qi. (Will talk about these fluids with next stage, of dryness)

  • for Qi deficiency: Certain adaptogens—

  *Astragalus/Astragalus membranans:* lifts Qi up and out, very effective for venting

  *Elecampagne/Inula helinium:* not venting but helps with transform damp, which can weaken Qi. (Phlegm is 3rd stage of progression.)

  *Codonopsis/Codonopsis membranans:* which is moistening and a Qi tonic.

  *American Ginseng/Panax quinefolius:* Possible use as it’s cooling and moistening, both which can help with heat but it does consolidate Qi and at this stage you want to vent.

  *Licorice, Chinese and American/ Glycyrrhiza uralensis And Glycyrrhiza lepidota.* Qi tonic and moistening, major herb in Chinese herbalism. Often use as a small percentage of formula—5-10%

  Not recommended: *Asian Ginseng/Panax ginseng:* it’s too warming and consolidating (bringing energy inward)

  *Eleuthro/Siberian Ginseng:* Too warming

  *Medicinal Mushrooms:* use with caution as they likely go to the Kidney and can bring the illness deeper.

• 3rd treatment principle: make sure bowels and bladder are open—*disinhibit the bowels and the bladder.* Secondary to first two principles, but making sure that the body can clear things out via elimination is important. If person has significant internal heat or if condition is progressing quickly, may need to use laxative and/or diuretics.

  *Diuretics:* Increase urination, open the bladder.

  *Dandelion/Taraxacum off.* Western herbalism often uses root, Chinese herbalism uses whole flowering plant and calls it Pu Gong Yin. Goes strongly to Liver and Gallbladder, also to Bladder. Bitter, cooling, draining. Diuretic to clear heat downward

  *Plantain Seed/Plantago spp:* To Bladder, bitter, cold drying, diuretic, drains heat downward
Corn silk/Zea mays: To Bladder and Kidney, cooling, drying as diuretic but also moistening, can use with other diuretics to protect fluids as they are drained.


Purgatives and laxatives: To strongly clear heat through the intestines. **Caution:** Using too much purging herbs for too long can weaken the Qi in general and the digestive system in particular—use with caution. (Can use Qi tonics/most adaptogens to protect Qi as needed.)

Cascara Sigrid bark/Rhamnus purshiana Purgative, strong, cold, use with some caution as it can weaken energy/Qi of intestines and digestive systems (Spleen Qi)

Rhubarb root/Rheum spp Purgative, very strong, cold, bitter, use with caution as it can weaken intestine and digestive energy.

Aloe vera gel (dried)/Lu Hui Purgative, very strong, very bitter, cold, strongly draining, tonifies Kidney Yin, use with caution as it can weaken intestine and digestive energy.

Senna leaf/Senna spp. Laxative, mild, bitter, warm (not cold), OK to use in longer term as it is not so harsh and not cold.

Cannabis seed/Cannabis sativa/Huo Ma Ren, Laxative, mild, moistening, neutral, safe to use in longer term, moistening to intestines

**2nd Caution:** In addition to the issues of draining Qi downward, another issue with using laxative and diuretics is that they send energy downward into the intestines and bladder. At this first stage, the major focus is on venting the pathology up and out so use this downward focus with caution/awareness.

7. **2nd stage:** Dryness/Yin deficiency: a lack of fluids. Comes from the 1st stage/heat cooking off fluids. Signs/symptoms can include hot flashes/night sweats, sweating on chest, hands and feet (5 palm heat), consistently feeling hot, internal agitation. This stage can come soon after start of Lyme or can come weeks, months or even years later.

Mucilaginous/demulcent herbs:

Asparagus root/Asparagus officinalis Tian Men Dong is Chinese herbalism. Moistening, cooling, to Kidney, Bladder, Lung.
**Solomon’s Seal root/Polygonatum spp.** Neutral, moistening, sweet. Kidney, Lung, Spleen, maybe Heart.

**Slippery Elm Bark/Ulmus flava** Sweet, neutral, cool, moistening

**Burdock root/Arcticum lappa:** clears heat and tonifies fluids, for heat and Yin deficient heat, cooling, draining. Diuretic to clear heat downward

**Raw and prepared Rehmannia/Sheng Di Huang Shu Di Huang** (being grown in VT): Sheng Di is more cooling and somewhat moistening while Shu Di is more moistening and somewhat cooling. Use Shu Di with caution as it is sticky

**California Figwort/Scrophularia californica and lanceolata** Garran and Holmes say clears heat at blood level, and Garran says tonifies Yin as well. I say cold and moistening. Similar/same use as Xuan Shen/(Chinese) Scrophularia.

**Comfrey root and leaf/Symphytum officinalis** Sweet, neutral, cooling, moistening, to Bladder, Kidney, Lung, Spleen. *Use with caution* as it is very mucilaginous and sticky, can easily create phlegm

**Marsh Mallow root/Althea officinalis** Sweet, cool, moist, softening. *Use with caution* as it is very mucilaginous and sticky, can easily create phlegm

**Alteratives:** Build Blood, with Chinese medicine this mostly means building Liver Blood.

**Raw and prepared Rehmannia/Sheng Di Huang Shu Di Huang** (being grown in VT): Sheng Di is more cooling and somewhat moistening while Shu Di is more moistening and somewhat cooling. Use Shu Di with caution as it is sticky

**Nettle/Urtica dioica:** cooling and moistening, builds (Liver) blood

**Dandelion root or whole plant/Taraxacum officinale:** cooling, moistening builds (Liver) blood

**Dang Kwei/Angelica sinensis, Chinese angelica:** is warming but a major building blood herbs in Chinese medicine.

•• for Qi deficiency: Certain adaptogens—

**Astragalus/Astragalus membranaceus:** lifts Qi up and out, very effective for venting

**Elecampane/Inula helinium:** not venting but helps with transform phlegm, which can weaken Qi. (Phlegm is 3rd stage of progression.)

**Codonopsis/Codonopsis membranaceus:** which is moistening and a Qi tonic.
American Ginseng/Panax quinquefolius: Possible use as it’s cooling and moistening, both which can help with heat but it does consolidate Qi and at this stage you want to vent.

Licorice, Chinese and American/Glycyrrhiza uralensis And Glycyrrhiza lepidota. Qi tonic and moistening, major herb in Chinese herbalism. Often use as a small percentage of formula—5-10%

Not recommended: Asian Ginseng/Panax ginseng: it’s too warming and consolidating (brining energy inward)

Eleuthro/Siberian Ginseng: Too warming

Medicinal Mushrooms: use with caution as they likely go to the Kidney and can bring the illness deeper.

- very likely continuing to use all of the other herbs from 1st stage.

8. 3rd stage: Phlegm: which is too much Yin, an imbalance of Yin. Phlegm comes from a lack of fluids that is dryness, with the dryness coming from heat. Sheng Hua is describing this progression.

- phlegm can be anywhere in body. Is heaviness, sluggishness in body/mind/spirit. From 5 Element/5 Phase view, phlegm associated with Earth (Late Summer) which is the Stomach and Spleen, so phlegm often in these two organs.

- as phlegm associated with Stomach and Spleen it is likely to be affecting digestion. Digestion (along with respiration) is how we create day-to-day energy. When digestion has phlegm, day-to-day energy is being weakened so people can start to feel fatigue.

- Stomach and Spleen also associated with thinking, so with phlegm, thoughts and cognition can start to become less clear and more muddled. This is the stage of ‘brain fog’ with Lyme.

- 2 treatment principles of phlegm in Stomach and Spleen is to transform phlegm and drain phlegm.

  To transform phlegm, can use herbs spicy Qi ronics like Elecampagne/Inula helinium.

  To drain phlegm, use diuretics like Plantain leaf or seed/Plantago spp or Goldenrod/Solidago spp., Corn Silk/Zea mays, Dandelion/Taraxacum off.

- phlegm often also in Lung and Large Intestine, as with 5 Element/5 Phase view they are associated with Metal (Autumn) which comes after Earth (Late Summer) in the flow of Qi between organs. So dampness/phlegm in Spleen, Stomach, Lung and Large Intestine possible.
For transform phlegm Lung, use Qi tonic and expectorant like *Elecampagne/Inula helinium*, for phlegm in Large Intestine use laxatives.

**mild laxative: Senna leaf/Senna spp**  Laxative, mild, bitter, warm (not cold), OK to use in longer term as it is not so harsh and not col

**Cannabis seed/Cannabis sativa/Huo Ma Ren**  Laxative, mild, moistening, neutral, safe to use in longer term, moistening to intestines

**strong/harsh laxatives: Cascara Sigrid bark/Rhamnus purshiana**  Purgative, strong, cold, use with some caution as it can weaken energy/Qi of intestines and digestive systems (Spleen Qi)

**Rhubarb root/Rheum spp**  Purgative, very strong, cold, bitter, use with caution as it can weaken intestine and digestive energy.

**Aloe vera gel (dried)/Lu Hui**  Purgative, very strong, very bitter, cold, strongly draining, tonifies Kidney Yin, use with caution as it can weaken intestine and digestive energy.

**as the phlegm is coming from dryness, which is coming from heat, the herbs from the first 2 stages are likely to be used.**

9. **4th stage: Internal Wind:** too much movement in body/mind/spirit. Wind is responding to phlegm. Phlegm is heaviness, stickiness, an excess of Yin and Wind is an excess of movement, which is an excess of Yang.

** from the tradition in Chinese medicine that specializes in neurology (Wai Ke tradition), all neurological conditions come from wind.

** Wind creates neurological conditions of all kinds—seizures, tremors, twitches, difficulty with speak, balance issues, numbness, coordination issues. Western diagnosis of Multiple Scoliosis, Parkinson’s disease, Turrets are about wind.

** In Chinese medicine including Wai Ke tradition, part of root cause of internal wind is (Liver) Blood deficiency, so alteratives mentioned above are important as they nourish blood.

** And, the cause of this internal wind is as a response of the phlegm, so this is also about Chinese diagnosis of wind-phlegm, which can be challenging to treat as wind can create significant neurological issues and phlegm is trapping the wind and making it harder to treat.
• Issue with wind phlegm is that if you clear the damp this can release the wind, making neurological issues increase. But if don’t clear damp, neurological symptoms might not improve.

• Because internal wind can be so disorienting, it can also affect the shen/the spirit of the Heart. This creates shen disturbance which is a form of spiritual imbalance.

• 1st treatment principle: Subdue wind. Use certain anti-spasmodics
  • Valerian/Valeriana officinalis: subdues wind, settles spirit
  • Hops/Humulus lupulus: subdues wind, settles spirit
  • Kava/ Piper methysticum – is more warming than the other 2 above so use with more caution. Subdues wind, settles spirit
  • Oyster Shell/Mu Li: subdues wind, cooling, heavy, settles spirit
  • Di Long/Earthworm/Earth Dragon: subdues wind.

  For Wind-Phlegm: Centipede/Wu Gong and Scorpion/Quan Xie

• 2nd treatment principle: Settle spirit. Can use all of the above, plus herbs to tonify Heart Blood to relax the shen. Chinese herbs are Bai Zi Ren/Biota Seed and Suan Zao Ren/Ziziphus seed, can use western herb of Hawthorne Berry/Crategus spp.

• 3rd treatment principle: tonify Liver blood. More of a long term strategy as it take weeks and months to begin to tonify blood.

  Raw and prepared Rehmannia/ Sheng Di Huang Shu Di Huang (being grown in VT): Sheng Di is more cooling and somewhat moistening while Shu Di is more moistening and somewhat cooling. Use Shu Di with caution as it is sticky

  Nettle/Urtica dioica: cooling and moistening, builds (Liver) blood

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  Dang Kwei/ Angelica sinensis, Chinese angelica: is warming but a major building blood herbs in Chinese medicine.

Overview of the sickness of climate change—The Sheng Hua of the climate crisis
• 1st stage: **HEAT** From the burning of fuel, greenhouse gases created, which traps sunlight reflected off plant’s surface, increasing temperature. Western science has understood this dynamic since the 1890s and there has been public testimony about this since the mid-1980s.

• 2nd stage: **DRYNESS** More recently, western science has come to understand that with *rising temperatures* has come a global *decreasing ability to sequester greenhouse gases*. In particular, the oceans may be close to saturation levels, there are *decreasing forests* to hold gases, and the *bogs/marshes are thawing* releasing more gases. From the view of Chinese medicine, this is a decreasing of Yin with the increasing of heat. Also, this stage involves global draughts like the ongoing, severe water shortage in California.

• 3rd stage: **PHLEGM** Especially in the last 10 years, global increase in flooding from storms like what we experience four years ago in Vermont with tropical storm Irene. The flooding is an excess of Yin, an imbalance in the climate’s water

• 4th stage: **WIND** The increase in storms globally, which is an increase in wind. The island nation of Vanatu just experienced a storm with 170 mph winds that has wiped out almost all infrastructures for the whole country.

• The progression of Lyme mirrors the progression of climate change—the microcosm is the macrocosm, the little picture is reflecting the big picture.

• What can we do to address both? *Address the heat within us and within our country and culture.*

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• Clinical work with patients with Lyme diagnosis.

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Case Report: Successful Treatment to Remission of Diagnosed Multiple Sclerosis
Karta Purkh Singh Khalsa, DN-C, RH, CAP

Abstract
This case demonstrates clinical effectiveness in diagnosed multiple sclerosis using Ayurvedic assessment and treatment. Ms. E.O., a 45 year-old woman, presented in May, 2013, with a primary concern of significant neurological symptoms of recent onset. The symptoms made it difficult for her to function normally at home or at work, and she was in significant distress with physical pain, disability, cognitive limitations and disorientation. Her health history was unremarkable. Prior to her presentation, she had experienced exceptionally high emotional stress in a work environment with attendant insomnia. She had been recently diagnosed with Multiple Sclerosis.
Ms. E.O. participated in therapy involving herbal medicine, nutritional supplements, specialized diet and lifestyle adjustments. Over the course of one year of therapy, her disease remitted and she remains in remission three years after her initial presentation.

Keywords
Multiple Sclerosis, Neurological, Dietary Therapy, Herbal Medicine, Phytotherapy, Ayurveda

Introduction
This case of a middle-aged, previously healthy, woman presenting with presumed multiple sclerosis illustrates how the holistic perspective of Ayurveda allows progress toward health in a commonly devastating situation with likely poor outcomes. Ultimately, the patient declined all conventional medicine interventions, although she did take advantage of extensive medical assessments to rule out possible causes and monitor improvements. No cooperation or communication was welcomed by her medical team. She acted as her own case referee, weighing the risks and benefits of conventional and Ayurvedic therapy.

Presenting Concerns
Ms. E.O., a 45 year-old Caucasian woman, who works as a publicist, presents in May, 2013, with a primary concern of significant neurological symptoms, including tingling, pain and diminution of motor skills and cognitive functioning.

Patient current primary concerns
Ms. E.O. experienced seriously diminished function. Two weeks before presenting at my practice, she noticed tingling on the right side of her body, including the foot. The next morning she awoke with tingling that had spread to her right arm and right hand, with small loss of fine motor skills in right hand and right foot (including foot drop), severely diminished distance vision in right eye and mild cognitive difficulties. She was admitted to the hospital, undergoing blood work and an MRI. The MRI showed lesions in the brain, possibly indicating Multiple Sclerosis (MS).
One week preceding neurological crisis, typical sleep time of 6 hours had diminished to an average of 3 hours nightly. She reported that this was due to severe work stress of four years duration, due to a drawn-out hostile company takeover at her employer, which had escalated during the week preceding the episode.
For one week after appearing, symptoms persisted, manifesting as cognitive difficulties with reading, writing and processing communications and information, difficulty driving, severe fatigue, tingling and decreased mobility issues on right side.
One week later, by the day of presentation, symptoms began to subside. The cognitive issues had improved slightly. Remaining was loss of control in the right foot, which observable limping. Right hand slightly improved.
Blood tests at symptom onset by primary care physician reveal a minor B12 deficiency, of concern because B12 deficiency can mimic MS symptoms. High doses (unspecified) improve symptoms temporarily.
Several medical providers voiced a subjective diagnosis of MS, but this was never confirmed nor ruled out by MRI or any other tests in the initial phases. Numerous other theories of causation were ultimately discarded. Two years after the initial episode, a neurologist confirmed a diagnosis of MS, by which time Ms. E.O. had been symptom free for months and had resumed a normal life.
Much of the medical discussion was contradictory or speculative. Numerous etiologies were discussed, from MS, to lupus, to Sjogren’s. The possible scenarios included diseases that present from hot to cold, and from wet...
to dry. No classic presentation fit the case, except MS, but there was no smoking gun confirming the somewhat suspicious brain images. The energetic model of Ayurveda precludes these speculations. The patient was cold and fatigued, but not especially dry. Lupus (hot) and Sjogren’s (dry) were unsupported speculation, and were ultimately discarded for lack of medical evidence.

**History**
Remarkable only for its lack of precursors.

**Medical, family and psychosocial history**
Family history shows nothing of note related to current episode. Ms. E.O. was in apparently excellent health prior to this episode. She is a yoga practitioner of many years and maintains a clean lacto-vegetarian natural foods diet. She is perimenopausal with recent 3 week menstrual cycles without discomfort or abnormal bleeding. One month before the episode she experienced 1-2 days of fever and vomiting that resolved without intervention.

**Clinical findings**
Lesions in white matter visible both hemispheres on MRI. Several neurologists opine a diagnosis of MS, but decline to confirm for lack of supporting tests.

Prakruti Vata-Pitta
Vikruti Vata
Low ojas
Low tejas
Vishamagni (irregular)
Pulse: rapid, irregular (vata dominant)
Tongue: dry, tremors, uncoordinated movement
Speech: slow, word loss, slurring
Ama: minimal
Bowels: 2 BM qd, slightly soft, transit time 22 hours, minimal gas
Samprapti: vata relocated, manifested, diversified
Dhatu affected: through sequence to majja
Srotas affected: Manovahasrotas

**Patient current secondary concerns**
None of note.

**Patient past history of concerns**
Car accident with a significant whiplash in 2011. (Possibly predisposing to damage manovahasrotas) No other serious injuries or operations. All other history unremarkable.

**Diagnostic Focus and Assessment**
Initial assessment was performed using Ayurvedic methods.

**Lab values**
In an effort to diagnose the condition responsible for the symptoms, many tests were performed over 2 years after the initial neurological episode.

Vitamin D3 was 18 ng/ml
No others were significant in any way, absent the lesions observed on MRI. A conclusive diagnosis was elusive, but eventually MS was confirmed.

Positive ANA Screen, above normal SSA and Jo1 antibodies (indicates a concern for the presence of a collagen vascular disease). (These were ultimately discounted by rheumatologist and neurologist.)
Negative lab findings: Sjogren’s antibodies, Lyme studies, Lupus Like inhibitor, Cardiolipin antibodies, Beta 2 Glycoprotein 1 antibodies, Antinuclear antibody pattern

**Therapeutic Focus and Assessment**
Ms. E.O. was in pain and very scared because of the consequences of spending a lifetime with MS as explained by the primary practitioner and neurologist. She is her own source of financial support and was unable to work. We undertook a collaborative effort of crisis care to improve her nervous system health and eliminate symptoms, to be followed by a long—term maintenance program to sustain her health.
Ms. E.O. was seen initially at 10-day intervals, gradually lengthening to 2 months by 6 months into the therapeutic relationship, and to 6 months or longer follow-ups by 18 months into the process. She was disciplined and adherent to the agreed-on protocol.

**Interventions at presentation and following**

<table>
<thead>
<tr>
<th>Time from previous</th>
<th>Protocol Ayurveda</th>
<th>Protocol Additional</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>Centella 90 g qd as tea Sesame abhyanga</td>
<td>Mg glycinate, B complex, B12 subl., 5HTP, D3</td>
<td>Immediate improvement in sleep, movement, cognition</td>
</tr>
<tr>
<td>2 weeks</td>
<td>Add: Turmeric 4 Tbs qd Blueberries 1 cup qd Celery (raw, steamed, juice) –max in diet</td>
<td>Add: ascorbate</td>
<td>Continued improvement</td>
</tr>
<tr>
<td>3 weeks</td>
<td>Add: Tagara based formula in evening Epsom salt baths – daily Tea: Poppy seed - 3 Tbs poppy seeds, brewed, at bedtime</td>
<td>Probiotics</td>
<td>Sound sleep, continued improvement Normal function of hand</td>
</tr>
<tr>
<td>3 weeks</td>
<td>Continuing</td>
<td>Add: glutamine, Omega-3 oil (algae), Pantothenic acid</td>
<td>Symptoms dramatically reduced</td>
</tr>
<tr>
<td>3 months</td>
<td>Continuing</td>
<td>Continuing</td>
<td>Normal functioning</td>
</tr>
<tr>
<td>6 months</td>
<td>Add: Minimize grains Emphasize small beans Reduce Centella to beverage strength</td>
<td>Add: folate</td>
<td>Normal functioning</td>
</tr>
<tr>
<td>9 months</td>
<td>Turmeric 2 Tbs Add: curcumin 2 grams</td>
<td></td>
<td>Normal functioning D3 - 75 ng/ml Red blood cell Mg – high normal</td>
</tr>
<tr>
<td>6 months</td>
<td>Continuing</td>
<td>Continuing</td>
<td>Complete recovery, no pathology, Lesions no longer visible MRI</td>
</tr>
<tr>
<td>10 months</td>
<td>Continuing</td>
<td>Continuing</td>
<td>Maintaining complete recovery, no pathology, Lesions no longer visible MRI, no new lesions since starting therapy</td>
</tr>
</tbody>
</table>
Follow-up and Outcomes
She experienced substantial improvements during the first week, which continued until she was symptom free by six months after the crisis.
Recent MRI imaging shows no activity of demyelinating lesions.

Discussion
Ms. E.O. may or may not have actually experienced multiple sclerosis, which is notoriously difficult to diagnose, and subject to a pronounced lack of consensus in the neurology community regarding appropriate diagnostic standards.
In any case, MS often relapses and remits unpredictably, so it is impossible to objectively state that Ms. E.O. is in remission, permanent cure, or coincidental improvement.
Ms. E.O. vata crisis was the result of 4 years of chronic unremitting stress. Her inherent weak area (the brain) was the target of the vata vitiation.

Informed Consent
Informed consent to present this case was obtained from this patient.
QUASSIA AMARA; STRONG MAN OF THE TROPICAL FOREST
by Susan Leopold, PhD

Enjoy reading the foreword to the newly published and updated English version. Contact United Plant Savers if you wish to purchase the book.

Quassia amara is a member of the Simaroubaceae family, which consists of 19 genera and 95 species of trees and shrubs that are mostly tropical in distribution. Folks in the temperate region may be familiar with the Tree of Heaven (Ailanthus altissima), which is also in the Simaroubaceae family. It is known as an invasive to eastern North America but a native medicinal to those in China. Quassia, with 40 species in the rainforests of tropical America and Africa, contains trees and shrubs. Quassia amara is the source of bitter-tasting compounds and is used currently in commercial products as a vermifuge and as an insecticide. Among those in Costa Rica it is known commonly as Hombre Grande, translated as the strong man, to make a tea that can cure pain in the stomach, rid parasites, help with diabetics, and treat fever.

As folklore goes Gramman Quacy or Kwasi (1692-1787) was a slave brought to Surinam from Ghana, who had earned a reputation as a powerful medicine man. He helped the Dutch fight the maroons, earned his freedom and traveled to the Netherlands. One of his famous remedies was a bitter tea used for internal parasites and made from the bark of mysterious shrub. Linnaeus (1707-1778) named the mysterious medicinal shrub after the famous healer, Quassia amara thus meaning the bitter Quassia. John Uri Lloyd wrote about the species in 1897 in the Western Druggist regarding how it was being used in the European pharmacopeia as early as 1788. Quassia amara, being a smaller tree/shrub, was quickly over harvested in Suriname, and a larger tree found in Jamaica that has similar properties quickly became its substitute. It was commonly called Jamaican quassia (Picrasma excelsa). Though it is a larger tree, its range is much smaller and due to deforestation it was added to the IUCN redlist in 1988, and to date, Picramnia. excelsa is an endangered species (Areces-Mallea 2009). There is also a related plant, Picramnia antidesma that is a smaller shrub and known medicinally with similar distribution as Quassia amara. In Argentina Quassi amara has been confused with Picrasma crenata, another species of bitter wood. Interesting to note that in Brazil Quassia amara is known as false quinine (Ocampo and Balick 2009). The common names can be confusing within the historical context of Quassia amara use and demand in trade over the last 300 years.

In 1994 I transferred from Boston University to Friends World College in Costa Rica. I was a Geography major, but my passion was to study ethnobotany, and relocating south allowed me to pursue this path. It was not long after arriving in Costa Rica that I learned of Rafa Ocampo’s work as the preeminent and pioneering ethnobotanist. I also became intrigued with the Caribbean/Limon region of the country, known as the wet side with its Amazonian feel, as river tributaries flow from the Central and Talamanca Mountains down through tropical wet rainforest. The Limon region is a mix of indigenous cultures such as the BriBri and Cabekar with the afro-Caribbean people, who have a long history of respectful co-existence resulting in a rich and dynamic ethnobotanical reservoir of knowledge. It is in this region that Rafa Ocampo has his research farm, Bougainvillea, where he has meticulously studied agro-ecological/forest systems of important native species, one of those being Quassia amara. In this book he has gathered his knowledge and that of others to concisely describe critical data that is useful in the transition towards intentional management and cultivation of an economic and medicinally important species whose wild populations are under threat due to overharvest and loss of habitat.

Rafa Ocampo is one of the founding members of the Sacred Seeds Sanctuary located at Finca Luna Nueva Eco Lodge and certified biodynamic farm near the majestic Arenal Volcano. Rafa is co-author (with Michael Balick) of the Sacred Seeds book that highlights the collection of 300 medicinal plants that are tended to in the garden. The Sacred Seeds garden sparked the establishment of an international network of gardens located around the world that share in...
the same mission — conservation of biodiversity and cultural knowledge of sacred plants.

United Plant Savers is a non-profit organization founded just around the time I set off on my journey to Costa Rica. UpS is the umbrella organization to the Sacred Seeds Network of Botanical Sanctuaries. It is with deep respect and admiration that I write the foreword to Rafa’s English version of his book “Bitter Wood: Cultivation, Conservation, and Commerce”. We are in a time of rapid changes to the landscape with unprecedented global and local demands on important medicinal plants, the majority of which come from complex forested ecosystems. Agroforestry is critical because we can more intentionally cultivate and manage for economic and medicinally important species, instead of unsustainable harvesting from wild populations. Rafa Ocampo is a pioneer in the field of ethnobotany taking on the challenge to conserve native medicinal plants while also providing viable incentives to those living in the forest, embodying UPS mission of conservation through cultivation. Quassia amara is just one example of his many scientific contributions to the field of tropical ethnobotany. This book will serve as a valuable resource to those looking to weave Quassia amara into the disturbed wet tropical forest. It is the perfect addition to a tropical permaculture/ forest garden with its use as an important natural pesticide, de-wormer for animals, medicine for fevers and stomach ailments. In a time when mosquitos are carrying multiple tropical diseases it’s an easy preventive to add the bark to water to eliminate larva in stagnant water. It is a plant with an important conservation story and a timely medicinal with unique chemistry that provides tangible solutions to important needs. ■
We have lots of work to do!

This year’s Journal cover False Unicorn comes with a very important message. The herbal industry can reformulate but plants cannot. Currently Chamaelirium luteum is selling for 277.83 a pound on Bulk Apothecary and it even graces the shelves of Walmart. This spring advertised prices to diggers are around 30.00 green/wet and 90.00 for dried false unicorn root. This is a plant that we do not know how to cultivate to meet commercial demand at this time. The seeds can be germinated and plants can be purchased from reputable native plant nurseries, but attempt to grow false unicorn root on a commercial scale have failed thus far. This is a very slow growing plant and there is still much to learn about the plants current populations in the wild and its reproductive biology. The alarming concern is that diggers are being paid 5.00 for green goldenseal root and 26.00 dried root. I share this as a means to compare the current value of a wild harvested root we know is also showing declining populations. The only other plant being paid more to diggers is Virginia Snake Root (Aristolochia serpentaria) at 100.00 dried weight. Compare this to trillium which diggers sell to dealers for around 3.50 dried root/bulbs and cohosh root at the same price 3.50 dried. My point is that False Unicorn is paying such a high price because it is not easy to find, and it is not abundant when you do find it. I can only wonder if this red flag is our last warning sign that our most sacred fertility herb is disappearing from our forests. We hope that by sharing our concern we can bring awareness to how we can use the at-risk tool and the network of United Plant Savers to curb the demand and to bring awareness to natural product companies that they can reformulate but once false unicorn is gone that is it!

We are working towards refining our at-risk tool to bring more clarity to the consumer and the herbal industry. We are working towards a No Pick/No Use third category for those plants we hope to send a clear message to herbal industry to lay off, unless its cultivated. We have also identified those plants on the At-Risk and To-Watch list that are now tagged to be reviewed and rescored. These plants have further been rated by highest priority, top priority and mid priority and now listed in our Journal next to our At-Risk and To-Watch on page X. These plants have been tagged for review because we are concerned in regards to the increase in use in the herbal trade, and we are looking to inform the scoring of the plants by gathering the most current data on wild populations and tonnage in trade. We are also working on a list of plants that we intend to score that have come to our intention. We are also setting a clear protocol review process and a way to be timelier and effectively when reviewing plants. We encourage our membership to share concerns with us and if you are interested to help us conduct research or review plants to reach out to us.

The herbal industry is growing at a rate much faster than the slow growing forest botanicals. And only a hand full of companies are conscientious to the conservation of wild plants. In each state where the Department of Natural Heritage monitors for rare plants and reports to Nature Serve where plants are the ranked at a state and global level are in most cases decades behind in reporting. A ranking of a medicinal plant that is in high demand such as false Unicorn based on data that is over a decade out of date can be extremely misleading to the realistic stability of its future in the wild.
Two international plants featured in this Journal; *Quassia amara* and *Garcinia Kola* also represent two forest botanicals that are also in high demand both as folk medicine and in the international market place. *Garcinia Kola* of the Guttiferae family was listed as vulnerable under the IUCN redlist in 1998 and evaluated again in 2004. Found in the rainforests of west Africa, and used extensively in folk medicine and also show to inhibit the growth of Ebola as it is an immune booster, and antiviral. Maurice Iwu of the Bioresources Development and Conservation Program in Nigeria, who has won awards for his research on “Bitter kola” states “when the healer does not know what is wrong, the drug of choice is and extract of *Garcinia kola*”. One can imagine the increase in its popularity among the general population in Africa. How do we keep up with conservation work in regards to important medicinal plants, in times of crisis as Nigeria and many African nations are in the midst of conflict, famine and massive migration of refugees? Harvesting the fruit of bitter Kola is very sustainable, its limitation is that it is very tricky to germinate, which is the focus of the article in the Journal. *Quassia amara* also known as strong man can also be very sustainable managed as you can coppice the understory shrub. This is an amazing plant to grow in a permaculture setting and extremely relevant medicinal that is for the most part harvested from wild populations. Spreading the word on how to encourage the forest farming of this critical forest medicinal demonstrates not only economic opportunity but also forest conservation.

The two most significant studies to emerge this year that I want to share with our membership are the Kew State of the World’s Plants produced by Kew Botanical Gardens and US Forests and the Climate Emergency produced by the Dogwood Alliance. These two studies combined provide the most updated perspective on what is happening both on a global and local scale in regards to plant biodiversity. The big message is that we need to take action in how we manage our botanical resources not just to curb the rapid rate of biodiversity extinction but also to see the forest as our best solution to carbon storage/ essentially the solution to the climate crisis that we are facing.

The Kew State of the World’s Plant released in 2016 is now going to be annual report and collaboration with a global network of researcher to continue to track and provide up to date botanical data, this is a huge and vital undertaking. The report states 391,000 vascular plant species are known to science, and 2,034 new plant species were discovered in 2015. **The red flag in the report is that 21% of global plant species are threatened with extinction at this time according the IUCN red list criteria, in large part due to loss of habitat.**

We can look outside of our own geopolitical borders and feel helpless to the rapid conversion of wild lands in the tropics especially but the Dogwood alliance’s study on American forests points out a very real global double standard. “When farmers burn forests for palm plantations in Indonesia, it is deforestation -- but when landowners clear-cut forests in the US for pine plantations, it is sustainable? Somehow, crossing country lines changes the meaning of landscape-wide degradation”
The study is extremely important as it points out the dramatic conversion of diverse biodiversity rich forest ecosystems that were once large carbon sinks and provided important ecosystem services that has taken place in large part due to our outdated forest policies and management protocol of our most treasured and important resource.

The study points out that “Protecting mature, high-biomass forests and remaining old forests, allowing young forests to mature, and halting the conversion of natural forests to plantations may solve many of our current forest carbon problems.”

“What is most important to this statement from the study is that not only are the old-growth, and mature forests the keeps of the highest densities of carbon they are also where are most at-risk forest dwelling medicinal plants call home. Essentially saving at-risk medicinal plants by protecting their habitat is also the most critical solution to our climate crisis.”

“One study found that ending commercial logging on U.S. national forests and allowing forests to mature instead would remove an additional amount of carbon from the atmosphere equivalent to 6 percent of the U.S. 2025 climate target of 28 percent emission reductions. Yet, the U.S. Forest Service is proposing to increase logging on national forests to 1980 levels, which by some accounts would increase emissions by 6
percent."

We can shift this paradigm and change the way we perceive and manage our forests. Richard Evans Shultes monumental book the Healing Forest has taken on a new meaning for me as we face our most serious global crisis, not only are the forests our solution but also the source of our medicine. We have work to do!

United Plant Savers is now an official voting member of the IUCN, who has been the international voice for conservation and who manages the RED LIST. We attended, presented and participated in the Conservation Congress that happens every five-years. This year I spoke at the Free herbalism Project hosted by Mountain Rose Herbs. I spoke about the deeper message that medicinal plants bring to us through their stories. I shared about the lessons of sacredness in regards to sandalwood, the fullness breath of osha and high altitude medicine and the teacher of bringing balance through our most valued adaptogen ginseng. This talk is a podcast you can listen to from the Free Herbalism website. I also gave a talk at the Center for Agroforestry at the University of Missouri. Tom Newmark provided the Keynote talk, Health Planet, Healthy Lives: Making the Case for Medicinal Plants in Agroforestry and I presented on Medicinal Plant Conservation: Sanctuaries, Outreach and Forest Farming, you can watch both these talks featured on the centers website.

I traveled to Standing Rock and for me it was a reminder of how sacred landscapes have guided humanity. We are living in a time when nothing is sacred anymore. It is no coincidence that the cannonball river home to the spherical balls became the location for the largest gathering of native people to happen in recent history. The land is sacred and standing rock is now the birth place of bringing the role of sacredness back. The herbal clinic at standing rock, the outpouring of the herbal community to rise into action in the midst of activism speaks to the power of plants to show up and bring us all together.

This year’s Journal signifies the role of medicinal plants in healing the landscape through the ever-growing network of Botanical Sanctuaries both here in the U.S and the Sacred Seeds international network. We are witness to the rapid growth in the natural products industry but we are not witnessing the rapid growth in consciousness when it comes to conservation. We have work to do! We need to work together to ensure that herbalism is not just about healing ourselves it’s also about building a community of activism and raising consciousness in these critical times. We need all hands-on deck, we have work to do!
Si
de bar:

Prince Maximilian von Wied-Neuwied travelled into the interior of North America during the summer of 1833. Here is an excerpt of his travels to the cannonball river: “On the north side of the mouth, there was a steep, yellow clay wall; and on the southern, a flat, covered with poplars and willows. This river has its name from the singular regular sand-stone balls which are found in its banks, and in those of the Missouri in its vicinity. They are of various sizes, from that of a musket ball to that of a large bomb, and lie irregularly on the bank, or in the strata, from which they often project to half their thickness when the river has washed away the earth; they fall down, and are found in great numbers on the bank. Many of them are rather elliptical, others are more flattened, and others flat on one side, and rather convex on the other. Of the perfectly spherical balls, I observed some two feet in diameter.”
Herbalists and Health Freedom: The Impact of Laws and Regulations on Herbal Practice

Diane Miller JD
Director Law and Public Policy
National Health Freedom Coalition
https://nationalhealthfreedom.org/
AHG Symposium
October 5-9, 2017
Silverton, Oregon

Law - The Voice of Freedom...

2015-2016 Washington Homeopath Investigation
Practicing Medicine
Practicing Naturopathic Medicine

State Activism harnessing police power
Local Level

Washington State Law
PRACTICE OF MEDICINE Defined

“...(1) Offers or undertakes to diagnose, cure, advise, or prescribe for any human disease, ailment, injury, infirmity, deformity, pain or other condition, physical or mental, real or imaginary, by any means or instrumentality;...”
Washington RCW 18.71.011

Maryland State Law
Practice of Naturopathic Medicine

- §14-5F-01.
- (g) (1) “Naturopathic medicine” means the prevention, diagnosis, and treatment of human health conditions, injury, and disease using only patient education and naturopathic therapies and therapeutic substances recognized by the Council of Naturopathic Medical Education.
- (2) “Naturopathic medicine” includes:
  - (i) Counseling;
  - (ii) The practice of the mechanical sciences of healing, including mechanotherapy, articular manipulation, corrective and orthopedic gymnastics, hydrotherapy, electrotherapy, and phototherapy; and
  - (iii) The practice of the material sciences of healing, including nutrition, phytotherapy, treatment by natural substances, and external applications.
Maryland State Law
Practice of Naturopathic Medicine

§ 14-5F-29.
(b) An individual who violates this section is guilty of a felony and on conviction is subject to:
(1) A fine not exceeding $10,000 or imprisonment not exceeding 5 years or both; and
(2) A civil fine of no more than $50,000 to be levied by the Board.

Maryland State Law
Practice of Naturopathic Medicine

§ 14-5F-30.
(a) Unless an individual is licensed to practice naturopathic medicine, the individual may not:
(1) Represent to the public by title, by description of services, methods, or procedures, or otherwise, that the individual is licensed by the Board to practice naturopathic medicine;
(2) Use the title "doctor of naturopathic medicine", "doctor of naturopathy", "naturopathic doctor", or "naturopath";
(3) Use the initials "N.D.", "ND", "NMD", or "N.M.D." after the name of the individual.
(b) An individual licensed to practice naturopathic medicine in the State may not use the title "physician".

Kansas Healing Arts
Not a Natural Right

65-2801
Chapter 65.--PUBLIC HEALTH
Article 28.--HEALING ARTS
65-2801. Purpose. Recognizing that the practice of the healing arts is a privilege granted by legislative authority and is not a natural right of individuals, it is deemed necessary as a matter of policy in the interests of public health, safety and welfare, to provide laws and provisions covering the granting of that privilege and its subsequent use, control and regulation to the end that the public shall be properly protected against unprofessional, improper, unauthorized and unqualified practice of the healing arts and from unprofessional conduct by persons licensed to practice under this act.

History: L. 1957, ch. 343, § 1; July 1.

New Mexico 61-35-2 Complementary and Alternative Health Care Services

B. "complementary and alternative health care service" means the broad domain of complementary and alternative healing methods and treatments including: (1) anthroposophy; (2) aromatherapy; (3) ayurveda; (4) culturally traditional healing practices, including practices by a curandera, sobadora, partera, medica and arbolaira, and healing traditions, including plant medicines and foods, prayer, ceremony and song; (5) detoxification practices and therapies; (6) energetic healing; (7) folk practices; (8) Gerson therapy and colostrum therapy; (9) healing practices utilizing food, dietary supplements, nutrients and the physical forces of heat, cold, water, touch and light; (10) healing touch; (11) herbology or herbalism; (12) homeopathy; (13) meditation; (14) mind-body healing practices; (15) naturopathy; (16) nondiagnostic iridology; (17) noninvasive instrumentalities; (18) polarity therapy; and (19) holistic kinesiology and other muscle testing techniques.

2017 Safe Harbor
Health Freedom States!

Oklahoma *
Idaho *
Minnesota
Rhode Island
California
Louisiana
Arizona (limited)
New Mexico
Colorado
Nevada!
State Groups Working on Many Issues
- Practitioner Rights
- Vaccine Exemption Rights
- GMO Labeling
- Geo-engineering
- Electromagnetic Frequency
- Glyphosates Roundup Levels
- Regenerative Projects

VACCINE MANDATES

Parents Coerced into Getting Vaccines for their Children

The following are the diseases for which immunizations shall be documented:
(1) Diphtheria.
(2) Haemophilus influenzae type b.
(3) Measles.
(4) Mumps.
(5) Pertussis (whooping cough).
(6) Poliomyelitis.
(7) Rubella.
(8) Tetanus.
(9) Hepatitis B.
(10) Varicella (chickenpox).
(11) Any other disease deemed appropriate by the department, taking into consideration the recommendations of the Advisory Committee on Immunization Practices of the United States Department of Health and Human Services, the American Academy of Pediatrics, and the American Academy of Family Physicians.
GMO Labeling

The Dark Act: Took away Vermont and all other states rights to label GMOs

Parents Forced to Agree to Chemotherapy for their Children

"... (5) is medically neglected, which includes, but is not limited to, the withholding of medically indicated treatment from a disabled infant with a life-threatening condition. The term "withholding of medically indicated treatment" means the failure to respond to the infant’s life-threatening conditions by providing treatment, including appropriate nutrition, hydration, and medication which, in the treating physician’s or physicians’ reasonable medical judgment, will be most likely to be effective in ameliorating or correcting all conditions, except...

Minnesota Statute Sec. 260C.007 Subd. 6 (5) 2009

Federal Issues

GMO Labeling - Passage of Dark Act
Vaccine Mandates - state by state
Dietary Supplements - New Ingredient Guidelines
Geoengineering - who regulates the air
Electromagnetic Frequencies - pervasive

FDA Definition of Drug

The term “drug” means
(A) articles recognized in the official United States Pharmacopoeia, official Homeopathic Pharmacopoeia of the United States, or official national Formulary, or any supplement to any of them; and
(B) articles intended for use in the diagnosis, cure, mitigation, treatment or prevention of disease in man or other animals; and
(C) articles (other than food) intended to affect the structure or any function of the body of man or other animals; and
(D) articles intended for use as a component of any article specified in Clauses (A), (B) or (C) of this paragraph. A food or dietary supplement for which a claim ..."

21 U.S.C. 321(g)1

Dietary Supplement = Food

“A vitamin; A mineral; An herb or other botanical; An amino acid; A dietary substance for use by man to supplement the diet by increasing the total dietary intake; or A concentrate, metabolite, constituent, extract, or combination of any ingredient mentioned above...”
U.S. Dietary Supplements

* Regulated as Foods and not drugs
* Generally Regarded as Safe (GRAS) unless proven otherwise

Marketed Before 1994

Impact of New Dietary Ingredient Guidelines

WHO is representing YOU?

We need to be at the table long term if we plan to make a difference and protect health freedom.

Need Leaders

Who understands health freedom?
Who wants health freedom?
Who teaches health freedom?
Who lives health freedom?

U.S. Health Freedom Congress
Principles of Health Freedom

Principle #1.
The fundamental right of self-determination of individuals, to be let alone to survive on their own terms and in their own manner.

Principle #2.
The freedom to perceive and to act as one wishes to secure health and survival.

Principle #3
The freedom to access who and what one needs or prefers for ones health and survival.
Principle #4
The responsibility to do no harm.

Principle #5
The responsibility to respectfully tolerate diverse options in health, healing, and survival choices.

Principle #6
The duty of corporations and institutions to be trustworthy entities upholding health freedom rights and liberties of members of the human family, and abiding by health freedom responsibilities.

Principle #7
And in light of the special legal nature of corporate entities and their systemic impact on the human family, the duty to:

#7-1
-honor and preserve the sovereign nature of individuals, the sovereignty of the United States; and avoid any negative impact on the sovereignty of other nation states;

#7-2
-honor and preserve American financial and cultural diversity and multicultural systems, and avoid negative financial or cultural impacts on other nation states;
#7-3
- avoid creating or being monopolies, and avoid the use of large monopolistic ownership of resources to dominate cultures, public policies, regulations and laws;

#7-4
- avoid dominant control of natural resources, avoid the suppression of access to natural resources, and avoid potentially harmful modification or destruction of natural resources; and

#7-5
- avoid promotion of products, protocols, policies, regulations, or laws, that would encourage unlimited dependence on corporations and institutions, or that would discourage, prohibit, or otherwise negatively impact the ability or will of humans and local human communities to survive and prosper without the corporation of institution.

Principle #8
The duty of the government to protect health freedom and to make no law or public policy abridging health freedom or its fundamental principles.

BE AN AGENT OF CHANGE
Laws and customs must be carefully reviewed, revised, and even repealed if necessary, and new laws created, to reflect the development, evolution, and spiritual maturization of a people.

NATIONAL HEALTH FREEDOM COALITION
A 501(c) 3 Educational Nonprofit Organization

NATIONAL HEALTH FREEDOM ACTION
A 501 (c ) 4 Lobbying Organization

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Freedom to Heal
Heart disease and circulatory system problems are leading causes of mortality. They are further operating in the background of a host of conditions. In terms of hierarchy of therapeutic strategies, the heart and circulation enjoy primacy. In the end, it is very simple, there is a pump, fluid, vessels and the ground substance in which these structures rest.

Thus, the cardiovascular system becomes a critical feature of short, medium and long-term treatment strategies. On the short term, it relates to the treatment strategies relevant to the immediate concerns of the client. On the medium term, good nourishment and circulation of blood allows for the meeting of material needs, good relations, fulfillment of purpose and even liberation. For the long term, the concerns are focused upon longevity. Let me just get it over with: Hawthorne berry! Now for more nuanced detail.

The circulatory system consists of two primary features. They are the cardiovascular with heart, arteries, capillaries and veins … and the lymph which includes the extracellular matrix and ground substance. The cardiovascular system is a closed loop for blood circulation, while the lymph system is an open field for metabolic and fluid exchanges. My last American Herbal Guild presentation focused upon lymph and ground substance. This presentation focuses upon the cardiovascular loop.

Herbal interventions for circulation have affects that include many systems beyond cardiovascular, and are, therefore trans-systemic. For instance, the nervous and endocrine systems can contract or relax blood vessels affecting surface tension of the vessel. Further, the endocrine system has chemical messengers distributed through the endothelial surfaces of the vascular system, infusing tissues with chemical messengers that deliver signals and then return those messages through the negative feedback loop.

When the problems are still functional with little damage to the vascular wall, the radial artery is level, and slightly resistant. The term ‘level’, suggests that the pulse feels similar to touching the strings on a violin. Both diaphoretics and carminatives will relax a tense vessel by affecting vasopresser signaling from both the nervous system endocrine systems; the diaphoretics

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1 Diaphoretics that are cooling include the mint family, while Diaphoretics that are warming include cinnamon twig and raw ginger.
2 Carminatives included fennel, cardamom and citrus peels.
vasodilate superficial tissues while the carminatives dilate vessels closer to the organs. Adaptogens, blood nourishing agents, and those materials that are cooling, soothing and moistening will indirectly affect the health of the endothelium.

An example of agents that directly impacts the endothelium are those that contain nitric oxide. These include adaptogens such as gynostemma and ginseng. The impact takes place on the cardiovascular health, local blood perfusion and circulation, brain health and erectile function (Cannon, 1998).

Rolling fingers along the vessel can elucidate pulses that are tense and level. Such techniques can also be useful for assessing the thickness of the vessel wall, and accumulations along the intima such as lipids and calcification.

Treatment of damaged vascular tissue tends to be complex since it is often a progressed state of degeneration. The obvious treatment is antioxidants (Leopold, 2015). While there is no research on the topic of polypharmaceutical botanical therapies, the use of treatment principles that address the etiological components of atherosclerosis has a basis in Chinese medical approaches. Depending on the cause, one might cool and disperse the surface with diaphoretics which will relax vascular tension in addition to the anti-inflammatory action. One might also use blood activators such as tumeric and dang gui, alteratives such as red clover and sarsasparilla, and phlegm dissolvers such as rue.

Early detection of vascular damage may be made by observing the capillary beds around the ankles. This area is subject to gravity and provides visible access to the regional status of circulation. The veins on the surface of the hands and feet, palms and nails are useful points of inspection. Lastly, the inside of the lower eyelid ad sublingual veins are some of the easiest locations to see the condition of the circulatory system.

If the vessels are ballooned, the bioflavanoid rutin will strengthen the walls of the capillaries and vessels and buckwheat is a great food source of rutin! Plant resins have a natural tropism to the capillary beds. Such agents include frankincense, myrrh, dragon’s blood and pine resins, as they are useful for congestion and stasis of blood. Astringents such as oak gall help to bind the tissues more tightly.

Portal vein circulation may be observed at the radial artery on the left wrist. Congestion is well observed in the middle depth of the middle position by lifting from the depth. A slippery quality here suggests mild congestion of the portal vein. It is easily confirmed by confirmation of a recent fatty meal. This should be differentiated from an elevated amount of inflammatory

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3 Adaptogens are classified as superior grade medicinals as opposed to middle grade agents that are directional, such as having anti-inflammatory actions, or the lower grade agents which are toxic, such as datura.
4 This includes materials such as mulberry fruit, Goji berries, and
5 The endothelium is a single cell layer that lines all blood vessels. This tissue produces paracrine factors that maintain vascular homeostasis.
compounds in the blood, condition which can be called ‘blood heat’. When there is heat in the
blood, the pulse will become wider, more urgent, more forceful, or more slippery when lifting
from the depths of the pulse through the middle zone, on the way to the surface (Hammer, 2001).
Heat in the blood is confirmed by inflammatory skin conditions.

_Vascular Status_

Visual inspection of the lower limbs and sublingual area can provide information about early
damage to the cardio – circulatory system. Closely examine the skin and subcutaneous tissues,
especially of the lower extremities. Also, retract the lower eyelid and look at the vascularized
inner surface. This is one of the most immediate ways to gain visual access to the blood and
vascular system. In more immediate method, is to examine the sublingual veins, taking note of
the capillaries extending from the region of the veins.

Capillary tension is consistent with the Chinese medical concept of ‘qi stagnation’ (A.W. Priest,
1982). The net result is functional impairment of an organ whereby physiological processes
become slower than usual. This chronic stagnation can lead to inflammation as the body
overworks in an attempt to resolve a problem. At this stage, the organ tends to overheat. This
condition is consistent with, and can easily result from, chronic sympathetic nervous system
dominance. The tension of the radial artery may provide some information about the tension or
relaxation of the capillaries. If the capillaries are relaxed, there may be visible distension and
congestion of the capillaries. Constriction of the capillaries easily leads to an inflammatory
response the inflammation can cause dryness of the dermal, subdermal and mucous membranes.

Erythema and hemangiomas are consistent with inflammatory conditions that have affected the
circulatory system. Further, consequent decrease in the function of the secretory glands can
result in dryness of the skin or mucous membranes with increased sensitivity, irritability and
pain. Where stagnation of the vital life force becomes chronic, the tissues can become
dehydrated and hypo-trophic. The therapeutic strategy involves relaxing and hydrating with
moistening and relaxing agents such as mallows. When there is chronic heat and dryness with
irritability, then the strategy can include carminatives and relaxing diaphoretics which operate as
micro-circulatory agents affecting the capillaries.

Capillary tension affects tissues and organs in a general way since blood supply is impeded. If
there is hypertension with elevated systole, then, it is wise to improve circulation at the level of
the capillaries. Fluid pathology may take place as fluids may become congested in certain areas
while in adequately in supply at other locations. These effects upon the peripheral circulation
will present with skin that is cold to the touch under some circumstances as there is insufficient
blood supply. The congestion, under other conditions can cause the blood to be hotter. This is

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6 Alteratives that can be helpful and include red clover, sarsaparilla, figwort, and gromwell.
7 Systole is the pressure taking place with heart contraction. Diastole is the pressure taking place while the heart
relaxes and refills with blood.
assessed by pressing on the skin and the tissues begin to have a sensation of increased temperature. Without good nutrient perfusion tissues can become flaccid and shrunken due to impeded blood flow. Agents such as bayberry, cayenne, or ginger can be helpful.

The first step for treating circulatory disturbances is to determine whether it is in the lymph return, vascular system or the heart. A deep, weak pulse almost always takes place in the context of wet ground substance and poor lymph return. Water transforming strategies must be employed such as water transforming mushrooms and red root.

Rhythm, rate and blood pressure are useful tools for understanding the heart and circulatory systems. If the pulse is changing intensity, the likely problem is insufficient heart vitality for performing its duty (ashwaganda and astragalus are useful). Taking the pulse rate at the beginning and end of the consultation allows one to see pulses that change rate over a longer arc of time. If the pulse is changing rate at rest by more than 10 bpm, then it is likely that the humoral compounds in the bloodstream are cascading up and down, and there is an emotionally labile state (licorice root and nervines can be helpful).

**Rhythm, Rate and Blood Pressure**

I learned this mini-stress test during a seven year mentorship with Leon Hammer, MD. Take the rate of the pulse at rest. Record the number, this should be counted for thirty seconds and multiplied by two. Then, have the client perform a min-exertion test winding the arm up vigorously for ten swings. Without hesitation, immediately count the beats per minute for ten seconds and multiplied by six.

If the pulse increases by more than 10 bpm over the previous count, the body is inadequately returning blood to the heart. Under such circumstances, there can be sleeplessness, anxiety and low self-esteem. Use blood building strategies such as: astragalus and dang gui, liquid iron, vitamin B12 and folic acid, liver, brewer's yeast, bone marrow soup, colostrum and black strap molasses.

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8 The rule of 10bpm can be used for other purposes. While studying Renaissance medical astrology techniques at an Augustinian retreat center, a colleague had severe allergies. We went outside to find the culprit. Upon noticing a daisy, I asked permission and pulled a flower. I took her pulse rate, then had her sniff the flower and took the rate again. The pulse went up more than 20 bpm. This suggested sensitivity to that daisy. I took the flower and placed it in the water and succussed the water bottle 10xs. This made a homeopathic dilution of the daisy, what is called a ‘homeo-iso-nosode’ which is treatment by same rather than traditional homeopathy which is treatment by similar. When the bottle was finished, we left the residue in the bottle, refilled it and succussed 10 times again. Each of these processes is called Korsakov dilution. It is only a single case example, but she reported relief like she never had from any herbal or pharmaceutical treatment. Sometimes it works.
Here is where it gets a little weird. If there is no increased rate upon exertion, then it suggests that the heart lacks sufficient vitality to push the blood. There can be increased fatigue, and palpitations with exertion.9

If the pulse rate goes below your first count, then, look at insufficient metabolic – warming – capacity. This can be assessed through questions such as: are you colder than other people in the room, or do you get cold easily? Palpated at the elbows and knees and low back the back of your hand, is it moist and cold? Look at the tongue, is it moist bubbles? If so, there is depleted metabolic warming capacity, and one must use agents such as cinnamon and ginger together to warm the person. Summary:

**Mini Stress Test**

Instructions:

1. Take the rate for 15 seconds
2. Have patient swing arms around in a full circle for at least ten vigorous rotations
3. Take the rate again

Interpretations:

1. Rate increases between 4 and 10 beats per minute: ideal
2. Rate increases by more than 10 beats per minute: heart blood and yin depletion
3. Rate stays the same: heart qi depletion
4. Heart rate gets slower: heart yang depletion

It may seem intuitively inconceivable that the heart may slow down upon exertion, but it is possible and does happen. You will see it in patients with heart qi and yang depletion.

**Rhythm and Rate**

Li Shi-zhen poses an incomplete taxonomy of rhythm and rate for pulse diagnosis. He has knotted (slow irregularly irregular), hurried (rapid irregularly irregular), intermittent (regularly missed beats) and racing (tachycardia).

Leon Hammer provides a complete taxonomy based upon whether the pulse is constantly missing beats or occasionally missing beats (Hammer, 2001). The more constant, the worse the condition and the more likely the problem is correlated with structural heart disease as opposed to a condition which is functional. The arrhythmias involve: a) a pulse that changes rate at rest, which suggests an emotionally labile state, b) irregularly irregular beats (please see Figure 1).

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9 Use agents that boost vitality such as Astragalus, Ginseng and Eleutherococcus.
Generally, more constant arrhythmias are more serious than those that are occasional. If the herbal therapy reduces frequency and constancy of arrhythmias, it is working.

Cardiac arrhythmias comprise any perturbation to the activation sequence of the myocardium, taking place as: a) the sinus node sending a depolarization wave over the atrium, depolarizing the atrioventricular (AV) node, b) the signal propagates over the His-Purkinje system, depolarizing the ventricle.

If the arrhythmia is aggravated upon exertion, low vitality is suggested. Aralias and oplopanax can be useful. If the arrhythmias are aggravated by emotional stress, use carminatives, diaphoretics to relax the neurovascular junction and plus nervines. Pay attention to the general status of the circulation through organs and capillary beds. Blood pressure is an important part of the conversation.

**Blood Pressure**

When the heart and kidneys are burdened maintaining these functions leading over time to an elevated blood pressure. The excess heat tends to increase and rise, causing headaches and an even greater fragility of the vessels in the upper part of the body and brain, increasing the possibility of a cerebrovascular accident. The excessive heat (inflammation) in the blood has a vulcanizing effect on the intima of the vessel walls. This process of hardening is complicated by the later drying caused by the loss of fluid, both of which create an inflexibility and fragility that,
in Western terms, is an inflammatory state leading to all the vascular conditions for plaque formation and arteriosclerosis, myocardial infarction, and stroke. (Within Chinese medicine, other considerations exist in the etiology and pathogenesis of arteriosclerosis, hypertension, and stroke, outside the scope of this discussion.)

I discuss here, a pulse diagnostic method promoted by Jimmy Wei Chang in his seminars and publications. He takes blood pressure against rate in order to understand deficiency, excess, heat and cold. The system is a reliable methodology and may help when cases are confusing and complex. There are four types (Chang & Chen, 2005).

Here are four common patterns

- High systolic and diastolic blood pressure with a fast pulse rate suggests excessive heat. The appropriate treatment for such a condition is to clear heat. Supplementation should only be used with caution. One may consider berberine containing agents such as gold thread and Oregon grape root.
- Low systolic and diastolic blood pressure with a slow heart rate suggest metabolic insufficiency or what the Chinese call yang deficiency. The person will tend to be cold. Use warming and supplementing strategies. One may combine astragalus with cinnamon and ginger. Ginseng is also an option as is placenta.
- High systolic pressure with normal diastolic pressure and a slow heart rate suggests deficient heat with blood stasis. Under these circumstances, shatavari and turmeric are some options. The blood stasis may be the result of an old injury or surgery. The heart rate is slow because it is taxed by the overwork of pushing against the blood stasis and the obstruction of the blood flow. Systolic pressure is then increased and the body is overworked and overheated. A taxation heat which is deficient ensues much as a car with an overheating radiator.
- There can be low systole, diastole and blood pressure with a slightly rapid pulse. This is a hyper metabolic state that could be called yin depletion in Chinese medicine. The heart must beat faster to keep the insufficient blood and fluids in circulation.

Declining systole may lead to an increase of the pulse rate in order to sustain blood flow to the brain and heart. Thus, ischemic headaches, and angina can be avoided by increasing systolic blood pressure.

The process of pulse assessment also affords the opportunity to palpate tissues of the extremities at the knees, elbows, ankles, and wrists. This gives direct knowledge of the humeral status of the tissues in terms of hot, cold, moist and dry. The status of hydration-dehydration within the extracellular matrix affects conductivity of biochemical compounds and electrical impulses throughout this system.
A low systolic blood pressure draws attention towards cardiac and arterial insufficiency, while a cyanotic tint of the subcutaneous tissue suggests involvement of the right cardiac and congestion of the venous return.

Hemorrhoids are a direct expression back pressure through the portal vein onto the vasculature around the rectum. Hemorrhoids are thus, a subset of general congested venous return. The problem is exacerbated with fatty meals. Under these circumstances, the lipids are drawn into the mesenteric blood flow and create congestion as the portal vein feeds into the liver. There is then a perfect storm of venous back pressure combined with low integrity of the vascular intima and walls of the veins that drain the rectal tissues. Then blood pools up and the vessel wall can tear due to hard, dry stool or excessive wiping. The treatment under these circumstances is to reduce fat and increase movement. Herbal strategies include thinning the blood and increasing the integrity of the vascular wall. Hawthorne berry has tremendous virtue under these circumstances.

Diastolic blood pressure can be used to make inferences about the state of tension within the tissues. If diastole is low, there as a slack state of the vessels and the tissues. Supplement and astringe, then add agents that improve cardiac output. This might look like ginseng, schizandra and hawthorne. The systolic/diastolic ration is generally 3:2. When diastole is below ration, there can be cerebral depression and hypotensive vertigo. When diastole is relatively low, there can be renal pathology and functional insufficiency of the kidneys. Therefore systole should not be reduced without a similar decline in diastole. This can bring about a resolution of the cognitive conditions.

The pulse varies according to typological response condition in which the rate reflects cardiac response, the pulse – pressure arterial/venous balance, and the pulse data suggests autonomic and nervous state. The following are common strategies:

a. Pulse thin and tense – relax the pulse by supplementing blood with something such as dang gui, molasses or nettles. Combine with diaphoretic nervines such as chamomile or blue vervain for the tension.
b. Pulse full and sluggish – stimulate and tone by boosting qi and cleansing the blood with red clover.
c. Pulse imperceptible – gradually supplement – combine ginseng with shatavari and schizandra. This will gently increase cardiac output (inotropic action). Transform fluids with diuretics or water transforming mushrooms such as water plantain.
d. Pulse bounding – relax by diaphoresis and reduce inflammation by using baical scute and cinnamon. Detoxifying strategies are useful such as red clover and dandelion.
Here is a guide to seeing excess-deficiency patterns by blood pressure and rate, or what could be called, a cardiovascular index. The formula is: pulse rate x (systolic + diastolic). As an example take 72 x (120+80) = 14,400. A normal range is approximately 12,000 to 14,000:

a. below 12,000: deficient syndromes, wasting pathologies, chronic depressive states (adaptogens including the qi, yang, yin and blood tonics of Chinese medicine).

b. 14,000 to 20,000: degrees of circulatory tension (diaphoretics, carminatives and

c. over 20,000: cardio – renal – vascular pathologies (hawthorne and cayenne)

d. over 25,000: danger of cerebral hemorrhage (rutin and cayenne)

More extreme abnormal readings require slower and more cautious processes of rectification. The first consideration must be the restoration systemic balance and organ health, then secondarily, the elimination of systemic toxins. The choice of agents would be for those which are mildly toning or relaxing as required, so that any stress factor of the prescription is minimal and the possibility of systemic decompensation avoided (A.W. Priest, 1982). The condition of the arterial wall becomes of consideration.

Pathogenesis of Arteriosclerosis

The cause of disease is complex, from internal, external and those factors which are neither such as lifestyle. Internal causes include the emotions which are complicated by suppression, repression and addictions. The external pathogens are wind, heat, cold, damp, summer heat and dryness. Causes of disease that are neither internal nor external are life style related and involve damage by food and drink, irregularity in daily cycles, and irregularities in sex, work, or exercise.

Arteriosclerosis occurs primarily through heat complexed with phlegm and damp (lipids). Heat from internal or external pathogens depletes the vessel walls of fluids causing a progressive hardening of the arterial wall. Cold pathogens lodged at the interior may also transform into heat, resulting in hardening of the arteries. Pathogens may be compensated for and retained at the interior or in a latent state. The pulse is ropy. It is hard and defined and one could almost pick the artery up by hand (please see Figure 2).

10 According to Liu Wan Su’s theory of heat transformations, all pathogens transform into heat at the interior.
Internal states of the seven emotions can be repressed, leading to qi stagnation. This transforms to heat. The attempt to compensate for the heat by distributing cooling fluid yin to the kidneys, liver and overheated vascular system, taxes the blood and yin leads to dryness and a loss of nourishment that eventually affects the vessel walls, which harden, lose their flexibility, and gradually become brittle.

_In Closing_

Blood pressure and pulse diagnosis provide information that can allow the practitioner to treat an array of conditions beyond that of the cardiovascular system. The concerns of circulation are relevant to the function of all tissues and organs. There is rarely a clinical presentation whereby the blood supply and circulation is not worthy of due consideration.

**REFERENCES**


**Nervous System Support**

**Analgesic, Antispasmodic, and Anti-inflammatory Compounds**

**Analgesic, Antispasmodic, and Sedative Compound I (Alkaloid-based)**

*Directions:* Combine the following single extracts. When treating insomnia, consume 30-90 drops, two hours before going to sleep; if necessary, repeat one-half hour before bedtime. Avoid operating heavy machinery or driving.

1 part valerian (*Valeriana*)
1 part California poppy (*Eschscholzia*)
1 part hops (*Humulus*)
1 part passion flower (*Passiflora*)

**Analgesic, Antispasmodic, and Sedative Compound II (Alkaloid-based)**

*Directions:* Combine the following single extracts. Consume 30-90 drops, up to four times daily. Avoid operating heavy machinery or driving.

1 part kava kava (*Piper methysticum*)
1 part passion flower (*Passiflora*)
1 part California poppy (*Eschscholzia*)

**Anti-inflammatory Compound (Long-term)**

*Directions:* Combine the following single extracts. Consume 30-90 drops, two to three times daily. *Note:* Omit licorice if high blood pressure or edema is present.

2 parts turmeric (*Curcuma*)
2 parts chamomile (*Matricaria*)
1 part St. John’s wort (*Hypericum*)
½-1 part meadowsweet (*Filipendula*)
¼-½ part licorice root (*Glycyrrhiza*)

**Anti-inflammatory Compound**

*Directions:* Combine the following single extracts. Consume 30-90 drops, two to three times daily.

2 parts Jamaican dogwood (*Piscidia*)
2 parts St. John’s wort (*Hypericum*)
1 part meadowsweet (*Filipendula*)
1 part willow bark (*Salix*)
Ten Highly Effective Herbal Treatments for Common Health Conditions

Excerpts from *The Essential Guide to Western Botanical Medicine*
By Christa Sinadinos

**Headache Relief Compound**

*Directions:* Combine the following single extracts. Consume 30-90 drops, two to three times daily. This compound aids in treating muscle tension and migraine headaches.

1 part feverfew (*Tanacetum parthenium*)
1 part Jamaican dogwood (*Piscidia*)
1 part pedicularis (*Pedicularis*)

**Crampbark Compound**

*Directions:* Combine the following single extracts, then add ¼ part of the total compound volume of honey. Consume 30-120 drops, up to four times daily. *Note:* This is a modified version of Hayden’s Viburnum Compound.

3 parts black haw (*Viburnum prunifolium*)
2 parts crampbark (*Viburnum opulus*)
2 parts cinnamon (*Cinnamomum*)
1 part wild yam (*Dioscorea villosa*)
1 part skullcap (*Scutellaria*)
1 part orange peel (*Citrus sinensis*)

**Anxiolytic Compound (Tannin-based)**

*Directions:* Combine the following single extracts. Consume 30-90 drops, up to three times daily.

2 parts motherwort (*Leonurus*)
2 parts bugleweed (*Lycopus*)
1 part hawthorn fruit (*Crataegus*)
1 part lemon balm (*Melissa*)

**Anxiolytic Compound (Alkaloid-based)**

*Directions:* Combine the following single extracts. Consume 30-90 drops, up to three times daily.

2 parts motherwort (*Leonurus*)
2 parts milky oats (*Avena*)
1 part kava kava (*Piper methysticum*)
1 part passion flower (*Passiflora*)
1/8–¼ part pulsatilla (*Anemone*) (optional)
Ten Highly Effective Herbal Treatments for Common Health Conditions
Excerpts from The Essential Guide to Western Botanical Medicine
By Christa Sinadinos

**Gentle Nervine Tea**
*Directions:* Prepare a decoction or cold infusion containing the following herbs. Consume 8-12 ounces, up to three times daily.

- 2 parts spearmint (*Mentha spicata*)
- 1 part chamomile (*Matricaria*)
- 1 part oat straw (*Avena*)
- ½ part lemon balm (*Melissa*)
- ½ part of catnip (*Nepeta*)
- 1/8-1/16 part lavender (*Lavandula*) (optional)
- 1/16 part stevia (*Stevia*)

**Antidepressant Compounds**

**Blues Be-gone (Antidepressant Compound)**
*Directions:* Combine the following single extracts. Consume 30-90 drops, up to three times daily.

- 4 parts St. John’s wort (*Hypericum*)
- 2 parts fresh milky oats (*Avena*)
- 2 parts reishi mushroom (*Ganoderma*)
- 1 part aralia berry (*Aralia californica*)
- 1 part gotu kola (*Centella*)
- 1 part lemon balm (*Melissa*)
- ½ part lavender (*Lavandula angustifolia*)
- ½ part rosemary (*Rosmarinus*)

**Mood Elevating, Trophorestorative, and Gentle Nervine Compound**
*Directions:* Combine the following single extracts. Consume 30-90 drops, up to three times daily.

- 4 parts St. John’s wort (*Hypericum*)
- 3 parts fresh milky oats (*Avena*)
- 2 parts skullcap (*Scutellaria*)
- 1 part lemon balm (*Melissa*)
Ten Highly Effective Herbal Treatments for Common Health Conditions
Excerpts from The Essential Guide to Western Botanical Medicine
By Christa Sinadinos

Adaptogens and Adrenal Support

Calming Adaptogen Compound
Directions: Combine the following single extracts. Consume 30-90 drops, up to three times daily.

2 parts reishi mushroom (Ganoderma)
2 parts shu di huang (Rehmannia)(prepared)
1½ parts American ginseng, woods-grown (Panax quinquefolius)
1½ parts Devil’s club (Oplopanax)
1½ part ashwaganda (Withania)
1½ part white peony root (Paeonia lactiflora)
½ part wu wei zi (Schisandra)
½ part licorice (Glycyrrhiza)

Adaptogen and Adrenal Tonic Compound
Directions: Combine the following single extracts. Consume 30-90 drops, up to three times daily.

2 parts Tulsi basil (Ocimum sanctum)
2 parts reishi (Ganoderma)
1½ parts eleuthero (Eleutherococcus), American ginseng (Panax quinquefolius), or uncurd Chinese ginseng (Panax ginseng)
1½ parts shu di huang (Rehmannia)
1 part devil’s club (Oplopanax)
1 part white peony (Paeonia lactiflora)
½ part ashwagandha (Withania)
¼ part schisandra (Schisandra)
¼ part licorice (Glycyrrhiza)

Adaptogen and Adrenal Tonic Tea
Directions: Prepare a decoction or cold infusion containing the following herbs. Consume 8-12 ounces in the morning and early afternoon. Note: Some individuals may have difficulty sleeping if they drink this tea in the late afternoon.

1 part eleuthero (Eleutherococcus)
1 part devil’s club (Oplopanax)
1 part wild sarsaparilla (Smilax)
½ part muira puama (Ptychopetalum)
½ part Indian sarsaparilla (Hemidesmus)
½ part allspice (Pimenta)
½ part ashwagandha (Withania)
¼ part licorice (Glycyrrhiza)
Simple and Subtle Adaptogen Delight

*Directions:* Prepare an infusion containing the following herbs. Consume 8-12 ounces in the morning and early afternoon.

- 2 parts tulsi basil (*Ocimum sanctum*)
- 1 part oat straw (*Avena*)
- ½ part gotu kola (*Centella*)
- 1/16 part stevia (*Stevia*)
**Female Reproductive Support**

**Premenstrual Syndrome**

**Reproductive Deficiency Phase I Formula**  
(Estrogen or follicular phase)  
**Directions:** Combine the following single extracts. Consume 30-90 drops, two to three times daily. Consume after menstruation ceases, through ovulation.

1 part dong quai (*Angelica sinensis*)  
1 part black cohosh (*Cimicifuga*)  
1 part devil’s club (*Oplopanax*)  
1 part ashwagandha (*Withania*) or eleuthero (*Eleutherococcus*)  
1 part Oregon grape (*Berberis*)  
½ part fennel (*Foeniculum*)  
½ part gotu kola (*Centella*)

**Reproductive Deficiency Phase II Formula**  
(Progesterone or luteal phase)  
**Directions:** Combine the following single extracts. Consume 30-90 drops, two to three times daily. Consume post-ovulation until menstruation starts.

4 parts chaste tree berry (*Vitex*)  
1 part devil’s club (*Oplopanax*)  
1 part Oregon grape root (*Berberis*)  
1 part dandelion root (*Taraxacum*)  
1 part peony root (*Paeonia lactiflora*)  
1-1½ parts motherwort (*Leonurus*)  
½ part fennel (*Foeniculum*)  
½ part turmeric (*Curcuma*) or ginger (*Zingiber*) (omit with heat present)

**Formula for Estrogen Dominance**  
(PMS, breast tenderness, crampy menses, etc.)  
**Directions:** Combine the following single extracts. Consume 30-90 drops, two to three times daily.

4 parts chaste tree berry (*Vitex*)  
2 parts dandelion root (*Taraxacum*)  
2 parts white peony (*Paeonia lactiflora*)  
1 part turmeric (*Curcuma*) or artichoke (*Cynara*)  
1 part motherwort (*Leonurus*)
Quit Your Bitching
(An acute PMS compound)
Directions: Combine the following single extracts. Consume 30-90 drops, two to three times daily.

3 parts kava (*Piper methysticum*)
1½ parts white peony (*Paeonia lactiflora*)
1½ parts motherwort (*Leonurus*)
1 part milky oats (*Avena*)
1 part damiana (*Turnera*) and/or cannabis (*Cannabis*) (optional)

Respiratory System Support

Respiratory, upper

Sinus Aid Tincture Compound
Directions: Combine the following single extracts. Consume 30-90 drops, up to four times daily.

3 parts yerba mansa (*Anemopsis*)
2 parts yerba santa (*Eriodictyon*)
2 parts usnea (*Usnea*)
1 part bayberry (*Myrica*)
1 part ambrosia (*Ambrosia*)
1 part lomatium (*Lomatium*) or osha (*Ligusticum*) – (omit with orange-yellow mucus)

Sinus Aid Tea
Directions: Prepare a decoction containing the following herbs. Consume 8-12 ounces, three to four times daily.

3 parts marshmallow root (*Althaea*)
1 part yerba santa (*Eriodictyon*)
1 part cinnamon (*Cinnamomum*)
½ part bayberry (*Myrica*)
½ part osha (*Ligusticum*)
½ part elecampane root (*Inula*)
½ part licorice (*Glycyrrhiza*)
Respiratory Decongestant Tea

*Directions:* Prepare a decoction containing the following herbs. Consume 8-12 ounces, three to four times daily.

- 2 parts marshmallow root (*Althaea*)
- 1 part Mormon tea (*Ephedra*)
- ½ part yerba santa (*Eriodictyon*)
- ½ part cinnamon (*Cinnamomum*)
- ½ part yerba mansa (*Anemopsis*) (optional)
- 1/8-1/4 part licorice (*Glycyrrhiza*)

Allergy and Sinus Relief Compound

*Directions:* Combine the following single extracts. Consume 30-90 drops, three to four times daily, in two to four ounces of water.

- 2 parts yerba mansa (*Anemopsis*)
- 2 parts yerba santa (*Eriodictyon*)
- 1 part bayberry (*Myrica*)
- 1 part ambrosia (*Ambrosia*)

Allergy Preventative Tea

*Directions:* Prepare an infusion containing the following herbs. Consume 8-12 ounces, three to four times daily.

- 2 parts peppermint (*Mentha piperita*)
- 1 part nettles (*Urtica*)
- 1 part hawthorn berry (*Crataegus*)
- ½ part orange peel (*Citrus*)
- ½ part horsetail (*Equisetum*)
- 1/16 part stevia (*Stevia*) (optional)
Respiratory, lower

Humboldt Hack-away Compound

**Directions:** Combine the following single extracts. Consume 30-90 drops, three to four times daily in two to four ounces of water. Or add one-quarter of the total tincture volume of honey to make syrup. Consume one-half to one teaspoon, up to four times daily.

- 4 parts usnea (*Usnea*)
- 2 parts aralia (*Aralia californica*)
- 2 parts gumweed (*Grindelia*)
- 1 part yerba santa (*Eriodictyon*)
- 1 part anise seed (*Pimpinella*)
- ½ part elecampane (*Inula*)
- ½ part osha (*Ligusticum porteri*)
- ½ part biscuit root (*Lomatium*)
- ½ part thyme (*Thymus*)
- ½ part licorice (*Glycyrrhiza*)

Respiratory Antispasmodic Formula

**Directions:** Combine the following single extracts. Consume 30-90 drops, three to four times daily in two to four ounces of water.

- 2 parts gumweed (*Grindelia*)
- 1 part aralia (*Aralia californica*)
- 1 part elecampane (*Inula*)
- 1 part anise (*Pimpinella*)
- ½ part yuan zhi (*Polygala tenuifolia*)
- ½ part licorice (*Glycyrrhiza*)

Respiratory Relief Tea

**Directions:** Prepare an infusion containing the following herbs. Consume 8-12 ounces, three to four times daily.

- 2 parts peppermint (*Mentha piperita*)
- 1 part coltsfoot (*Tussilago or Petasites frigidus var. palmatus*)
- ½ part hyssop (*Hyssopus*)
- ½ part mullein (*Verbascum*)
- ½ part marjoram (*Origanum majorana*)
- ½ part eucalyptus (*Eucalyptus*)
- ¼ part licorice (*Glycyrrhiza*)
Ten Highly Effective Herbal Treatments for Common Health Conditions

Excerpts from The Essential Guide to Western Botanical Medicine

By Christa Sinadinos

Respiratory Roots Blend

*Directions:* Prepare a decoction containing the following herbs. Consume 8-12 ounces, three to four times daily.

4 parts marshmallow root (*Althaea*)
2 parts anise seed (*Pimpinella*)
1 part balsam root (*Balsamorhiza*) – if available
1 part cinnamon bark (*Cinnamomum*)
½ part osha root (*Ligusticum*)
¼ - ½ part licorice (*Glycyrrhiza*)

Lymphatic Compound

*Directions:* Combine the following single extracts. Consume 30-90 drops, up to four times daily.

4 parts echinacea (*Echinacea*)
1½ parts red root (*Ceanothus*)
1 part yerba mansa (*Anemopsis*)
1 part cleavers (*Galium*)
½ part false indigo (*Baptisia*)
Ten Highly Effective Herbal Treatments for Common Health Conditions
Excerpts from The Essential Guide to Western Botanical Medicine
By Christa Sinadinos

Digestive System Support

Digestive Bitter Compound
Directions: Combine the following single extracts. Consume 30-90 drops 15-30 minutes before meals, up to four times daily.

6 parts artichoke (Cynara)
4 parts turmeric (Curcuma)
3 parts orange peel (Citrus x sinensis)
3 parts cardamom (Elettaria)
2 parts anise (Pimpinella)
1 part fennel (Foeniculum)
1 part fresh ginger (Zingiber)
½-1 part licorice root (Glycyrrhiza)

Digestive Bitter Acetum Compound
Directions: Combine the following single extracts or combine the herbs and prepare using the Simpler’s method. Consume 60-90 drops, 15-30 minutes before meals, up to three times daily.

2 parts dandelion, fresh (Taraxacum)
2 parts burdock root, fresh (Arctium)
2 parts orange peel (Citrus sinensis)
2 parts cardamom (Elettaria)
1 part yellow dock root, fresh (Rumex)
1 part artichoke leaf (Cynara)

Calm Belly and Peaceful Mind Compound
Directions: Combine the following single glycerin extracts. Consume 20-60 drops, up to four times daily.

2 parts chamomile (Matricaria)
1 part lemon balm (Melissa)
1 part hops (Humulus)
½ part catnip (Nepeta)
½ part lavender (Lavandula)

Hepatodetoxifying Compound
Directions: Combine the following single extracts. Consume 30-90 drops 15-30 minutes before meals, up to four times daily.

4 parts milk thistle (Silybum)
4 parts turmeric (Curcuma)
3 parts dandelion root (Taraxacum)
3 parts burdock root (Arctium)
2 parts yellow dock (Rumex)
1 part red root (Ceanothus)
Ten Highly Effective Herbal Treatments for Common Health Conditions
Excerpts from The Essential Guide to Western Botanical Medicine
By Christa Sinadinos
1 part licorice (Glycyrrhiza)

Christa’s Favorite Liver Support Tea
*Directions*: Prepare a decoction containing the following herbs. Consume 8-10 ounces, up to three times daily.

1 part unroasted dandelion root (*Taraxacum*)
1 part roasted dandelion root (*Taraxacum*)
1 part burdock root (*Arctium*)
1 part Jamaican sarsaparilla (*Smilax*)
1 part Indian sarsaparilla (*Hemidismus*)
1 part anise (*Pimpinella*)
1 part fennel (*Foeniculum*)
1 part carob pods (*Ceratonia*)
½ part licorice (*Glycyrrhiza*)

Digestive Healing Teas

Demulcent Anti-inflammatory Tea
*Directions*: Prepare a decoction containing the following herbs. Consume 8-12 ounces on an empty stomach (20-30 minutes before meals), up to three times daily.

4 parts marshmallow root (*Althaea*)
2 parts carob pods (*Ceratonia*)
1 part fennel seed (*Foeniculum*)
1 part fenugreek (*Trigonella*)
1 part anise seed (*Pimpinella*)
½ part licorice root (*Glycyrrhiza*)

Digestive Healing Tea I
*Directions*: Prepare an infusion containing the following herbs. Consume 8-12 ounces on an empty stomach, up to three times daily.

2 parts peppermint (*Mentha piperita*)
1 part chamomile (*Matricaria*)
1 parts meadowsweet (*Filipendula*)
1 part comfrey leaf (*Symphytum*)
½ part chickweed (*Stellaria*)
½ part calendula (*Calendula*)
1/16 part licorice (*Glycyrrhiza*) or stevia (*Stevia*)
Ten Highly Effective Herbal Treatments for Common Health Conditions

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Digestive Healing Tea II

*Directions:* Prepare an infusion containing the following herbs. Consume 8-12 ounces on an empty stomach, up to three times daily.

2 parts peppermint (*Mentha piperita*) or spearmint (*Mentha spicata*)
1 part chamomile (*Matricaria*)
1 part meadowsweet (*Filipendula*)
1 part anise (*Pimpinella*)
1 part fennel (*Foeniculum*)
½ part alfalfa (*Medicago*)
¼-½ part licorice (*Glycyrrhiza*)

Carminative Tea I

*Directions:* Prepare a decoction containing the following herbs. Consume 8-10 ounces, up to three times daily.

4 parts marshmallow (*Althaea*)
1 part anise (*Pimpinella*)
1 part cardamom (*Elettaria*)
1 part coriander (*Coriandrum*)
1 part fennel (*Foeniculum*)
1 part orange peel (*Citrus x sinensis*)
½ part allspice (*Pimenta*)
½ part fresh ginger (*Zingiber*)
¼-½ part licorice root (*Glycyrrhiza*)
Western Herbal Medicine in Primary Care

Considerations for practice in a free integrative medical clinic

A Discussion with Jakob Sletteland and other members of Eugene Occupy Medical

What are the implications and considerations for the practice of herbal medicine and clinical nutrition within a free, integrative, mobile primary care unit primarily serving the needs of the houseless, economically disadvantaged, undocumented and other marginalized demographics? The proposed discussion will be led by members of Occupy Medical Eugene, a free primary care clinic serving the health and medical needs of thousands of patients in the Willamette Valley area and beyond in the Pacific Northwest.

Students who attend this workshop will be able to:

1. Identify special needs groups in underserved populations, and assess barriers to care and other concerns

2. Develop a critical understanding of the role of the herbal practitioner in a primary care medical clinic serving the needs of the disenfranchised and dispossessed.

3. Gain an understanding of common health and medical complaints encountered in these populations with correspondent therapeutic considerations and approaches

1. Introductions
2. Overview

1. Identify special needs groups in underserved populations, and assess barriers to care and other concerns

Who We Serve

A. Special Needs Groups
   1. Houseless, uninsured, underinsured
   2. Folks with Mental health Issues/Drug and alcohol abuse
   3. Undocumented/Immigrant populations
   4. All who seek care

2. Develop a critical understanding of the role of the herbal practitioner in a primary care medical clinic serving the needs of the disenfranchised

A. Considerations for Western Herbal Medicine working in conjunction with conventional medical practitioners
1. Safety and legality within a conventional medical paradigm
2. Working in conjunction with newly prescribed and evolving medication strategies
3. Conventional medical practitioners gaining trust and confidence in herbal medicine
4. Potential conflict regarding perceived hierarchy and ego

B. Considerations regarding Western Herbal Medicine with marginalized populations
   1. Chronic drug and alcohol use/abuse
   2. Ability to access basic resources and nutrition
   3. Chronic sleeplessness
   4. Trauma and sense of safety within a clinical environment; Distrust of medical professionals

3. Gain an understanding of common health and medical complaints encountered in these populations with correspondent therapeutic considerations and approaches

A. Common Health Conditions Encountered
   1. Stress, Anxiety, and Depression/Mental Illnesses
   2. Communicable Diseases
   3. Environmental Injuries
   4. Diseases of Civilization
      a. CVD
      b. Type 2 Diabetes

B. Considerations regarding methods of herbal administration for marginalized groups
   1. Storage and stability
   2. Personalized vs. Pre-blended formulas
   3. Compliance
   4. Belief systems regarding receiving care/ types of care

*Further Questions and Resource Share / Further organizing, networking and coordination*
Herbal Team Training and Reference Manual

OM does not discriminate against patients, workers, or applicants for any activity on the basis of race/ethnicity, color, national origin, age, disability, sex, gender identity or presentation, religion, political beliefs, citizenship status, marital status, familial or parental status, sexual orientation, income or insurance.
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Occupy Medical Treatment Team: Who are we?

The OM treatment team is comprised of herbalists who are also experienced in nursing, nutrition, midwifery, wound care, wildcrafting, plant medicine-making, flower essences and mental health. We cover herbalism, nutritional counseling, prescriptions and over the counter products that the OM prescribers specify. We provide resource information, nutritional supplements, wound care and triage services as well as herbal consultations. Becoming a member of this all-volunteer team is a collaborative process and potentially flexible enough for members to find their niche.

All potential volunteers must first fill out an OM volunteer form, available online at http://occupy-medical.org/volunteer/. OM Herbalists have an additional application which will be made available to you after the general application is processed. Treatment Team lead(s) & vetted herbal team members will review the application before arranging for the new volunteer to begin shadowing in one or more of three areas: warehouse restocking; OM Herbcrafters/Medicines Herbalist; clinic work on-site. SEE: OM Herbalist Job Descriptions for more information on these roles. Check with team lead(s) to schedule a tour.

It is appropriate for any new volunteer to work with the Herbcrafters and warehouse restocking before assuming duties at clinic, although this has not historically been required. Likewise, there are volunteers who never work at clinic but regularly work behind the scenes. Clinic apothecarist & intern times and duties will depend, in part, on the new volunteer’s experience, skills and understanding of clinical herbalism. The team prefers that any new person interested in on-site clinical work be willing to complete shifts as apothecarist as well as shadow each herbalist at clinic for at least one shift, after which the team will confer about appropriate placement.

Sometimes the clinic is shorthanded in other areas - wound care & triage, e.g. - and a treatment team member often fills in the gap. A new member of the team would not be expected to fill in a gap until properly trained for that task. Defer to the team leader(s) for details.

The team meets monthly for team business, information sharing, and troubleshooting problems. These are working meetings and all invited team members are welcome to attend. Day to day shop talk among the team happens via email in closed group conversations.

Treatment hours are Sundays, 12-4pm, split into two shifts: 11:30-2 & 2-4:30pm. At least one herbal member should be on site at 11:30am to wipe down the team’s work area as well as put away incoming supplies before clients are seen and one team member stays after clinic closes to help pack up the bus. Team members are encouraged to consider shift signups a month at a time in order to best utilize volunteer availability without squandering volunteer energy. Individuals choose what their availability will be. The calendar keeper will email updates and shift requests.

Note: The OM Treatment Team is a functional element of Occupy Medical. All OM protocols are pertinent to this team and all members of the team are expected to familiarize themselves with OM policies and procedures.
Hello Medical Provider (MDs, NDs, NPs, PAs, DCs, DOs)!

Thank you for participating in Occupy Medical! We appreciate you! In order to help this operation run more effectively, we would like to introduce you to the herbalism component of the clinic and, hopefully, demystify who we are so that you can help us reach the folks who will most benefit from this service.

Herbal medicine can play an effective role in improving such diverse issues as digestive problems, eczema and other skin conditions, anxiety, insomnia, upper respiratory infections, insulin resistance, tooth infections, sinusitis, and many others. We can also compliment your treatment plans for chronic issues such as diabetes and hypertension through supporting the body's innate healing tendencies. For example, the medical provider may address a client's severe hypertension with a prescription while the herbalist may help address the roots of the problem by providing dietary counseling, herbal therapeutics, and holistic health approaches to alleviate stress or other factors compounding the issue. For more about herbal medicine, See: Herbal FAQs For Medical Providers at the end of this document.

Herbalism at Occupy Medical is staffed by trained, experienced herbalists who have been vetted by our own team. In addition, many of us are trained and experienced nutritionists, nurses, body workers, social workers, and educators. As herbalists, we do not diagnose or prescribe according to the standards of biomedicine, though we may use assessment and therapeutic modalities informed by traditional medical systems and the conventional health and biosciences.

We offer gentle and effective herbal remedies, vitamins, supplements and a safe space for clients to tell their stories. The application of herbal medicines themselves may in part be thought of as supportive phytochemical ‘nudges’ aimed at bolstering the terrain of the body-ecology, increasing host resistance and resilience while aiding cellular and organ system functions. Herbalists often view these processes through the lense of a biopsychosocial model, comprising an integrated ‘whole’ within an individual. Whatever the underlying approach, our job is to support the body’s own efforts at healing through focusing on the foundations of health: stress management, healthier digestion, better sleep and needed nutrition. As demonstrated by the broadly emerging scientific disciplines of psychoneuroimmunology and complex systems, through this “Treatment Team” portal we help clients walk away with an improved sense of both physical and emotional well-being.

Generally, clients will see you, the provider, first and then have the option of seeing an herbalist. Please offer our services to the client. Please note whether they want herbals or not and then hand off the chart to us or place it in our stack when you have completed your visit, as we are the first step in each client’s discharge planning. We will provide education regarding community resources, prescription procurement, send the client on to the next station or return the chart to the record-keepers for you.

We welcome collaboration with the medical provider team, as we can often create a more effective plan to address the client’s health issues when we put our heads together. Please feel free to approach us at any time with questions, suggestions, or concerns. We look forward to working with you, and thanks again for contributing to this important work.

In solidarity,
The Occupy Medical Herbalists
Important things to know

**Pink clipboard:** or post-it note flag directs you to see that client off the bus. We use this for folks in wheelchairs, claustrophobics, “shoppers” (clients who see the wall of tinctures and suddenly have four more symptoms), and harassers (clients who have pushed the limit of appropriate behavior with staff).

"Dr. White": this is the code word we use internally to indicate we are feeling unsafe or would otherwise like support interfacing with a client. We find this is rarely needed but important for you to know that it is available. A Mental Health Team member and/or a Peacekeeper are also generally available to attend a consultation as needed.

**Prescriptions:** Never dispense a prescription drug received as a donation. You may notify MDs if a donation comes in and they may store it in their section of the bus if they believe it will be useful to them. If not, give it to the clinic manager for proper disposal at the sheriff’s office. *Do not throw in the trash!*

**Over the counter medications:** We receive many donations that look like someone cleaned out the medicine cabinet of their recently deceased grandma. Things that are expired, damaged, or otherwise unsafe for our clients are disposed of at the apothecary (not on clinic site).

**A note about knowledge sharing:** There is no one right way to care for someone but we believe that collectively we know more than as individuals. Therefore, to better serve our clients, we do not foster an environment of competitive practices but instead encourage cross-cultivation of ideas and sharing of knowledge. Please do not hesitate to utilize available & reliable references such as books, smartphones, or other herbalists. We believe continuing education is the only way to ensure quality care and everyone benefits from refreshers and reminders! So don’t hesitate to check your facts --before, during or after your appointments-- and share what you learn!

**Smart phone Apps that are handy**
- Medscape Mobile (drug-drug, drug-herb interactions)
- Natural Healer, About Herbs
- Family Practice Notebook (differential diagnosis and MD testing)
- MedSpanish (medical spanish terminology and phrasing)
- ProHerbalist Helper (herbal formulating and dosage application)

**Listening is Healing:** Herbs will not solve all the problems of the world. The secret to the real work of this clinic is in listening. Compassionate care might include an herbal formula, flower essences, dietary supplements, referral, motivational interviewing etc., or sometimes, just empathy is enough.
Clinical protocol

Reviewing a Chart

Review chart thoroughly, reading over MD and herbal notes from previous visits. Take note of the following:

Are they next in the queue? When did they check in at intake? Take charts in order unless there is a flag to "expedite" their case.

Look for Pink! A pink clipboard or post-it note flag indicates you should see them off bus. There are several reasons someone may be flagged. For example, they may use a wheelchair or otherwise have trouble with stairs, they may have anxiety about confined spaces, be suspected to have scabies or another contagion, have a tendency for "shopping" for whatever is in view, or something else that is not immediately apparent.

When was the last time they were here? If they have not been served by OM before, we prefer that they first be assessed by one of the prescribers. If they are coming every week, follow up with them on their previous issue(s) and care plan as well as any new complaints they may present with. Sometimes continuing the established care plan is the best choice for their wellness.

Who did they see in the past? You may want to check in with someone on shift about their case, therapy may vary between individuals and getting a brief perspective from someone who has already worked with the patient can give a lot of insight into their case. Learn to identify signatures of other practitioners.

What medications are they on or did they just receive from the prescriber? Any allergies? There's a reference book in our tiny library called The Pill Book that can give you clues about what diagnosis and side effects the person might be dealing with. Medication history can provide useful background information for you. Check for any allergies, intolerances, or interactions to/between food, herbs, medications or supplements which may affect your therapeutic plan.

What are their chief complaints today? Check triage and MD notes, sometimes you will see "herbalist" written in the chart, indicating they spoke to the client about seeing us for something in particular. Please ask if there is something you can't read that you think may be important. More experienced team members may be able to help you decipher a prescriber's shorthand.

Complete a vital signs review. Some folks just want to see an herbalist so it is especially important to look for red flags for these folks since their case may not have been reviewed by a prescriber. See Red Flags page on the biggies and use a highlighter pen to
mark any concerns on the chart such as high BP if you do not see it addressed in the prescriber consult.

**Face-to-Face:**

*Smile and introduce yourself.* Be warm and welcoming. State your name and practice (and always wear a nametag!).

*Confirm date of birth before continuing to ensure chart matches client.*

*Be observant.* From the very moment you greet a new client, begin to notice details about their posture, gait, facial expressions, personal items, and general appearance. This skill is not to be used to form judgments but rather to provide clues that will guide your care and better serve the client.

*Posture:* Many patients respond better if you are sitting with them, some feel more comfortable if you are at a greater distance, some at a closer distance. An elderly patient with a hearing problem, for example, may appreciate closeness rather than getting louder. Observe your own safety. Keep an exit at your back.

*Investigate and Integrate.* First, ask open-ended questions. Even in the off chance you were able to read all the MDs notes, keep in mind that a client may reveal additional information to you that they did not to an MD or triage team member. Listen closely to what the client is saying and begin to integrate this information with what you've both observed today and read from previous notes. Next, start asking more specific questions. Once you've narrowed down the focus for this visit, get details on the severity, frequency, and onset of the symptom. What makes it worse or better? What have you already tried? Take notes on what they say but also notice what they are not telling you.

*Physical Assessment.* Explicit consent must be given before ever touching a client. In order to respect the personal space and privacy of our clients, the OM Herbal Team does not mandate any amount of physical assessment. Our diverse training backgrounds means that each of us has a unique skill set that they bring to the clinic. Physical assessment of any kind is appropriate only with previous training and experience in clinical settings ( Sufficiency to be determined by experienced team members during your training). Physical assessment tools that *may* be acceptable include checking temperature, pulse, tongue, respiration, blood pressure, reflexes, visual examination and palpation/auscultation of non-sensitive areas of the body that can be observed readily without removing clothes or use of invasive instruments. Furthermore, physical assessment should be conducted only when private space is available and the client gives informed consent for any form of examination. Otherwise, aside from shaking hands or fist bumping when greeting a client, we encourage limited physical contact with clients to both reduce transmission of contagions and respect our clients’ personal space.

*Contraindications and interactions* Be familiar with herbal contraindications and potential adverse effects in pregnancy, breastfeeding, and other sensitive states, as well as with accompanying pharmaceutical drug administration. If you are not absolutely sure, always
check references. There is a book available on the bus and a smartphone app that some of us use (see Useful Information section above).

Treatment. Treatment varies between the experience and preferences of our team members. For returning clients, be mindful of adding anything new to what they are already doing. Some folks may just need refills on vitamins or refreshments on nutritive care. In general, do not overwhelm someone with too much at once. Defer to gentler, simpler solutions whenever possible. *FIRST, DO NO HARM*

**Tinctures:** Always check if client has a history or sensitivity to alcohol and/or are opposed to using alcohol based tinctures. Distribute 1, 2, or occasionally 4 oz bottles with appropriate labels indicating contents and recommended dosage (even if it is "as needed"). Do not pour formulas in front of client (ask them to wait off the bus if needed).

**Capsules:** Available for folks who are more comfortable or familiar with taking pills, are sensitive to alcohol extracts, or if this form of administration is more suitable for other reasons.

**Glycerites:** Check expiration date of glycerite extracts (generally 3 months after it was produced). This is especially important in the summer.

**Flower Essences:** These are especially appropriate for folks dealing with health conditions related to their emotions. See reference chart for appropriate formula and dosing.

**OTCs:** Always check expiration date before handing out an over-the-counter donation. Do not bring OTCs to hospitality. Dispose of expired or unwanted OTCs off-site.

*A note on dispensing:* We aim to dispense a one to two week supply of popular supplements. This can be a hassle for our chronic care folks but due to limited supply, we dispensed 1 oz. tincture or 1 week supply of vitamins/herbal capsules. Sometimes exceptions are made.

**Harm Reduction** Always strive for harm reduction. Never put someone down or question lifestyle choices. Instead provide both compassion and depersonalized information. For example, instead of saying "you really ought to quit drinking" or "smoking is bad for you," try something like this: "I've heard that a lot of [alcohol] can be stressful to the liver and I'm wondering how you feel about trying some milk thistle capsules to support yours?"

*Never take decision-making power away from a client.* Always leave health care decisions to the client. You may provide information and share your experiences with the client, but rather than giving them an assignment, always ask them if they are interested in trying something new. This will increase compliance, but more importantly, leaves health care decision-making up to them. This does not necessarily mean that it is always appropriate to give a client anything they ask for. (For example, if there is evidence for misuse or abuse of our resources, offering the patient an alternative may be the most appropriate action).
**Listening and Empathy.** A great deal of your time should be spent listening and empathizing with the client. Most folks we see live extremely challenging lives and struggle with trauma, mental health, and getting their basic human needs met. Simply listening to their story can be incredibly therapeutic.

**Information and Referrals.** (I&Rs) Sometimes the most helpful thing a client needs is referral to a social service that can help them get some basic needs met. This is especially true when folks are new to town or new to living on the streets. Familiarize yourself with the reference material available at intake and on the bus such as voucher information for prescription meds (see Voucher Information in Appendix), voucher for dental treatment (ask Intake), lab tests requested by providers (usually send folks to Any Lab Test Now, clinic manager can authorize Occupy Medical to cover the cost).

**Ask the patient how their feet are.** Feet get a battering for unhoused and physical laborers. Some patients are neglectful or embarrassed about their feet. Refer patients to Wound Care for foot care.

**Be considerate of time.** The average time spent with each client is around 20 minutes. Some regulars may be much faster. With other clients, you may need to be assertive in moving through their case at a reasonable pace. Keep in mind that charts back up quickly and by the time they get handed off to us, many folks have already been waiting for a long time. Nonetheless, good patient care should never be sacrificed for expediency. This can be a difficult balance, but one each practitioner will become comfortable with over time.

Likewise, the folks who’ve waited patiently for their turn to receive care can expect to not be interfered with by interruptive folks at the back door who just want... *insert myriad possibilities here*... politely redirect these folks to intake for sign up of first come, first served care.

**Follow-up.** Are they able to come back for a follow-up and when? Do they need refills and how soon?

**Is the chart complete?** Look for any missing information such as insurance information, vitals, meds (name, frequency, dose), staff signatures.

**Is there a prescription?** If the patient had a prescription, you should have the white copy with the chart. Check it for signature, prescription name, frequency and dose before stapling it to the back of the page. Ask the client if they need suggestions on getting help to fill their prescription. (See Prescription Voucher information)

**Sign your notes and return the chart to intake.**
General protocol for Common Complaints

Please note these are simply therapeutic ideas, and are not appropriate plans for every client. It may be best to start with just one supplement at a time to better determine what may be working or not working. Use discretion when addressing a complaint that may be a side effect of a drug or lifestyle habit, it may not always be appropriate to point this out to someone. These protocols are not intended for educational purposes but rather as references for well-trained caregivers with competent herbal and clinical skills.

Allergy, Seasonal

Lifestyle notes: reduce exposure to mold, pets, and pollen as much as possible. Wearing a face mask may help. Many allergic conditions are improved with diet, nutrient and EFA repletion.

Supplement Options: multivitamin/mineral, black strap molasses, Vitamin C (500mg daily); Fish Oil (1-10 grams omega 3 EFAs daily, generally 1-2 grams). Use caution with fish oil on patients on anticoagulant therapies (e.g. warfarin) or with blood-thinning herbs (Winston and Kuhn, 2008). Sometimes we dispense OTC antihistamines for severe or incapacitating allergies.

Herbal Support: Nettles, nettles, nettles (leaf). Best to start taking as a tonic tea in the weeks leading up to allergy season. Sometimes we make a big batch of Black Nettle Syrup during the season. Vaccinium sp. Such as blueberry, huckleberry, bilberry, or their concentrates, as well as other antioxidant-rich brightly colored fruits, licorice root, mucous membrane tonics such as Eyebright (Euphrasia sp.), Hydrastis; acute care herbal respiratory approaches might include Ephedra sp., Lobelia, Ligusticum, thyme, Salvia, or Inula sp. Mushroom therapy, especially reishi (Ganoderma sp.) can also be helpful to alter the immune response.

Anxiety

Notes on further questioning: How often are you dealing with this? What time of day? How long does an attack last? Where in your body do you feel it? What kind of thoughts go through your head? What triggers an episode of anxiety? What have you done in the past that helps? Is there anything getting in the way of the client taking care of themselves?

Do not pry if the client seems uncomfortable or unwilling to divulge details. Clients with anxiety are often living with PTSD/trauma and do not want to talk about their anxiety in detail.

Lifestyle notes: Impoverished living comes with boatloads of trauma and uncertainty. Anxiety is a challenge for nearly all the folks who visit us. Reduce sugar and other refined carbs, if possible--and caffeine intake. As always increase healthy fats (olive oil, wild fatty
fish) and protein, and increase vegetable (and low glycemic index) fruits. Promote sleep through sleep hygiene protocol.

**Supplement Options:** Multivitamin/mineral, Magnesium citrate (“Calm”); start with ½ tsp/day in water or juice, increasing by ¼ - ½ tsp/day until stools become soft/loose...back off by ½ tsp/day...that's (your) therapeutic daily dose; B-Vitamins for nerve health (complex, and B12). 5-HTP

**Herbal Support:** gentle nervines like skullcap, milky oats, passionflower, catnip, etc.; also kava, valerian, lemon balm, Centella, Bacopa, motherwort, withania, ganoderma. Flower essences are handy for many emotional cases. Lemon balm is specific for PTSD.

**Mind-body techniques:** Teach techniques to manage anxiety. Breathing Exercise and Meditation handout.

**Referral notes:** Referral to social services or mental health providers if needed.

**Bacterial Infection (Skin, Lungs, GI)**

**Lifestyle notes:** Germs are everywhere. Healthy body systems are less vulnerable to exposure (and good immune systems are effective at staving off smaller infections) but regardless, nasty infections happen to everyone. Tend to both the acute symptoms and the immune response. For prevention, advise on maintaining healthy flora in your gut and skin when appropriate. Remember, how you apply therapy can mean all the difference. Check in with other practiced caregivers about creative and effective topical and internal treatment.

**Supplement Options:** Vitamin D3 esp. in winter and fall (=/> 2000 IU qd if levels unchecked/unavailable, and higher dose if overweight/obese or darker skin pigment.i.e. people of color); Vitamin C, zinc

**Herbal Support:** Goldenseal, Oregon Grape, Coptis, Echinacea, Chaparral (externally), Baptisia, Thuja, Andrographis

**Mind-body techniques:** visualize pathogenic world peace

**Referral notes:** With folks that prefer a more natural approach, we still recommend getting a Rx so they have a choice to fill it later if symptoms worsen or do not improve under herbal care.

**Colds and Flu (See Bacterial Infections above, as there is significant overlap)**

**Lifestyle notes:** Inevitable rounds of flu usually emerge in the late fall as we transition into colder weather. Immune boosters can help moderate the severity and length of symptoms. We often put together respiratory care packages that includes tissues, cough drops, tea bags, and some of the following:

**Supplement Options:** Vitamin C
**Herbal Support**: elderberry syrup, echinacea, Usnea for upper respiratory infection, garlic mullein ear oil for ear infections

**Referral notes**: if mucus green or cough is severe and persistent, refer to MD.

**Cough**

**Lifestyle notes**: Chronic cough is common in this clime. Mold and other particulates exacerbate the problem. Client should keep face covered with scarf or bedding at night to keep air going to the lungs warm.

**Supplement Options**: Vitamin C, cough drops, tea bags

**Herbal Support**: Osha for wet lungs, elecampane, mullein, thyme, horehound, cherry bark (if cough is excessive/disturbing sleep, causing pain etc.), hyssop

**Referral notes**: If mucus is green or cough is persistent and severe, refer to MD.

**Fungal Infection**

**Lifestyle notes**: Clean feet, dry socks! Fungi love damp, dirty places. Foot powder during the day (a recipe may include clay powder, arrowroot powder and antifungal essential oils if you are feeling fancy). Apple cider vinegar spray at night, allow to air dry (overnight if possible). Especially in the winter, it is imperative to change socks and wash feet daily! This protocol goes for other musky places that tend to get fungified.

**Supplement Options**: Vitamin C (500 mg daily); Zinc supplement (40 mg daily).

**Herbal Support**: We may dispense tea tree essential oils for addition to homemade foot powders or directly onto toenail beds for more stubborn fungal infections on less sensitive areas. While convenient, salves are often not optimal since they lock moisture in and can provide additional nutrients to the fungus.

**Referral notes**: Our Wound Care team may be available to wash feet.

**Insomnia**

**Lifestyle notes**: stress, age, PTSD, alcohol, coffee, sugar, stimulants, prescriptions, menopause, exposure to temperature fluctuation, and a full moon can all exacerbate insomnia as well as a number of underlying health issues (depression, chronic pain, sleep apnea, restless legs, etc.). Try getting up and moving around for half an hour before trying to go back to sleep. Regular moderate exercise, if possible, is a foundational and critical intervention. One can still get a full rest with two, four-hour sleep sessions. See *Sleep Hygiene Protocol* below. Immune function, memory, and mood are all negatively impacted by poor sleep, as well as many chronic health conditions such as hypertension, T2 Diabetes and cancer.

**Supplement Options**: Magnesium citrate
**Herbal Support:** Valerian, hops, passionflower, cannabis for acute sedative effect (we can inform but not distribute); may want to try ‘loaded dosing’ using one dose 1 hr before intended sleep time, and one dose at intended sleep time; tonic nervines such as skullcap, and adaptogens e.g. Withania for long-term care.

**Mind-body techniques:** See Breathing Exercises and Grounding Techniques to calm running thoughts that keep you awake

**Pain (Chronic muscular, Joints, Acute Injury, Gut, Head)**

**Lifestyle notes:** Old accidents, manual labor jobs, sleeping on the streets and general stress are the most common contributors to the type of pain we see.

**Supplement Options:** Magnesium citrate, Fish Oil, Cal/Mag/Zinc. We also keep baggies of IBUProfen to hand out.

**Herbal Support:** St. John’s wort tincture (internal), SJW oil (external), turmeric for generalized inflammation (high doses required), white willow, hops, valerian, skullcap, lobelia, devil’s claw, anodyne/analgesic formula for more severe pain (formulas vary).

**Mind-body techniques:** see Breathing Exercises and Grounding Techniques. Stretching exercises.

**Referral notes:** Acupuncture for the People offers sliding scale service.

**Scabies/Fleas/Lice**

**Lifestyle notes:** bugs are spread from sharing clothing, bedding, or sleeping surface with another host. Treatment requires treating pets, washing clothes and bedding, and vacuuming surfaces in and around beds and furniture.......coats, hats, backpacks, auto upholstery, stuffed animals, hairbrushes, ponytail holders.....

**Supplement Options:** There are sometimes kits in the OTC cabinet for nit removal

**Herbal Support:** essential oil of tea tree, etc. sometimes dispensed for external use on the scalp or skin. Long term unsuccessful treatment with essential oils can lead to skin irritation.

**Referral notes:** usually Rxn is given by an MD.

**Toothache/Gingivitis**

**Lifestyle notes:** Brush and floss like a boss. Cut out the crap. Check out side effects of prescription and street drugs (dry mouth is often a side effect that can lead to tooth problems). Soda and other sugary drinks are often a culprit. Smoking of any substance dries the mouth. A suggestion of drinking water or even a quick swish with water can help after smoking.
Supplement Options: Vitamin C (500mg daily); Calcium + Magnesium if bone loss is suspected or noted; oral probiotic lozenges or increased intake of living foods.

Herbal Support: Increase salivation with bitters, especially if accompanied with digestive deficiency. Mouth rinse with spilanthes for temporary relief and tonic therapy. Strawberry leaf vinegar is a good base for a mouth rinse. Add spilanthes for temporary numbing and drawing effect. Add thyme or sage as a stimulating and disinfecting aromatic.

Referral notes: White Bird Dental for extractions (they get a voucher from us if houseless). Oral hygiene products available at our hospitality tent.

UTI

Lifestyle notes: Good diet reducing irritants (caffeine, simple sugars, starches, tobacco, alcohol, food additive), consume more garlic and onions, increase fluid intake. To reduce risk: urinate after sex, have protected sex with new partners, use aloe vera for personal lubricant to reduce irritation during sex.

Supplement Options: Probiotics, Vitamin C, D-Mannose (acute infection)

Herbal Support: Unsweetened cranberry juice, 16 oz. daily or 500 mg extract capsules daily. Uva Ursi tincture. Immune supporters like, berberine, echinacea, etc.

Referral notes: test percussion of the kidneys, if tender, refer to MD.

Wound Care

Lifestyle notes: Ensure client has the material needed for keeping wound clean and protected. Band-aids, a variety of gauze, and antibacterial liniment or salve are always on hand. Advise client to clean area and redress daily. Air it out at night if possible.

Supplement Options: Zinc (esp. for chronic ulcers), Vitamin C, antioxidants

Herbal Support: Goldenseal, Echinacea, Chaparral, Oregon Grape, St. John’s Wort.

Referral notes: Wound Care Station where we have nurses that are trained in wound care.
Common contraindications, Adverse Effects, & Drug Interactions

While safety is critical and it is always best to err on the side of caution, the majority of negative herb-drug-nutrient interactions are speculative, and based off in vitro (petri dish) or in vivo (non-human animal) data often using outlandishly high dosages, as well as forms, and routes of administration that bear little to no resemblance to the practice of herbal medicine by Herbalists. More often than not, these data do not represent clinically relevant reactions or contraindications. Herbs generally have more side ‘benefits’ than side ‘effects.’ Nonetheless, if you’re not confident it’s safe, don’t use it!

Here are some common potential contraindications that you may encounter. This is not an exhaustive list, so do your own research if you are uncertain.

- Blood thinners (Warfarin) and willow, fish oil/omega 3 supplements, turmeric, red clover, garlic, etc.
- Liver pushers, e.g. cholegogues and choleretics (Oregon Grape) and medications metabolized by the liver
- Chantix (prescription for stop smoking) and PTSD; if observed, discuss with MD. Dangerous psychological side effects are possible.
- St. John’s Wort (as well as other herbs which influence the CYP450 enzyme system) and many prescription drugs (those metabolized by CYP450 3A4 pathway)
- Mucilaginous herbs taken internally are sometimes contraindicated within an hour of any pharmaceutical as they may inhibit bioavailability/alter pharmacokinetics
- Valerian will act as a stimulant with ~10% of folks, use caution especially with Hx of mental health, heat signs, Type A personality, if easily overstimulated etc.
- Many nervine relaxant, sedative, anxiolytic and analgesic herbs will potentiate the effects of synthetic opioids, barbituates, tranquilizers, etc. and additionally may interact with hypotensive medications for high blood pressure
- Licorice is contraindicated in hypertension
- Alkaloids (secondary metabolite plant constituents) are less active when combined with acidic constituents such as tannins or vinegar menstruum.
- Diazepam with alcohol or suicidal history. Bring to the attention of an MD.

Recommended references:
- Herb Contraindications and Drug Interactions by Francis Brinker
- Herb, Nutrient, and Drug Interactions: Clinical Implications and Therapeutic Strategies by Mitchell, Stargrove, and Treasure
- The Essential Guide to Herbal Safety by Mills and Bone
- NAIMH Herbal Safety Seminar.
- The late, great, Michael Moore’s slightly dated classic, Herbal-Medical Contraindications may be the most concise and practical introduction to this subject to students and practitioners of our craft. See http://www.swsbm.com/ManualsMM/HerbMedContra1.txt.
- This list is incomplete! Check reference material on bus, or smart phone App.
Working with Spanish speaking clients Notes on cultural competence and alliance based on Patricia Cortez presentation 3/26/16

There are more than 5000 undocumented folks in the Eugene/Springfield area (not all Latin@s). We should assume these folks are undocumented until we know otherwise. Latin@ or other people of color may not know we’re ‘radical'/allies/whatever, and may think we’re somehow state/government affiliated and potentially unsafe. We’ll need to build trust, trying to establish rapport too rapidly may backfire. Latin@ /undocumented folks may be concerned about cops/our proximity to the court, police station etc. and also may be uncomfortable with other demographics we serve.

Very often, Latin@ /undocumented folks may identify with their place of origin rather than as Chicanos, Hispanics, Latinos (e.g. Mexicano, Salvadorena etc.) We should keep in mind Spanish speaking people we encounter come from hundreds of distinct cultures, regions, and language groups (for example, there are more than 100 languages spoken in Oaxaca alone). These terms (chicano, latino, hispanic) we use for convenience are neither necessarily accurate or respectful. We should be mindful to avoid assumptions. If you’re multilingual or bilingual, speak initial sentence in Spanish and English and let THEM decide which to use.

A variety of cultural differences may come into play that we should be aware of, but are nonetheless generalities. A handful of these include: sex and gender role differences; may be more conventionally patriarchal/machismo/machista from some of our perspectives, may avert eyes/not be as assertive or forward, may come in pairs or groups for safety and/or comfortability (we shouldn’t assume this means they are a romantic couple, or in any other specific type of relationship). Generally more communal culture than Euroamerican, means HIPAA and other privacy related concerns may need to be approached differently.

Be mindful of body positioning, don’t ‘loom’ over etc. If you’re a Mandatory Reporter as this relates to potential abuse scenarios, remember that these populations are very vulnerable to a variety of extremely serious legal repercussions we may not be aware of. If this situation involves suspected sexual violence/abuse, Sexual Assault Support Services can be a referral and resource (they are not Mandatory Reporters) and have bilingual members of their team.

RESOURCES:

Patricia Cortez has really put themselves out there as a resource for us. They are available for ongoing direction, communication, etc. Let’s expand this conversation for OccMed more broadly!

Patricia Cortez: 541-337-1567

Guadalupe Quinn is our go-to advocate for migra defense, and help for Latin@/Hispanic undocumented individuals in general. In other words, if we sense or know someone within this population is in trouble, we call them and tell them what’s up. They can activate an organized response.

Guadalupe Quinn: 541-688-7376
Skills Checklist for Herbal Team Members
Want to be an Occupy Medical Herbalist? Here’s what we want to know that you know:

On The Bus
__What is the OM intake process?
__What is the overall clinical flow of the charts? Who signs where?
__Have you done one shift with each active herbalist on the team?
__Where are emergency medicines- naloxone, epi pens, etc.?
__Where do dirty bottles go and who sanitizes them? (hint: we all + you do!)
__What do we do with donations of prescriptions and over the counter medications?
__Give us a mock walking tour of the bus to demonstrate you know what is where.

Wound Care
__Have you shadowed someone on at least one wound care shift?
__Who makes the tea and what is in it?
__Who are the current team members?

Who to Ask About What & Who to Ask for Help
__When would it be appropriate to call for Dr. White?
__What should you do if someone is having an emotional crisis and charts are backed up?
__What is available at hospitality? (Don’t forget about the nutritional tea!)
__What would you do if you are unfamiliar with a prescription given a client?
__Where do you find out if a drug and herb have any contraindications?

Vouchers & Referrals
__Where are pharmacy coupons and information on the voucher program?
__What is the voucher program?
__Where do we keep brochures about other services?
__Have you perused the reference material available? What did you learn?

Privacy
__Have you done your HIPPA training?
__How will you call a client’s name and handle their chart?
OM Herbalist Job Descriptions

There are two general volunteer roles: the clinical role and the Medicine-Making/Herb-Crafters role. The two are not mutually exclusive and in fact overlap is encouraged if appropriate.

Clinical Herbalist:

- Conduct herbal consultations with clients at Occupy Medical clinics
- Freely consult with herbal and medical colleagues to provide the most thorough care
- Work closely and in tandem with medical staff to ensure client safety
- Keep detailed and accurate records of herbs, supplements, and referrals given
- Listen to client’s story respectfully, giving them full attention
- Protect client privacy by seeking appropriate consultation space on or off the bus
- Take the time the client needs
- Recognize that our presence and listening skills are just as important as the herbs we give and additional therapeutic recommendations we make
- Connect clients with additional Occupy services as needed, including medical, wound care, social work/mental health, hospitality etc...
- Engage in Continuing Education and professional development activities

Medicines Herbalist:

- Wildcraft and/or cultivate and/or process raw herbs
- Make tinctures, salves, other medicines
- Re-stock herb supplies on bus
- Bottle and label tinctures and other medicines
- Organize apothecary in the warehouse
- Organize and update inventory in Google Drive and communicate with Clinical Herbalist(s) regarding current inventory stock and future needs
- Develop Standard Operating Procedures (SOPs) for processing medicines
- Familiarize oneself with Good Manufacturing Processes (GMPs) for herbal medicines
- Request Certificates of Analysis for donated herbs and supplements, and familiarize oneself with common adulteration, misidentification and other herbal medicine quality issues and concerns
- Engage in Continuing Education and professional development activities
Herbal FAQs For Medical Providers

WHAT IS WESTERN HERBALISM?
Western Herbalism (WH), also known Western Herbal Medicine, medical herbalism, or phytotherapy, is a whole system of healthcare which embodies the practice of herbalism in North America, Europe, and Australasia. WHM draws from numerous sources including Greek-Arabic and Native American traditions, as well as modern conventional sciences. Additional traditional medical systems include Ayurveda and Chinese Medicine among others. The services of an herbalist should not be confused with those of a licensed physician.

WHAT IS HOLISTIC HEALTH?
A person-centered approach to health which views the individual as a whole entity within the context of biological, social, psychological, environmental–and for some–spiritual forces.

HOW DO THEY WORK?
Herbs and proper nutrition, in conjunction with other key lifestyle factors, can alter the body’s ‘biological terrain’. This can influence cellular processes and organ systems to shift toward more optimal functioning. There is now a large and growing amount of clinical and basic research validating both traditional and new uses of herbal medicines, as well as these healthcare system practices as a whole.

WHAT ARE THEY USED FOR?
Herbs and nutrition have been used for centuries in every culture in the world. Health practitioners and educators may suggest herbs and diet changes to increase health in the presence of: pain, inflammation, depressed mood & energy levels, sleep problems, addiction, musculo-skeletal, skin, immune, cardiovascular & reproductive issues, nervous & hormonal imbalances, sub-clinical ailments, and may also be used for weight management and improving digestion.

ARE HERBS SAFE?
Yes, generally herbs are quite safe. Nonetheless, not every herb is appropriate for every person at all times. Herb, drug, & nutrient interactions are possible, herb quality issues such as misidentification and adulteration are real, & there are other considerations to take into account when determining the safety or value of an herb to a specific person.
Additional Resources

American Herbalists Guild: http://www.americanherbalistsguild.com
American Botanical Council: http://www.herbalgram.org
Consumer Labs: http://www.consumerlabs.com
David Winston’s Resources: http://www.davidwinston.org/dw-herbs.html
Directory of Open Access Journals: https://doaj.org/
Google Scholar: https://scholar.google.com/
Henriette’s Herbal Homepage: http://www.henriettes-herb.com/
Herb Research Foundation: http://www.herbs.org
Institute for Traditional Medicine: http://www.itmonline.org/
Michael Moore Homepage & SWSBM: http://www.swsbm.com/HOMEPAGE/HomePage.html
North American Institute of Medical Herbalism: http://www.naimh.com/
Native American Ethnobotany Database: http://herb.umd.umich.edu/
National Center for Complementary and Integrative Health: https://nccih.nih.gov/
National Institute of Medical Herbalists: http://www.nimh.org.uk/
New Zealand Association of Medical Herbalists: http://nzamh.org.nz/
Tillotson Institute of Natural Health: http://oneearthherbs.squarespace.com/
United Plant Savers: http://www.unitedplantsavers.org/
Dementia, Cognition, and Alzheimer’s Disease

Botanical and Natural Interventions

Neurodegenerative diseases are on the rise and have a high global economic, emotional, and societal impact. Alzheimer’s disease, an age-related neurodegenerative disease and the most common cause of dementia, with a global prevalence estimated at 26.55 million in 2006. There are no curative treatments. Despite considerable efforts, the available drugs are not highly effective, and there is great interest in searching for novel compounds. Preventatives show the most promise, as we search for both palliative symptomatic therapies, and the so-far non-existent restorative or truly effective treatments.

Pharmaceutical Therapies for Dementia

Only five drugs have been developed to alleviate cognitive symptoms:

- Acetylcholinesterase inhibitors – 2 are inspired by naturally occurring compounds, Galantamine and Rivastigmine
- N-methyl-D-aspartate (NMDA) antagonists - Memantine
- Piracetam - is a nonprescription nootropic drug designated by the FDA as an orphan drug for myoclonic seizures
- Antipsychotics – offer sx relief but increase risk of strokes and other morbidity.

All of these provide some symptomatic relief in dementia, but do not prevent progression.

Pharmaceutical Therapies for Dementia

Protein aggregates contribute to neuronal death and neurotransmitter deficits in AD including:

- Extracellular plaques of Abeta-peptide
- Intracellular neurofibrillary tangles

All such drugs may have natural remedies acting via wholistic mechanisms

Cholinesterase Inhibitors

- Tacrine [Cognex®]
- Donepezil [Aricept®]
- Rivastigmine [Exelon®, Exelon Patch®]
- Galantamine [Reminyl®, Razadyne®]

Because amyloid-β (Aβ) has been implicated in AD pathogenesis, the use of β-secretase inhibitors as well as immunotherapy against Aβ is being investigated.

**PHYTOCHEMICALS FOR DEMENTIA**

- **Cannabinoids** - Such as cannabidiol from Cannabis sativa for BPSD.
- **Resveratrol** - In Red Grapes, Peanut skins may delay the progression.
- **Curcuminoids** - Flavonoids in Curcuma longa may delay the onset of dementia.
- **Ginkgolides** - Antioxidant and anti-inflammatory cerebrovascular agents found in Gingko biloba.
- **Sesquiterpene Lactones** - Found in Asters Erigeron, Inula.

**BOTANICALS FOR DEMENTIA**

- **Saffron** (Crocus sativus)
- **Ginseng** (Panax species)
- **Sage** (Salvia species)
- **Lemon balm** (Melissa officinalis)
- **Yokukansan** (Polygala tenuifolia)
- **Tobacco** (Nicotiana tabacum)

**NUTRIENTS THAT MAY SUPPORT COGNITION**

- **Important Brain Nutrients**
  - Uridine monophosphate
  - Choline
  - Omega-3 fatty acids
  - Medium Chain Fatty Acids
  - Phospholipids
  - B-Vitamins
  - Amino Acids (DMAE)

**HEAD TRAUMA AND DEMENTIA**

- Younger adults may be more resilient to the effects of recent mild TBI than older adults.
- Patients suffering TBI at 55 years or older or mild TBI at 65 years or older show an increased risk of developing dementia.
- Older veterans having suffered a TBI show a 60% increased risk of developing dementia than veterans without TBI.
- A large cohort study conducted in Sweden found a strong association between young onset dementia and traumatic brain injury.

**HEAD TRAUMA (TBI) AND DEMENTIA RISK**

**HERBS FOR HEAD TRAUMA**

- *Hypericum perforatum*  
  St. Johnswort  
  - Traditional remedy for head, spine, nerve, and fingertip injuries, neuralgia and nerve inflammation, contusions and vascular weakness.  
  - Use tea, tincture, encapsulations, and topical preparations.

- *Centella asiatica*  
  Gotu Kola  
  - Traditional for memory and cognition, as well as fractures, ulcers, tissue healing.  
  - Use tea, tincture, encapsulations, and topical preparations.

- *Withania somnifera*  
  Ashwagandha  
  - Traditional for memory and cognition, as well as fractures, ulcers, tissue healing.

- *Ganoderma lucidum*  
  Reishi  
  - Traditional for memory and cognition, as well as fractures, ulcers, tissue healing.

- *Gingko biloba*  
  Maidenhair Tree  
  - Traditional for memory and cognition, as well as fractures, ulcers, tissue healing.

- *Curcuma longa*  
  Turmeric  
  - Traditional for memory and cognition, as well as fractures, ulcers, tissue healing.

- *Arnica montana*  
  Leopard’s Bane  
  - Traditional for memory and cognition, as well as fractures, ulcers, tissue healing.

**NUTRIENTS**

- *Fish Oil, MCTs*  
- *Co-Q10*  
- *Flavonoids*

**LIPIDS, STEROLS, AND DEMENTIA**

**MEDIUM CHAIN TRIGLYCERIDES (MCT) FOR DEMENTIA**

- Supplementing with Medium Chain Triglycerides (MCT) is aimed at increasing neuronal metabolism as this may have a protective effect against further degeneration in AD.  
- MCTs are metabolized to ketone bodies that serve as an alternative source of energy for neurons.

**MCT FOR DEMENTIA**

- *Cocos nucifera*  
  Coconut  
  - “Palm” oil  
  - Butter contains MCT and LCT  
  - Olives and some palms are high in LCT, and low in MCT
Clinical trials suggest that MCTs improve cognition in patients with mild to moderate AD in apolipoprotein E4-negative patients. Adverse events observed were mild and included minor gastrointestinal problems such as diarrhea, dyspepsia, and flatulence.


Fish oils provide the PUFAs (EPA) and (DHA), both associated with reducing the risk of dementia in epidemiological studies. Mouse models of AD suggest that these oils reduce amyloid accumulation, as do consumption of plant sterols.


Cholinesterase inhibitors are among the most effective palliative treatments for AD. Two of the licensed cholinesterase inhibitors are naturally derived (galantamine and rivastigmine), creating much interest in similar plant derived compounds to treat dementia.

Many whole plant extracts may be superior to isolated alkaloids or other plant compounds, because they are synergistic and can work via multiple mechanisms at once. There is very limited research on whole plants for dementia and no human studies, but growing animal research, and research on identifying new cholinesterase inhibitors.
The alkaloid physostigmine, is a cholinesterase inhibitor from the Calabar Bean, Physostigma venenosum. This molecule has been used as a template for the development of synthetic cholinesterase inhibitors such as rivastigmine.


Lycopediella cernua, a Club Moss, has been used in Vietnamese folk medicine for treating central nervous system conditions. Alkaloids in the plants have been found to inhibit cholinesterase. Neurosci Lett. 2014 Jul 11;575:42-6. Anti-amnesic effect of alkaloid fraction from Lycopodiella cernua (L.) Pic. Serm. Chuong NN1, Trung BH2, Luan TC1, et al.

The alkaloid huperzine from Huperzia serrata Club Moss is a cholinesterase inhibitor. Huperzine and similar alkaloids are referred to as Huperzines, and many or a combination found to improve cognition. Huperzines are also found in other plants besides Huperzia.

"Huperzines" are a group of alkaloids found in many species of Huperzia and sometimes referred to as Lycopodium Alkaloids. The Huperzines are widely studied for cholinesterase inhibition.

Huperzia Research

Huperzia and Dementia: Cholinesterase Inhibiting Alkaloids

Huperzia squarrosa contains lycosquarosine A, acetyl-aposerratinine, huperzine A and B

Huperzia serrata contains huperzines A-E

Huperzia sauropus contains alkaloids saurowine, 6-hydroxycopodine and saurowine and huperzine A.
**HUPERIZIA RESEARCH**

- Huperzia goes by the name Qian Ceng Ta where it is a licensed AD drug in China.

**NON-CHOLINERGIC EFFECTS INCLUDE:**
- Protection against amyloid beta-induced oxidative injury
- Protection against mitochondrial dysfunction
- Up-regulation of nerve growth factor
- NMDA antagonism


- Many Huperzia species are high in amino acids including arginine, a known precursor to nitric oxide synthesis.


**HUPERIZIA RESEARCH**

- Huperzine A appears to be water-soluble, and taking with food is not needed.

- Although its initial spike is quick, it appears to have a long half-life; however, the pharmacokinetic profile might change when changing dosages.


**HUPERIZIA RESEARCH**

- Huperzine A may also reduce brain iron accumulation that contributes to neurodegeneration.

- Animal studies also show Huperzine A to promote the proliferation of cultured neural cells, but extremely high doses decrease proliferation.

- Huperzines also activate protein kinase signaling pathways.


- Huperzine A ameliorates diabetes-associated cognitive decline in animal models of dementia. One mechanism appears to be via reduction in oxidative stress and inflammation.


- A fungus on Huperzia contributes huperzines to the plant.


**HUPERIZIA RESEARCH**

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**AMYRILLIS FAMILY**

- Phytochemical Cholinesterase Inhibitors

- Galanthus Snow Drop
- Lycoridis


*J Mol Graph Model.* 2015 Jul 30;34:44. Study of the interaction of Huperzia alkaloids with the acetylcholinesterase enzyme. Puiatti M1, Bottoni JL, Vallejo MG, et al.

Galanthus ciliicus is an Amaryllidaceae family plant whose bulbs contain the cholinesterase inhibiting alkaloids lycorine and galanthamine. Galanthus tojanus was not found to contain these alkaloids.

Galantamine is an alkaloid from snowdrop bulbs Galanthus woronowii that is a natural cholinesterase inhibitor and has been shown to improve cognitive functions in AD patients.

Lycoris radiatae bulbs contain the acetylcholinesterase inhibitors ungerimine and galanthamine, reported to act synergistically, the duo being more powerful than either used alone.

Panax ginseng, a relative of the Ginseng, has been demonstrated to improve memory in mouse models of dementia. Hyperin, a flavonoid glucoside found in the plant, has been shown to be a cholinesterase inhibitor.

Calanche - Phenylpropanoid glycosides
Inula - Sesquiterpene lactones
Erigeron - Sesquiterpene lactones
Citrus - Essential oils
Dichapetalum - Dichapetalin kilerpenes
Many plants - Flavonols
Cistanche tubulosa is a traditional memory-enhancing herb in China. It has been found to contain phenylpropanoid glycosides including echinacoside and acteoside, found to decrease amyloid deposition and support cholinergic and dopaminergic transmission.


Sesquiterpene lactones cholinesterase inhibitors:
- Inula oculus-christi
- Inula aucheriana

Of various sesquiterpene lactones studied, gaillardin, britannin and pulchellin, laillardin are most potent cholinesterase inhibitors.

An Acad Bras Cienc. 2014 May 14;0(0):0. Natural sesquiterpen lactones as acetylcholinesterase inhibitors. Hajimehdipoor H1, Mosaddegh M1, Naghibi F1, et al.

Citrus limoni, lemon peels are high in volatile oils including sabinene, limonene, α-pinene, β-pinene, neral, geranial, 1,8-cineole, farnesol, borneol, α-terpinol, terpinene-4-ol, linalyl acetate and β-caryophyllene, all shown to inhibit acetylcholinesterase and butyrylcholinesterase.

This, along with notable antioxidant properties are believed to prevent oxidative stress-induced neurodegeneration.


Salvia species are traditional herbs used for memory and some species contain cholinesterase inhibitors.

Salvia is a large genus with many antioxidant, and vascular protectant traditional medicines:
- Salvia officinalis – Sage
- Salvia miltiorrhiza – Dan Shen

Salvia officinalis has multiple medicinal effects including protecting the body against oxidative stress, free radical damages, angiogenesis, inflammation, bacterial and viral infection, and neuroendocrine and hormonal actions.

Studies on Salvia officinalis conducted in Asia and India suggest possible utility for dementia.

**PHYTOCHEMICAL CHOLINESTERASE INHIBITORS**

- *Dichapetalum gelonioides* is a tropical plant with known toxic properties.
- Over a dozen dichapetalins, a group of triterpenoids, have been identified and shown to have cholinesterase inhibiting properties.

**BOTANICALS WITH OTHER MECHANISMS OF ACTION**

**ACTIONS THAT BENEFIT COGNITION**

- In addition to cholinesterase inhibition, botanicals may prevent and treat AD via many other mechanisms of action:
  - Inhibit amyloid formation, deposition, accumulation.
  - Affect metabolism glucose, cholesterol, AGE formation.
  - Protect the Endothelium, Blood Cells, Vasculature.
  - Protect neurons, synapse function, neurotransmitter balance.

**ESTROGEN AGONISM/ANTAGONISM WITH AMYLOID INHIBITION**

- *Erigeron breviscapus* contains Scutellarin shown to have estrogenic effects at alpha ERs, inhibit the aggregation of beta-amyloid, and beta-amyloid mediated neuronal cell death according to in vitro research.

**Erigeron breviscapus**

- Scutellarin, a flavonoid isolated from *Erigeron breviscapus*, has been shown to have estrogenic effects at alpha ERs and to inhibit the aggregation of beta-amyloid, which is a key component in the pathology of Alzheimer's disease.
**Erigeron breviscapus**

**NEUROPROTECTION (AND REGENERATION?)**
- *Panax ginseng* may benefit the brain in senile dementia due to an ability to protect cortical neurons from inflammation and degeneration.
- *Withania somniferum*
- *Curcuma*

**INCREASED MUSCARINIC RECEPTOR EXPRESSION**
- Urtica dioica leaves significantly ameliorate diabetes-induced associative and spatial memory deficit in mice, via up-regulation of muscarinic acetylcholine receptor expression.

**CEREBROVASCULAR TONICS**
- *Ginkgo biloba*
- *Salvia species*
- *Angelica species*
- *Vinca*
- *Allium*
- *Zingiber*
- *Curcuma*
- *Panax*

**PANAX GINSENG AND DEMENTIA**
- Ginsenosides:
  - Protect against overproduction of nitric oxide.
  - Preserve optimal levels of SOD.
  - Inhibit malondialdehyde production during lipid peroxidation.
  - Protect against the neurotoxicant glutamate.

**VINCA FOR DEMENTIA**
- *Vinca* Madagascar Periwinkle
- *Vinca* is in the Apocynaceae family known for its powerful alkaloids and many both toxic and medicinal members.
- Contains alkaloids previously studied to inhibit mitosis.
- *Vinca* species are the source of Vinpocetin.
Vinpocetine is an alkaloid in Vinca.

Vinpocetine may improve perfusion to retinal neurons following metabolic insult.

Reperfusion injury can result following ischemic stroke and involves NF-kappa B and TNF-a mediated inflammatory responses.

Vinpocetine has been shown to decrease NF-kappa B and TNF-a levels at 24h and 3 days after reperfusion.


Vinpocetine may exert an anti-seizural effect via inhibiting Na+ ion channel permeability, and thereby hyperexcitability.

This may reduce the reactivity of NMDA sensitive glutamate receptors and reduce cerebral inflammation.


J Neurochem. 2014 Sep;130(6):770-9. The anti-seizure drugs vinpocetine and carbamazepine, but not valproic acid, reduce inflammatory IL-1beta and TNF-alpha expression in rat hippocampus. Gamez CD1, Buly KM2, Sigan A3.

Vinca also contains Glutamic and Apovincaminic acids reported to have neuroprotective effects in animal models of acute brain ischemia.


Clinical Studies

Vinca also contains Glutamic and Apovincaminic acids reported to have neuroprotective effects in animal models of acute brain ischemia.
A survey conducted in Germany revealed that over 57% of physicians were recommending Ginkgo to enhance cognition in the elderly in 2012.

A review of clinical trials investigating Ginkgo biloba for 1,200 dementia patients, found the herb to delay the deterioration of mental status by at least 22.3 months compared to placebo, and the therapy was cheaper compared to typical cholinesterase inhibiting drugs.

A clinical trial conducted in Iran found saffron capsules, 15 mg twice a day to be as effective as donepezil in the treatment for mild to moderate AD.

A small trial aimed at establishing Bacopa safety, dosed adults with 300 mg of Bacopa monnieri extract for 15 days, and 425 for another 15 days. Detailed examination of clinical, hematological, biochemical and electrocardiographic parameters done in pre and post-treatment periods did not indicate any untoward effects in any of the treated volunteers. Mild adverse events related to gastrointestinal system were observed in the trial, which subsided spontaneously.

Anti-estrogen and anti-androgen hormonal therapies used in the treatment of breast and prostate carcinomas, respectively, can have a negative impact on cognitive function in older adults as a side effect.
Mitochondria play a central role in regulating neuronal viability and neurodegenerative diseases. Estrogens have multiple effects on mitochondria, enhancing function during pathologic excitotoxicity, oxidative stress, and other pathologies. As such, estrogens may protect neurons against both acute brain injury and chronic neurodegeneration.

\[ \text{\textit{Estrogens have multiple effects on}} \]
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\[ \text{\textit{neurons against both acute brain injury and}} \]
\[ \text{\textit{chronic neurodegeneration.}} \]

\[ \text{\textit{Mitochondrial mechanisms of}} \]
\[ \text{\textit{estrogen neuroprotection.}} \]
\[ \text{\textit{Simpkins JW1, Yi KD, Yang SH, Dyken JA}} \]

\[ \text{\textit{17\textbeta-estradiol (E2) has neuroprotective effects in the}} \]
\[ \text{\textit{brain and affects memory, learning, and mood.}} \]
\[ \text{\textit{E2 binds both (ER\textalpha) (ER\textbeta) receptors. As}} \]
\[ \text{\textit{estrogen levels change with age, especially in females,}} \]
\[ \text{\textit{the number and ratio of these ERs may be down regulated}} \]
\[ \text{\textit{and contribute to cognitive decline.}} \]

\[ \text{\textit{The significantly higher incidence of AD in women}} \]
\[ \text{\textit{than in men has been attributed to tissue changes}} \]
\[ \text{\textit{associated with rapid estrogen decline, and related}} \]
\[ \text{\textit{cellular and molecular mechanisms. Estrogen has been}} \]
\[ \text{\textit{proposed to have neuroprotective roles against AD-related}} \]
\[ \text{\textit{pathology. Studies show estrogen may reduce}} \]
\[ \text{\textit{amyloid-\beta peptides and tau aggregates, yet clinical}} \]
\[ \text{\textit{trials have failed to show any benefit and, in fact,}} \]
\[ \text{\textit{had a negative outcome on cognition. The research is}} \]
\[ \text{\textit{now investigating selective ER\textalpha or ER\textbeta}} \]
\[ \text{\textit{receptors aiming to develop effective therapies.}} \]

\[ \text{\textit{It was revealed that the greater the number the}} \]
\[ \text{\textit{menstrual years, the lesser the occurrence of AD. In}} \]
\[ \text{\textit{fact, for every additional month with estrogen}} \]
\[ \text{\textit{exposure, women experienced on average a 0.5%}} \]
\[ \text{\textit{decrease in AD risk. The total number of months spent}} \]
\[ \text{\textit{pregnant in one's life also correlated with a}} \]
\[ \text{\textit{protective effect.}} \]

\[ \text{\textit{A long reproductive period is associated with}} \]
\[ \text{\textit{better verbal fluency, compared to a short}} \]
\[ \text{\textit{reproductive period. However, women who had their}} \]
\[ \text{\textit{first child at a young age performed significantly worse}} \]
\[ \text{\textit{on measures of cognitive function than others}} \]
\[ \text{\textit{having children at a later age.}} \]
HORMONES AND DEMENTIA

HOWEVER....

- Nine randomized clinical trials on ERT for AD have suggested that hormone therapy does NOT improve cognition in women with Alzheimer's disease.
- One clinical trial suggested that continuous, combined estrogen plus progestogen initiated at age 65 years or older INCREASES the risk of dementia.
- Estrogen as a preventative has not been clinically studied, nor have SERMs such as raloxifene, or phytoestrogens.

J Clin Endocrinol Metab. 2013 May;98(5):1771-80. Where are we 10 years after the Women's Health Initiative? Lobo RA1.

HORMONES AND DEMENTIA

- Several studies have suggested that estrogen and progesterone therapy may reduce the risk of dementia in older women, in particular those with the apolipoprotein E gene polymorphism.
- One study of 214 women, half of whom were using HRT, reported those using hormones showed worse memory, verbal memory and processing speed compared to those not using hormones.

The only exception was those women with the apolipoprotein polymorphism for whom hormone use correlated with superior cognitive function.


HORMONES AND DEMENTIA

- The negative effects on the vasculature and increased risk in CAD revealed with the initial results of WHI study in 2002 lead to fear regarding the use of hormonal therapy after menopause, and resulted in a dramatic reduction in HRT prescriptions in the United States and around the world.

J Clin Endocrinol Metab. 2013 May;98(5):1771-80. Where are we 10 years after the Women's Health Initiative? Lobo RA1.

HORMONES AND DEMENTIA

- The use of conjugated equine estrogens increases the risk of stroke and dementia in women over 65.
- Factors that contribute to the neuroprotective effects of estrogen in youth, BUT neurodegenerative effects in older decades is still being explored.

Trends Endocrinol Metab. 2011 Dec;22(12):467-73. Neuroprotective actions of estradiol revisited. Azcoitia I1, Arevalo MA, De Nicola AF, Garcia-Segura LM.

HORMONES AND DEMENTIA

- Some researchers have proposed a "window of opportunity" philosophy regarding HRT's effects on dementia, where estrogen over the reproductive life, or possibly in early menopause offers protection, but estrogen supplementation over the age of 65 is detrimental.

Brain Res. 2011 Mar 16;1379:188-93. Oophorectomy, menopause, estrogen treatment, and cognitive aging: clinical evidence for a window of opportunity. Rocca WA1, Grossardt BR, Shuster LT.

THANKS!!

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Consultas Naturistas: An Overview of Practice at an Integrative Free Clinic
Michelle Grace Steinberg, M.S. (Clinical Herbalist and Nutritionist)

DESCRIPTION
Consultas Naturistas, a nutrition and herbal medicine clinic at Street Level Health Project (SLHP) in Oakland, CA provides free, Spanish/English bilingual, complementary and preventative health care to low-income individuals. This bi-weekly program primarily serves day laborers and other uninsured/underinsured, low or no income Latino/a immigrants. The largest patient populations are from Mexico and Guatemala; in recent years, there has also been a large influx of clients from Eritrea and Nepal. Since opening in 2009, Consultas has treated more than 700 unique clients, with approximately 30% seen on multiple follow-up visits. Visits last 45 minutes per person and involve a client-centered discussion of health history and lifestyle, focused on nutrition, exercise, sleep habits, and stress reduction often conducted in Spanish. Clients receive free custom-blended tinctures and teas, as well as vitamins and supplements. In addition to the Consultas services, SLHP has a doctor or nurse practitioner, and a psychologist onsite two days/week to provide basic medical treatment and mental health counseling, while health navigators direct clients to outside service providers for on-going primary or specialized care. Other core programs include free lunches and food bags, and a workers’ collective.

NUTRITION
The majority of Consultas visits, even those for conditions that might not appear directly related to diet, involve some discussion of nutrition. My focus is on:

• whole, minimally processed foods
• increased intake of non-starchy vegetables
• macronutrient balance in all meals and snacks, with an emphasis on lean protein and healthy fats
• increased water intake

Most clients are immigrants for whom the standard American diet was not always standard. The conversation usually begins with the individual listing how her/his diet changed upon arriving in the U.S. Often, the client elaborates a pattern where the four components above were present in her/his diet prior to moving to the U.S. and declined upon arrival. This realization leads to the awareness that one’s ancestors held keys to nutrition that can be healing in the present. As I am not from the same cultural background as the majority of my clients, this strategy allows me to encourage the knowledge that my clients already possess. The upshot is that making the necessary nutritional changes can feel familiar rather than alienating, which undoubtedly leads to a higher rate of success.

FLEXIBILITY
Flexibility is crucial at Consultas, as many clients have very specific circumstances that require practical remedies. The main point is to be ready to empathetically meet people wherever they are and have mechanisms in place to accommodate their needs.

• For homeless clients, herbs must be portable, easily stored, and require a minimal amount of preparation; think tinctures, powders, and capsules over teas (though one homeless client loved tea and would religiously get a cup of hot water from the closest McDonald’s before bed.)

• When clients are battling alcohol addiction or the resulting physical damage, alcohol-based tinctures are generally not an option, and teas and powders become the focus.

• For people sleeping at live-in treatment facilities or shelters where there may be strict rules governing what they can bring inside, even teas and supplements may require special adaptations.
• For clients who have limited food options due to financial or access considerations, the practitioner must be sensitive to these circumstances and aware of what relevant resources do exist in the neighborhood. Visits to local food banks and nearby markets to assess the healthiest options are useful. Though not an ideal solution, I frequently provide multivitamins to those with reduced food access to supply basic micronutrients. In many cases, where more in depth dietary or lifestyle changes are not possible, I practice a strategy of "harm reduction" nutrition.

CONDITIONS SEEN
Below is a list of symptoms and conditions frequently seen in our clinic. These issues often overlap within a single client.

• Type II diabetes
• gastrointestinal issues
• insomnia
• anxiety/depression
• hypertension
• hypercholesterolemia
• chronic headaches/migraines
• low energy
• women’s hormonal imbalance
• urinary tract infections
• arthritis
• rashes
• allergies
• colds/flus
Approximately half of the clients seen are concurrently on multiple medications, which warrant additional consideration to identify drug side effects and to avoid potential herb-drug interactions.

PATIENT-SPECIFIC PROTOCOLS
What follows is a brief overview of treatments that have been effective for my clients in several of the conditions listed above. Clearly engaging individuals in a holistic context means that there is no universal formula for a given ailment. A constitutional and multi-variable picture of each person is part of formulating an effective treatment plan. Sadly, this approach is relatively rare in the conventional public health paradigm. Creating space for the individual is a cornerstone of Consultas Naturistas that is somewhat unique. The opportunity to be engaged in a respectful, non-rushed, interactive manner around one’s overall well-being may be of as much or more value to many clients than the herbs themselves.

GASTROINTESTINAL SYMPTOMS
*Gastritis* is a term that many of my Spanish-speaking clients use to describe a varied set of gastrointestinal symptoms that may include one or more of the following:
- pain in the abdominal area
- bloating
- acid reflux
- gas
- increased bowel movements and loose stools
- constipation and hardened stools
- nausea.

Many of these clients come to me following a diagnosis of GERD for which the doctor has prescribed medications of the proton-pump inhibitor or histamine-
blocker classes. Less frequently, the client’s history may include diagnosis of a gastric or duodenal ulcer, and possibly a cholecystectomy.

My treatment plans for any variant of gastritis usually involve increasing the intake of probiotics to balance the body’s bacterial environment. This often involves a discussion of fermented food options. For those with limited food access, I will generally provide a broad spectrum probiotic supplement.

Lactose intolerance is common in the Latino/a community; I will usually investigate the possibility of a dairy intolerance and recommend the avoidance of dairy products accordingly.

In cases where acid reflux is a primary issue, Neutralizing Cordial (a formulation of Rheum barbatum, Cinnamomum Cassia, Hydrastis canadensis, Mentha piperita spirits, and Potassium carbonate) can be of tremendous benefit; I generally suggest 30-90 drops on an as needed basis. In these cases, I also recommend Althea officinalis (Marshmallow) root powder, 1-2 teaspoons dissolved in water daily; I find compliance is higher with powder than with a cold infusion and it is arguably as effective. Coupled with the avoidance of dietary triggers such as citrus and caffeine, a number of clients have found relief with the combination of these herbal remedies that they were unable to get from standard medications.

Filipendula ulmaria (Meadowsweet) is another herb that I have found to be particularly useful for digestive issues, generally for stomach/intestinal pain, gas, bloating, and diarrhea. I include it both infusion and tincture blends. I often combine it with a carminative such as Foeniculum vulgare (Fennel) or Eletaria cardamomum (Cardamom) and, depending on the situation, Nepeta cataria (Catnip), Matricaria recutita (Chamomile), or Avena sativa (Oats) straw/seed.
As there is often a direct correlation between stress/tension in the sympathetic nervous system and digestive problems, a complete treatment plan will often include other nervines and/or adaptogenic herbs, such as:

*Melissa officinalis* (Lemon Balm)
*Verbena hastata* (Blue Vervain)
*Passiflora incarnata* (Passion Flower)
*Albizia julibrissin* (Mimosa Tree)
*Eleutherococcus senticosus* (Siberian Ginseng)
*Withania somnifera* (Ashwagandha)
*Rhodiola rosea* - to name a few.

For those who are not afflicted by acid, but who have generally sluggish digestion that might include constipation, I will include a bitter formulation prior to meals, usually based on *Rumex crispus* (Yellow Dock), *Taraxacum officinale* (Dandelion) root, *Gentiana lutea* (Gentian), and/or *Cynara scolymus* (Artichoke), partnered with a small amount of carminative, at 10-20 drop dosage. I may also include a small amount of *Iris versicolor* in the person’s primary formula. Additionally, flax or chia seeds at 1-2 tbsp/day offer an easy boost to fiber intake, for constipation, but these must be accompanied by adequate water intake to avoiding compounding the problem. For clients who have had a cholecystectomy, I will sometimes include digestive enzymes before each meal.

**INSOMNIA**

Insomnia is another major culprit that brings clients to see me. While the remedies are fairly straightforward, long term success in beating it often requires addressing underlying lifestyle factors that contribute to stress, anxiety, and depression; hence in many instances these conditions are intertwined. Sleep debt can have a major impact on one’s overall well-being and is often a causal factor in a broad range of diseases. In many instances, clients with serious chronic conditions can find improvement simply by restoring healthy sleep patterns.
**Eschscholtzia californica** (California Poppy) tincture is a favorite and this relaxing nerve/sedative/anodyne often constitutes 50% of my sleep formulas. Several other herbs typically find their way into tincture blends, depending on the character of one’s sleeplessness:

*Verbena hastata* for cycling mind chatter,
*Pedicularis spp.* for muscular tension in the neck and back

*Piper methysticum* (Kava Kava) for anxiety, particularly if there is a component of addiction.

*Valeriana officinalis* when something stronger is needed or if pain, particularly menstrual cramps, contributes to the sleeplessness. I am somewhat more conservative with Valerian than I used to be, as a small number of people may occasionally have stimulant responses to the plant and, particularly dried, it can cause a bit of “hang-over” the next day.

*Scutellaria lateriflora* (Skullcap) and *Passiflora incarnata* (Passion Flower) are also useful here, particularly in infusion blends.

Typical dosages for my sleep tinctures are 30-60 drops an hour before bed and an additional 30-60 as needed at bedtime or upon waking during the night. For those who do not suffer from nocturia the dose may be one cup of tea (generally prepared at 2 tbsp herb/cup of infusion) an hour before and one at bed if needed. Magnesium citrate supplementation can also support sleep, as well as address a common underlying deficiency. I also encourage clients to go to bed by 11 (or before) if possible and set aside the last hour of their evening to wind down; that can mean different things to different people, but all should involve some component of relaxation. Journaling to empty a full mind can also be of use to some. Many people need to be reminded of the impact of caffeine on sleep, and should consider reducing its intake altogether, particularly after noon.
Often underlying stress, depression, and/or anxiety are playing a role and must be addressed long before bedtime arrives. Individualized formulas for these may include the following, taken TID during the day rather than at bedtime.

*Leonurus cardiac* (Motherwort; particularly useful if accompanying hypertension)

*Melissa officinalis* (Lemon balm)

*Hypericum perforatum* (St. Johnswort),

*Avena Sativa* (Milky oat tincture)

*Verbena hastata* (Blue Vervain)

*Scutellaria lactiflora* (Scullcap)

*Passiflora incarnata* (Passionflower)

*Anemone occidentalis* (Western pasque flower)

These may be taken TID in individualized formulas along with adaptogens such

*Eleutherococcus senticosus* (Siberian ginseng)

*Oplopanax horridus* (Devil’s club)

*Ocimum sanctum* (Holy basil)

*Rhodiola rosea* (Rhodiola)

*Withania somnifera* (Ashwagandha)

*Ganoderma lucidum* (Reishi)

For acute anxiety attacks, I have found 30-120 drops of equal parts tincture of *Piper methysticum*, *Scutellaria latiflora*, and *Melissa officinalis* can have a pronounced effect. As part of a holistic plan, exercise can be critical to supporting healthy sleep habits and keeping stress and depression at bay. I find that merely having the opportunity to discuss one’s emotional state can be of use, as many of my clients have few outlets for this; we do so during Consultas visits, but if this appears to require greater attention, I will refer people to the onsite counselor for additional support.
URINARY TRACT

Another regular complaint is urinary tract infections. As long as there is no hematuria or serious back pain, herbal remedies are usually effective. Should those symptoms be present, I will generally still supply patients with herbs, but advise them to also visit a doctor or nurse practitioner immediately to investigate if the infection has spread to the kidneys. The importance of significantly increasing water intake cannot be overstated, along with drinking unsweetened cranberry juice, and supplementing with probiotics and vitamin C.

I find an infusion of 2 parts *Arctostaphylos uva-ursi* (Uva-Ursi), 1 part *Achillea millefolium* (Yarrow), 1 part *Urtica dioica* (Nettles), 1 part *Equisetum arvense* (Horsetail), and 1 part *Althea officinalis* (Marshmallow) is quite effective, usually prepared with 3 tablespoons/cup, taken 4-5 times/day for several days and 3 times/day for the remainder of a week. *Arctostaphylos uvi-ursi* should not be used on a long term basis, so if the formula has not had any impact at that point (which I have rarely encountered), then it should be discontinued.

For pain, *Dioscorea villosa* (Wild Yam) can be a useful tincture. For a particularly stubborn infection, the tea can be partnered with a tincture of equal parts *Anemopsis californica* (Yerba Mansa), *Hydrastis Canadensis* (Goldenseal), and *Mahonia aquifolium* (Oregon Grape), dosing around 90 drops every 4 hours. Elimination of dietary sugar and caffeine is essential as well.

HORMONES

I see a considerable number of women clients dealing with hormone-related issues such as irregular periods, dysmenorrheal, polycystic ovaries, and menopausal discomfort, which may involve menstrual flooding, hot flashes, anxiety/irritability/depression, insomnia, dryness of skin/hair, and hair loss. Here, the exact formula and composition will vary considerably depending on the
individual. I am careful to first assess whether there is any personal or family history of hormonal cancers, as this may suggest particular caution in herbal choices. A few important herbs that I use for women’s hormonal concerns are: *Vitex agnus-castus* (Chaste tree berry)- useful to help restore hormone balance. Though it tends to be specific in situations connected to low progesterone and high estrogen, it is of assistance in tincture blends for a variety of imbalances. It is particularly useful for breast tenderness, cycle related acne, and irregular periods. It usually requires consistent usage over at least 3 months and I use anywhere from 15-30 drops TID in combination.

*Cimicifuga racemosa* (Black Cohosh) is a major component in formulas to address both menopause and polycystic ovaries. Additionally, as an anti-inflammatory and nervine, it is of great value to clients that may be dealing with both menopause and arthritis simultaneously, a not uncommon overlap. I generally include 12-25 drops in formula TID.

*Angelica sinensis* (Dang quai) is an herb that I use less frequently, but is specific for dysmenorrhea and irregular cycles, often in situations where there is a tendency towards coldness, dryness, and anemia, again 12-25 drops in formula TID.

*Dioscorea villosa*, usually indicated for low progesterone/high estrogen, shorter cycles with pronounced PMS and cramps.

*Achillea millefolia*, which seems to regulate hesitant cycles, but also helps stem excess menstrual flow.

*Taraxacum officinale* leaf is an excellent diuretic for breast tenderness and bloating; the root is useful for decongesting the liver.
Salvia officinalis is a fantastic plant for relieving hot flashes.

I generally use a combination of the aforementioned herbs as a TID formula over the course of several months, sometimes with two slightly different formulas for before and after ovulation if the client is menstruating.

For immediate relief of painful cramps,

Garrya elliptica (Silk Tassel) works wonders, despite its nauseating taste. It is quite strong (and emetic when dosed too high) so 5-15 drops at the onset of pain is usually sufficient and can be repeated as necessary. I will sometimes combine Garrya elliptica with Dioscorea villosa, Valeriana officinalis, or Viburnum opulus (Cramp Bark), with a slightly increased dose.

A balanced diet (with a focus on sufficient protein and limited caffeine and sugar), adequate exercise, sleep, and stress reduction are also vital in supporting hormonal balance.

ARTHRITEIS
An emphasis on dietary/lifestyle factors is crucial in treating arthritis; in particular, decreasing the intake of inflammatory substances can bring tremendous relief to those suffering from either rheumatoid and osteoarthritis. Common culprits to reduce or eliminate, particularly for those with rheumatoid arthritis, are animal proteins, sugar, wheat, alcohol. For some people vegetables from the nightshade family (tomatoes, potatoes, eggplant, bellpeppers) need to be avoided. Omega 3 fats, found in chia, flax, and fish oil are useful, as are glucosamine/chondroitin supplements, are useful here.
Curcuma longa (Turmeric) and Harpagophytum procumbens (Devil’s Claw) are quite effective anti-inflammatories. I generally do a tincture of equal parts at 30-90 drops TID. For a more inexpensive approach, powdered Curcuma longa works just fine, mixed with a bit of water- usually 1 teaspoon BID or TID.

For some clients, *Arnica* oil mixed with a bit of *Capsicum* tincture provides topical relief. For those with rheumatoid arthritis, a more thorough examination of the underlining autoimmune etiology is important. Treatment may include herbs such as *Ganoderma lucidum* (Reishi) and supplements like Vitamin D that assist in supporting and modulating the immune response.

**DIABETES**

Though the topic of Type II diabetes requires much more space than this overview permits, here is a glimpse at some factors involved in management.

While I do provide potentially hypoglycemic herbs- such as *Opolopanax horridus* (Devil’s Club) tincture, *Trigonella foenum graecum* (Fenugreek) tincture, *Ocimum sanctum* infusion, and *Cinnamomum cassia*, as well as other supportive constitutional and stress reducing plants, clients’ diets and lifestyle are the most important focus here. Many of the dietary approaches I have already mentioned are of value, but I emphasize low-glycemic, high fiber foods (beans of all sorts and non-starchy vegetables), with a focus on adequate protein and quality fats. Small, frequent meals with a balanced macronutrient content and damp, low-heat cooking practices are essential.

Weaning people off high consumption of simple carbohydrates is of course critical, but reducing grains and excess carbohydrates of all sorts is often useful too. Sweet potatoes are a great stand-in for white potatoes, tortillas, and rice, all of which have a higher glycemic effects and less vitamin content. For Latino/a clients, I
encourage daily consumption of Nopales (*Opuntia spp*), which have significant hypoglycemic qualities. Apples, pears, and berries are the best bets for fruit due to their lower sugar content, but these should be partnered with a handful of raw nuts, preferably almonds or walnuts. I frequently recommend and supply some ingredients for protein-rich smoothies for those who rely on coffee and bread for breakfast. A common recipe is blueberries (frozen are cheaper), spinach, nopales, a few almonds/walnuts, plain yogurt, protein powder (whey or pea), flax or chia seeds, and almond milk. Exercise (a mixture of aerobic, strengthening, and stretching), increased water intake, adequate sleep, and stress management are other components of a diabetes treatment plan.

FREE CLINICS
I want to close by encouraging herbalists, holistic nutritionists, and other alternative practitioners to consider reaching out to existing community agencies and looking towards such partnerships as a way to increase access to our approaches. Many of these organizations have built trust and connection within vulnerable communities that can benefit from natural healthcare strategies. With the shifting public health landscape in this country, one can only hope that community clinics and other designated medical treatment centers for low-income populations will also start to integrate as a means to provide more effective preventative and complementary care. But in the meantime, we must look creatively for new opportunities to plug-in.

Michelle Grace Steinberg, M.S. received her Masters in Human Nutrition from the University of Bridgeport and a clinical certificate from the Ohlone Center for Herbal Studies. She is on the Board of Directors of Integrative Medicine for the Underserved and won the American Herbalist Guild 2015 Award for Diversity, Equity, and Inclusion. Aside from running the Oakland-based Consultas Naturistas program, she is a documentary filmmaker [http://www.underexposedfilms.com](http://www.underexposedfilms.com).
For more information about Street Level Health Project, please visit

Many thanks to 7Song of the Northeastern School of Botanical Medicine and Pam
Fischer of the Ohlone Center for Herbal Studies for their support in starting the Consultas
Naturistas Program. Gratitude as well to Mountain Rose Herbs, Pacific Botanicals, Super
Nutrition, and Five Flavors Herbs for their on-going donations and discounts.
MET(T)A
http://www.underexposedfilms.com/met-t-a.html
Underexposed Films
Director/Producer - Michelle Grace Steinberg
Producer - Robyn Bykofsky

MET(T)A explores the universality of trauma and resilience through the eyes of refugee and immigrant patients and health care providers navigating the medical system. This character-driven feature documentary film touches the heart of current debates on immigration and health care at this pivotal moment when these two issues dominate the country’s consciousness.

Rodrigue is a newly arrived refugee from war-torn Democratic Republic of Congo who, along with his mother and seven siblings, is struggling to adapt to life in Lowell, Massachusetts. Training to become a medical interpreter at the local community health center, he ultimately aspires to be a social worker to help his community heal from trauma. Socheat, a Cambodian immigrant, seeks tools to combat the stress of supporting her aging parents, teenage daughter, and disabled brother on a manicurist’s salary. The entire family experiences the benefits of meditation classes and culturally tailored wellness approaches at the health center. Sue, a nurse to both families, examines the continued impact of her own traumatic experiences, thriving in the U.S. after surviving the genocide in Cambodia and now supporting others to do the same.
Across the country in Oakland, California, Edgar and Yania, a young couple from Mexico and Uruguay, provide healing to their community through outreach to day laborers and Spanish-language yoga classes. Their aspirations to become a social worker and a nurse are threatened by possible deportation due to their tenuous immigration status under Deferred Action for Childhood Arrivals (DACA). At the same health clinic, Norma, a Guatemalan immigrant, provides interpretation into her community’s indigenous Mayan language, while she watches new arrivals from her homeland fight for asylum and safety.

Common ground and chance connection intertwine these stories as MET(T)A spotlights the profound importance of culturally responsive medicine that joins mental, physical, and spiritual paths to wellbeing. In the midst of an increasingly xenophobic climate, the film humanizes those who have come here, sharing their wisdom and perspectives that enrich and strengthen our communities. ‘Metta’ is the Buddhist Pali term for ‘loving kindness’, while in Spanish, ‘meta’ means a goal to be achieved. As violence destabilizes populations across the country and the world, MET(T)A moves audiences to envision new understandings of wellness for all. The film is currently in production with a scheduled release date in 2018.

For more information or to donate to support the film, please visit:
http://www.underexposedfilms.com/met-t-a.html
After decades struggling to protect her ancestors’ burial places, now engulfed by San Francisco’s sprawl, a Native woman from a non-federally recognized Ohlone tribe and her allies occupy a sacred site to prevent its desecration. When this life-altering event fails to stop the development, they vow to follow a new path- to establish the first women-led urban Indigenous land trust. *Beyond Recognition* explores the quest to preserve one’s culture and homeland in a society bent on erasing them.

Shattering stereotypes, this half hour film tells the inspiring story of women creating opportunities amid a system that fractures Native communities across the nation. Through cinéma vérité, interviews, and stunning footage of the land, *Beyond Recognition* introduces Corrina Gould, Johnella LaRose, and Indian People Organizing for Change as they embark on an incredible journey to transform the way we see cities.
The film invites viewers to examine their own relationship to place, revealing histories that have been buried by shifting landscapes. *Beyond Recognition* points to the intersection of human rights, women’s rights, and environmental protection, spotlighting a California story that has national and worldwide resonance.

*Beyond Recognition* premiered on Public Television Station KRCB in November 2014 for Native American Heritage Month and was rebroadcasted there in March 2015 for Women’s History Month. It is currently airing on national Public Television Stations through National Education Telecommunications Association, First Nations Experience (FNX), and the award winning series, *Natural Heroes*. The film was awarded *Best Short* at the 2015 *San Francisco Green Film Festival*. It debuted at the Wild & Scenic Film Festival in January 2015 followed by a dozen festivals internationally.

Educational and home video DVDs of the film are available through Documentary Educational Resources (DER).

Please visit [Underexposed Films](http://underexposedfilms.com) or email michelle@underexposedfilms.com for more information on filmmaker Michelle Grace Steinberg.

Michelle Steinberg  
Tales from an Integrative Free Clinic

**Who We Serve**

- Day Laborers
- Low wage workers
- Immigrants
- Homeless
- Uninsured/Underinsured
- Low-literacy

**Our Community and their Barriers to Healthcare**

- Economic barriers
- Structural/Political barriers (e.g., lack of insurance, undocumented)
- Cultural barriers (e.g., language, type of care)
- Tangible barriers (e.g., transportation, childcare)
- Fear, Intimidation and Discomfort barriers
  - Skills Barriers
  - Self-Advocacy barriers

**Our Programs**

- Health Access
- Wellness and Prevention
- Community Building
- Immigrant Rights and Empowerment
- Consultas Naturistas is our clinical nutrition and herbal medicine program. Other key staff at SLHP who interface around nutrition:
  - Our promotora de salud who expands the dialogue on nutrition to day laborers in the streets who might not otherwise access our services.
  - Our cook, a community member who prepares nutritious free meals available onsite for anyone in need of food.
### HISTORY OF CONSULTAS NATURISTAS...

- Importance of collaborating with existing organizations: 
  - Established community trust
  - Knowledge of clientele
- Individual consultations started in 2009 and continue to flourish


### Challenges of Integrating:
- Questions around liability
- Openness of other practitioners/staff
- Institutional priorities

A slow but gratifying process – as demonstrated need and successes for the program becomes visible, so does the level of support!

### Funding:
- Started small- volunteer time & product donations
- Gradually acquiring grants to cover salary and, in the future, overhead costs
- Private donation still fills in gaps

### Basic Approach:
- Culturally sensitive, “harm reduction” nutrition:
  - Basic tenets- whole foods
  - Approach addressing malnourishment balance
    - Plate - 50% non-starchy vegetables, 25% Whole grains/root veggies, 25% lean protein, with adequate healthy fats
  - Strategies to elicit client participation and support client’s own knowledge base
    - Client generated list of how diet changed on arrival to U.S.
    - Encouraging return to “ancestral” foods
  - How to address situations of limited access
    - Know local resources, food banks, stores, subsidised farmer’s markets
    - How to make best choices on limited budget
  - Practical, relevant food substitutions: Avocado for cheese; Plain yoghurt for sour cream; etc.

### Individualized custom formulas. Some herbs work better in different forms or medium is tailored to client needs:
- How to manage your health
  - Herbs: - Alcohol intolerant: ritual; relaxation; cultural familiarity
  - Triggers: Easy to use, accessible throughout the day
  - Powders: Alcohol intolerant (easy; work best for root, bark, seeds)

### Supplements:
- Vitamins: Multivitamin as harm reduction for those with limited food access

### Some other supplements used:
- Digestion: Probiotics, enzymes
- Inflammation: Bromelain. EFA
- Constipation: Flax seeds, Chia
- Misc: Protein powder; Lysine, Theanine, Melatonin

### Most common reasons for visits:
- Allergies
- Carpal Tunnel
- Headaches
- URTIs
- Arthritis
- Women’s hormonal concerns
- And... General Nutrition

### Basic tenets- whole foods
- Approach addressing malnourishment balance
  - Plate - 50% non-starchy vegetables, 25% Whole grains/root veggies, 25% lean protein, with adequate healthy fats
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### Some other supplements used:
- Digestion: Probiotics, enzymes
- Inflammation: Bromelain. EFA
- Constipation: Flax seeds, Chia
- Misc: Protein powder; Lysine, Theanine, Melatonin
Kitchen Cabinet Herbalism:
Also encouraging clients to use what is available and familiar:

**Nopales (Opuntia ficus-indica)**
Hypoglycemic; good for diabetes/pre-diabetes; also useful for cholesterol. Traditional in Mexican food-salad, salsa, or smoothie. Unclear whether cooked or raw has greater impact.

**Canela, Cinnamon (Cinnamomum cassia)**
Hypoglycemic, carminative, hemostatic. Useful for gas, diarrhea, and sleep for some people. Great sugar substitute to sweeten/flavor foods. In tea- on its own or with other herbs.

**Ajo, Garlic (Allium sativum)**
Antimicrobial, hypotensive; hypolipodemic. 4 cloves/day for blood pressure; cholesterol. Raw for colds/flus.

**Turmeric (Curcuma longa)**
Anti-inflammatory, hepatoprotective, chemopreventive, antioxidant. Works best combined with black pepper and lipids. Dosage recommendations vary, I often use 1/2 tsp powder 2x/day or tincture in formula. I frequently combine with Devil’s Claw (Harpagophytum procumbens) for arthritis.

**Ginger (Zingiber officinale)**
Antiemetic, anti-inflammatory, carminative, diaphoretic, antioxidant. Great for motion sickness, as well as idiopathic nausea; topical anti-inflammatory for sprains.

**Fennel (Foeniculum vulgare)**
Carminative, galactagogue; helpful in conjunctivitis. Considered mind calming in Ayurvedic medicine.

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**QUICK GLIMPSE AT SOME OF MY FAVORITE REMEDIES:**

**GERD and other GI conditions:**
Marshmallow root (Althea officinalis)
Neutralizing Cordial [Proprietary: Chinese Rhubarb- Da Huang; Cinnamon; Goldenseal; Peppermint (aerial & EO); Potassium Carbonate; Glycerin, Alc]
Meadowsweet (Filipendula ulmaria)
Bitters (Dandelion root – Taraxacum officinale, Oregon Grape- Mahonia aquifolium, Gentian- Gentiana lutea)
Probiotics, Flax seeds

**Insomnia:**
Calm poppy (Burchardia californica)
Skullcap (Scutellaria lateriflora)
Valerian (Valeriana officinalis)
Pedicularis (Pedicularis demidoffia)
L-Theanine
Melatonin
Combine with diet changes, exercise, stress reduction.

**IM4US**

**Mission Statement:**
Integrative Medicine for the Underserved is a collaborative, multidisciplinary group of people committed to affordable, accessible integrative health care for all. Through outreach, education, research, and advocacy, we support those dedicated to promoting health in underserved populations. Together we work to shift the current paradigm towards wellness, prevention, patient empowerment, and self-care.

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**Our Philosophy:**
- We believe health care is a right.
- We believe optimal health care focuses on wellness as much as on treating disease.
- We believe optimal health care addresses mind, body, and spirit.
- We believe that the social determinants of health must be addressed.
- We believe in the power of integrating diverse health care modalities and disciplines.
- We believe underserved patients and those providing their care need unique kinds of support.
- We believe collaboration and sharing improves patient outcomes and inspires providers to remain whole-heartedly engaged in this work.

**BRAINSTORMING**

- Considerations around privilege and working cross-culturally
- Tactics to effectively reach underserved populations in your practice
- How to increase collaborative integration with practitioners of other modalities
- Creating partnerships with existing local agencies that have established trust in underserved communities
- Roadblocks to integration
  - Personal
  - Structural
- What possibilities most excite you?
- What kind of support do you need to move in this direction?
Michelle Steinberg
Tales from an Integrative Free Clinic

CHECK OUT OUR WEBSITE AT
WWW.STREETLEVELHEALTH
PROJECT.ORG

ALSO VISIT:
INTEGRATIVE MEDICINE FOR
THE UNDESERVED
WWW.IM4US.ORG

I can be reached at:
naturalhealthaccess@gmail.com
It is common for people to rely on herbs throughout all stages and phases of uterine health. In fact, this is the way that many people first relate to herbs: to rid themselves of a yeast infection, to deal with horrible cramps, to support a healthy pregnancy, or in hopes of the oft-discussed herbal abortion. But I rarely hear folks discuss which herbs can be utilized post-abortion, whether elective or spontaneous (commonly referred to as a miscarriage). This is unfortunate since this is a time when preparing your body ahead of time (if elective) and taking care of yourself afterwards (whether spontaneous or elective) can make a huge difference in long-term generative organ health.

This delicate phase can be a struggle to navigate for ourselves and especially when we are working with others. The beliefs behind how we govern our own reproductive capacity are often deeply held and can stir up many of our own biases. It is important to address these before working with folks during this sensitive time. Do you have a personal belief about whether people should or should not get abortions? Do you have a thought as to what you or your partner would do in this particular situation? Do you have an opinion as to whether humans should or should not contribute to the current overpopulation of our planet? Do you feel it is wrong to bring children into a planet on the brink of destruction? Views on whether humans should or should not reproduce are all very personal as well as political and many people feel very strongly about what is right or wrong without much room in between for discourse. Now is the time to address any of those thoughts or feelings and leave them at the door before working with anyone in the midst of this situation. It is common for people to place too much or not enough significance on the peri-abortion period depending on their personal views. Some people’s belief in the injustice of abortions might cause them to make the situation feel more grave than it actually is, while others who long ago made the decision not to reproduce might negate any emotions that arise. Navigate this time carefully based on your client’s reactions rather than your own. Remember that it is always important to create a safe space and to acknowledge that it is okay to feel any feelings that might come up, no matter the ultimate decision that is made.

Something else that I’d like to mention here is that I have seen many people display their first auto-immune symptoms soon after an abortion (similar to post-pregnancy). It appears that people who have recently been pregnant are especially susceptible to developing auto-immune thyroid problems, both Grave’s disease (hyperthyroidism) and Hashimoto’s disease (hypothyroidism). From what I can tell, this seems to be related to an immune response that occurs in order to stop you from seeing the fetus as foreign and therefore, attacking it. When the fetus is no longer inside of your body, your immune system will revert back to its pre-pregnant stage. Yet sometimes, it will not recognize some of your own tissues and therefore, thinks that they are foreign and attacks them. After an abortion (or a birth) many protective hormones are decreased and therefore, the body’s ability to defend against this onslaught is common. This is another reason why it is vitally important to nurture and support the body to be as healthy as possible in preparation for, during, and after an abortion.
It is important to treat an abortion with the care that you would in any other pregnancy and post-partum period and to treat an elective surgical abortion as you would any other invasive surgery. If you are working with someone who has succeeded with an herbal abortion, treat it as you would a medical abortion. Whether the abortion is spontaneous or elective, it is necessary to rebuild and heal affected tissue, support hormonal balance, and address any emotional needs that arise. For simplicity’s sake, I have divided the herbs into the categories of fortification, re-balancing, and comfort. These categories often overlap and like most categories, no herb will always fit into just one.

FORTIFICATION- pre/post

Fortifying the body before and after any surgery, medical treatment, or invasive procedure is key and this goes for an abortion as well. Generally, people are depleted and lacking in minerals and vitamins after an abortion due to stress, a tapped immune system, and a loss of blood and tissue. Strengthening the body and the reproductive system ahead of time and continuing this treatment after the abortion can decrease long term consequences resulting from weaknesses that occur at this vulnerable time.

➢ Milky Oats: A calming and fortifying tonic that can have an uplifting effect when taken over a longer amount of time. Helpful for grief and nerves when folks are exhausted and no longer have the strength to heal. Replenishes at a deep level that is not always noticeable until someone else points it out or you are put in a stressful situation and realize that you can handle it more gracefully than previous times.
➢ Nutritive “pregnancy” tea:
  o Useful throughout all stages of abortion.
  o Oatstraw: Contains vitamins and minerals necessary for a well functioning nervous system.
  o Nettles: Highly nutritive. Useful when depleted. Lots of minerals and vitamins. Can be too drying for some people.
  o Red Raspberry: Nutritive and tonifying to tissues, including those of the uterus.
  o Gotu Kola: A great connective tissue tonic to strengthen uterine ligaments and tissues.
  o Calendula: Tissue healer and lymph mover extraordinaire.
  o Other nourishing herbs can be added in to this blend.
➢ Adaptogens: Any of them that are appropriate and specific to you!
➢ Bone Broth & Deep Nutrition: Making sure that you receive the deepest level of nourishment possible is vital before/during/after an abortion. Bone broths are one of the most absorbable ways to get this level of nutrition. If you prefer not to eat bones, you can use Glutamine and Glycine powders as a replacement.
➢ Sitz Baths and Pelvic Steams: It is important to not put anything into the vagina, swim, sit in a bath for at least 10 days after an abortion, though many people recommend 2 weeks. I have found that sitz baths as soon as 10 days post-abortion can be helpful though I wouldn’t recommend a pelvic steam until at least 20 days
post-abortion. Gotu Kola, Mugwort, Lavender, Calendula, Oregano, Yarrow, Comfrey leaf, & Rose petals all work wonderfully here. Choose your own adventure with other tonifying, tissue healing, anti-infective herbs.

➢ Yarrow flower essence: Bolsters energetic and psychic boundaries so that we can continue to function safely and with integrity.
➢ Rest: It is so important! After going through an intense experience such as an abortion, it is really important to give yourself time to rest so that you can fully recover.

RE-BALANCING- post

Bringing the hormones back into balance after an abortion is key. Often people feel off-kilter throughout a pregnancy due to shifting hormones, and then around 3-5 days post abortion there is a drop in progesterone that can cause people to feel extremely unbalanced for a day or two. Sometimes this feeling can last longer, especially in folks with a slow metabolizing liver, older folks, and people with chronic illness. During this time, the body is working hard to metabolize the hormones that are no longer needed to support a fetus, as well as drug metabolites from surgery or a medical abortion and stress hormones surrounding the whole ordeal. Supporting the body through this transition can decrease the emotional tension and physical taxation surrounding the whole process.

Herbs to support this process include those that help our liver efficiently process metabolic waste and stimulate bile in order to breakdown fats and hormones so that we can excrete them safely.

➢ Saint John’s Wort: SJW is one of the best herbs for stimulating liver detoxification pathways and can be helpful in cases of stagnant liver type depression that might occur after the procedure. St John’s Wort has some contraindications to be aware of before taking it.
➢ Bitters: Bitters stimulate bile production and bile release from the gall bladder to stimulate break down of fats/hormones. Examples of bitter herbs commonly used are Dandelion Root, Artichoke leaf, Gentian, Yellow Dock root, Angelica, & Citrus Peel.
➢ Turmeric: This bright orange root is considered a warming bitter and is commonly used to promote GI secretions and stimulate the liver and gall bladder. It’s also an amazing anti-inflammatory and supports the immune system, which is extremely helpful in this situation. Do not take Turmeric in medicinal doses if you are currently using blood thinner medications or have a blood clotting disorder.
➢ Adaptogens: Choose the adaptogen that is most appropriate to the situation. Since adaptogens act on the endocrine system and are by nature balancing and stress relieving, they are extremely important to include in a formula that is taken at all stages of an abortion. I recommend beginning an adaptogen as soon as you can and continuing its use long after the abortion has taken place. A few of the ones I most commonly work with are Reishi, Ashwaganda, Astragalus, Holy Basil, Shatavari, & Schisandra. Schisandra is specific in this case as it increases production of glutathione, which increases the body’s ability to remove drug
metabolites and other waste products. Reishi is hepato-protective and can be beneficial when choosing a medical or herbal abortion.

➢ Rest: This is the perfect time to rest if you can find the time. It is also a good time to not make big life decisions when your hormones and body are in flux…even if it is the exact time that you feel like you have to make huge decisions!

COMFORT- pre/post

Whether an abortion is spontaneous or elective, it is usually a stressful ordeal. Though some people may feel comfortable with their decision not to reproduce, this is still a time fraught with changes occurring in the body, discussing the decision with numerous people, hiding it from others, and changing plans to accommodate doctor’s appointments not to mention dealing with other people’s judgment. For those folks who don’t feel comfortable with their decision but recognize that it is the right one for them at the moment, this time can also be a struggle between their ideas of right and wrong and their own personal judgments. There are so many herbs that can be helpful here, but these are a few of my favorites. Any nervine can be helpful if people are stressed or not sleeping. As with most surgeries, it is best to rest for a few days afterwards and these can help support that.

➢ Peach leaf – Peach is my go-to in most cases of grief and loss. I originally learned from Phyllis D. Light that traditionally in the South, a tea of Peach leaf would be brought along when delivering bad news to a family member (such as a death in the mine, the loss of a child, etc…) I have seen Peach soften many a hard blow when dealing with bad news. It’s cooling, moistening nature is also beneficial in acute phases of tissue healing (think soothing and demulcent), anxiety and irritability. In large doses it can be very calming when needed.

➢ Hawthorn: Another lovely Rose family plant that is a go-to in all phases of grief. I often use this one similar to Peach as a long-term grief tonic. Hawthorn is nourishing, strengthening and calming to the emotional and physical heart. When someone is in the throes of grief over a loss and it is compounded because they are also wounded and hurt, Hawthorn can allow them to feel safe and held. I like to use Hawthorn when there is a fear of abandonment by a loved one due to the decision to acquire an abortion or when someone feels wounded by a person close to them during this process.

➢ Evening Primrose: Janet Kent introduced me to the use of this plant for compromised gut mucosa associated depression and I have grown to love its comforting and uplifting properties. In cases of depression and anxiety caused by hormonal imbalance, which is common while pregnant and after an abortion, it is superb (I first learned this from the writings of Kiva Rose). I find it helpful in calming and soothing jangled nerves and the feelings of sadness and not feeling like your normal self that hormones can cause. It is also demulcent and soothing and therefore, beneficial in cases of surgery and acute trauma when it is necessary to heal and re-build tissue.

➢ Motherwort: This lion-hearted plant is both calming and nurturing, helping a person to feel like they can make it through a tough time and still return to
themselves in order to integrate the experience into their life. I turn to this plant specifically when someone can’t share their abortion with family and friends due to fear of judgment or when someone needs a supportive “mothering” energy.

➢ Rose: Rose nurtures the heart similarly to Hawthorn but has less of a physical and more of an emotional effect. It is especially helpful when you are hoping to increase feelings of self-worth and self-love. I use Rose specifically when there is sexual trauma related to the abortion or when there is a lack of a supportive partner. It is nice as a tea, a tincture, or a sweet elixir.

➢ Skullcap: This calming neuro-trophorestorative teaches the body how to handle stress in the long term. It is specific when someone is running around in their head about the decision that they made, especially if they are naturally high-strung. I first learned from Paul Bergner that the tea is more strongly sedative than the tincture and I find this to be true as well. If you have someone who is having a hard time resting after the procedure, try Skullcap tea.

➢ Adaptogens: All adaptogens are stress relieving, choose the one that is most appropriate for your situation.

➢ Datura flower essence: This essence supports acceptance of death as a natural part of the cycle of life for those that are having a hard time integrating it. Use it when you need help releasing a spirit/idea/dream/love that you are having a difficult time letting go of. Helps you to see through the veil. I find this flower essence very useful for folks who are doing medical or herbal abortions and having a hard time connecting with a spiritual realm in order to let go and move on.

➢ Angelica flower essence: This extremely grounding essence is helpful during transitions of birth and death. It is protective so that people can be more courageous. Use ritually when working with transitions and therefore, can be helpful with medical/herbal abortions in this manner.

➢ Rose Quartz essence: I use this essence specifically for people who have a hard time embodying their experience and allowing themselves to feel the feelings that are necessary to move forward and through the process.

➢ Human connection: I always urge folks to have at least one point person or to set up a schedule of people that are on call to be available for the whole experience peri-abortion and to call on when needed. Remember that these support people often benefit from the above treatments as well!

ACUTE TREATMENTS- during
This section is specifically for the time period during and directly before and after the abortion occurs. I recommend preparing a bag with these remedies ahead of time so that you can have them by your side when you need them along with other support from the lists above that feel most helpful to your situation. Herbalist Caty Crabb first shared several of these treatments and protocols with me years ago and I have worked with them and built upon these ideas to come up with the following list.

➢ Rescue Remedy or a similar formula: In acute situations when grounding is needed.
 Arnica: Use in drop doses or homeopathically when heading into surgery or when taking the 2nd pill during a medical abortion. Continue for 1-3 days post abortion.

Anti-infectives: When receiving a surgical abortion, you will generally be given a prescription for antibiotics, which is mostly to prevent PID (Pelvic Inflammatory Disease). Some people choose not to take the antibiotics and in those cases I recommend taking some sort of herbal support instead. My go-to is generally Usnea or Echinacea in large doses. If you do take the antibiotics, remember to increase the amount of pre-/pro-biotics and fermented foods that you are taking to bring your intestinal flora back into balance.

Cramping after the abortion: Viburnum Compound, Black Haw, Crampbark, and other anti-spasmodics are helpful to decrease the pain of uterine cramping after the abortion. Warm cinnamon tea is a tasty way to decrease pain and heavy bleeding.

Deep breathing: Steady deep breathing during the surgical procedure or the medical/herbal abortion can help immensely.

Lavender essential oil: This calming & comforting scent is nice to carry with you/wear on you when getting a surgical abortion or burn in the air while doing a medical abortion. Soothes tension and creates healthy boundaries around letting go so that you can release and move on. Restorative.

Massage oils to use externally on the uterus: Poplar, Skullcap, Kava, (or other soothing, anti-spasmodic) infused oils with a heating pad post-surgery or medical abortion can be a soothing addition to help folks rest after the procedure.

It is important to note that none of this information should be used in lieu of your abortion doctor’s advice and is intended to use in conjunction with surgical and medical treatments. It is necessary to follow the directions that they give you regarding your health post-abortion (i.e. nothing in the vagina, no baths, a follow-up appointment to determine if all of the fetus was removed, use of antibiotics, etc…) to ensure long-term reproductive health.
More than Skin Deep

Expressions from within
Nicole Telkes RH(AHG), Founder and Director of The Wildflower School of Botanical Medicine
Free Fire Cider!!! Facebook, Instagram and Twitter

Chronic skin disorders are a common complaint that will often bring people in to see herbalists and holistic health practitioners. Expressions of the disorders on the skin can be from a wide variety of reasons, but many successful herbal protocols incorporate internal use of a rather broad class of herbs known as “Alteratives”. We will look at tools for evaluating skin disorders and how conditions like Eczema, Fungal Infections, Yeast Infections, Psoriasis, and Acne can many times be resolved more effectively without the use of commonly prescribed medications. Let’s look at how these conditions are not even necessarily something that needs radical and heroic topical herbal treatments, but instead respond to well thought out internal protocols with some external support.

>How holistic herbalists view chronic skin conditions: understanding the concept of “bad blood” and using Alteratives, specifically for the skin.
>Structure and function of the skin and what skin disorders tell us from different traditions of healing

Assessing the Skin-
Some questions to ask:
  ● Is this an acute situation or chronic?
  ● How long has the client been aware of the condition?
  ● Any relevant diagnoses?
  ● Exposure to pesticides/poisons(including medication) or other solvents?
  ● Any known food intolerances
  ● Allergies?
  ● When did they first notice this?

Ways to track and evaluate effectiveness:
  ● Take pictures and measure the area affected-note where it starts and where it spread
  ● Rate the scale of symptoms(itchiness, inflammation, pain)
  ● Keep a diary/journal if the condition is cyclical
  ● The value of a timeline
  ● Assessing the meaning of color, textures, cracks, and patterns
  ● Constitution and the skin. Humoral considerations
  ● Urine, Feces, Sweat, Mucous
Internal Considerations
● Allergies
● Intolerances
● The Immune System and inflammation
● Constitution
● Excretory pathways and your Liver
● Americans and their cleanses: fasting, sweating, heroic versus gentle approaches
● Calming things down
● Cycles, how hormones, age, lunar and solar cycles can trigger the body
● Medications

External Considerations
● Initially, are you able to evaluate if the skin condition you are dealing with is contagious?
● Having an accurate understanding of what you are treating is very helpful
● Referring out for proper diagnosis or second opinions
● Lifestyle and topical preparations
● Going beyond corticosteroids: Has the person tried anything at all that has helped relieve the condition in any way?

<table>
<thead>
<tr>
<th>Properties/Actions</th>
<th>Effect</th>
<th>Herbs to consider(not necessarily together)</th>
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<tbody>
<tr>
<td>Alteratives: category that seems to alter metabolism, improving organ and system function and elimination in the body, and/or helps with better assimilation of nutrients. Many times this is done thru being nutritive, or diuretic, lymphatic, diaphoretic, laxative, (stimulating in some way to the organs and pathways of elimination)</td>
<td>The magic bullet in herbalism with skin conditions. This classification of herbs is where we can really help to resolve a condition. These cause physiological changes in excretory pathways and are used at higher doses for shorter duration.</td>
<td>Rumex, Solanum dulcamara, Arctium, Taraxacum, Mahonia, Berberis, Ceanothus, Echinacea, Baptisia, Galium, Iris versicolor, Trifolium pratense, Phytolacca, Mentha, Zingiber, Galium, Smilax, Fouquieria, Urtica, Viola, Stellaria</td>
</tr>
<tr>
<td>Antimicrobials: category used to describe herbs that</td>
<td>If there is an active infection or “bloom”, or one is</td>
<td>Achillea, Berberis, Mahonia, Monarda, Tabebuia,</td>
</tr>
<tr>
<td>Type</td>
<td>Description</td>
<td>Examples</td>
</tr>
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<tr>
<td><strong>Astringent</strong></td>
<td>Tighten mucosa, tone, draw, and are antimicrobial to varying degrees.</td>
<td>Hypericum, Amorpha, Lomatium, Larrea, Plantago, Calendula, Rosmarinus, Lavandula, Mentha, Zingiber</td>
</tr>
<tr>
<td><strong>Calming</strong></td>
<td>Calm the nervous system by nourishing, sedating, and/or being analgesic and/or antiinflammatory</td>
<td>Achillea, Plantago, Ceanothus, Quercus, Salvia, Rosmarinus, Lavandula, Camellia, Mentha, Hamamelis, Quercus, Aloe, Opuntia, Calendula</td>
</tr>
<tr>
<td><strong>Demulcent</strong></td>
<td>Soothe through mucilage that forms a protective layer</td>
<td>Viola, Althea, Ulmus, Aloe, Stellaria, Symphytum, Opuntia</td>
</tr>
<tr>
<td><strong>Immunomodulatory/Immun Boosters/Adaptogenic</strong></td>
<td>Improve and strengthen the immune system or even boost its function</td>
<td>Calendula, Echinacea, Baptisia, Ganoderma, Astragalus, Phytolacca, Allium sativum, Lonicera japonica</td>
</tr>
<tr>
<td><strong>Vulnerary</strong></td>
<td>Wound healing</td>
<td>Aloe, Calendula, Opuntia, Symphytum, Plantago, Achillea, Echinacea</td>
</tr>
</tbody>
</table>

**Herbal Preparations**

- keep in mind quality, correct dose, and correct duration
External (mostly to soothe or help with drying out a bloom)

**Poultices/Washes:** Wonderful ways to soothe inflammation but can be messy and hard to make part of a regular day, depending on lifestyle--best done at r&r time, where it can be switched out every couple of hours.

**Powders/Pastes:** I generally like to grind herbs into powders and then if there is an active skin condition apply as a paste or make into a bolus depending on where the condition is. Nighttime is a great time to allow the substances to penetrate and work their magic. Sometimes, herbal dusting powders are great for oozy, hot, moist conditions.

**Steams:** Wonderful for delicate tissue around generative organs, though preference is for mason jar dunks for penis/testes

**Sprays:** Excellent and convenient way to treat often when on the go. Less mess!

**Oil:** Some skin conditions can benefit from this, but keep in mind the bioregion and the condition. Funky fungal infections or oozy conditions that are around warm wet creases of the body in the South do not do well with oils and creams during the day.

**Baths:** A wonderful way to address skin conditions, I often like the client to sip on the tea they are taking a bath in.

*Lessons from Ayurveda: the constitutionally balanced “ubtan” or body powder, choosing oils, and how Triphala became a big part of my practice.*

Internal

**Tinctures:** A convenient way to make sure dosing is at the appropriate amount. These are great for folks who have busy lives, and also if you want to send the extract more quickly to the liver.

**Teas:** Many people with chronic skin issues may end up have allergies or intolerances to many types of solvents and or herbs. Teas are great for people, especially while bathing to address the condition. Keep in mind that if it is an active bloom, the person may be drinking A LOT of tea.

**Glycerites:** good alternative for those sensitive to alcohol but may have to be used as higher doses.

**Powders:** If I am trying to get the skin condition to respond I generally opt for these over tea, and have the person mix it into foods, or do shots in hot water, so they can take more of the herbs, more often.

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<tr>
<th>Case Studies</th>
<th>Herbs to consider</th>
<th>Type of Preparations</th>
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<tr>
<td>Unknown Rash: Scabies and why all rashes are not the same</td>
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<tr>
<th>Condition</th>
<th>Herbal Allies</th>
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| Eczema with fissures, especially after drinking alcohol                  | False Indigo: *Amorpha fruticosa*  
Agarita *Berberis/Mahonia trifoliolata*  
Desert Willow *Chilopsis linearis*  
Ocotillo *Fouquieria splendens*  
Reishi *Ganoderma lucidum*  
Bee Balm *Monarda citriodora* and analogs |
| Psoriasis on the hands, worse with cold weather                          |               |
| Tinea: Ringworm that spreads with stress and polyester                   |               |
| Candida: Yeast Infections worse with weather changes, and new sexual partners, very painful |               |
| Cystic Acne around the menstrual cycle on cheeks                         |               |
| Recurrent skin ulcerations—is it herpess or bedsores, bedridden client   |               |

**Comments on Selected Herbal Allies**

(and analogs for various bioregions)
False Indigo: *Amorpha fruticosa*
Agarita *Berberis/Mahonia trifoliolata*
Desert Willow *Chilopsis linearis*
Ocotillo *Fouquieria splendens*
Reishi *Ganoderma lucidum*
Bee Balm *Monarda citriodora* and analogs
Yellow Dock *Rumex crispus* et al.
Skullcap *Scutellaria drummondi* *et al.*
Bittersweet Nightshade *Solanum dulcamara* XXX
Sarsparilla *Smilax bona-nox*

Things that can go right…..or wrong

- Compliance
- Recovery
- Time
- Managing trauma and stress
- Contraindications and medication
- It’s back?

Sample Protocol Notes for Chronic Skin Conditions

Main Complaint:

Herbal Recommendations and Instructions for Use:

Dietary Recommendations:

Supplement Recommendations:

Lifestyle Recommendations:

Medication Notes:

Self Monitoring Parameters:

Follow Up date

Use pictures and drawings to illustrate the condition.
Street Action and Large Event Herbal Support

Lessons from 20 years of fertile resistance

Nicole Telkes RH(AHG), Founder and Director of The Wildflower School of Botanical Medicine
and Wildflower School Chapter of Herbalists Without Borders
Free Fire Cider!!! Find us on Facebook, Instagram and Twitter

Herbal First Aid Clinical Protocol Book coming in 2018. Sign up here to receive information

My herbal practice began with herbal first aid on the streets and then in the wilderness at large gatherings. I had no formal background in first aid or medicine. I had a passion for herbs as well as environmental and social justice. This workshop isn’t just about what use in herbal first aid scenarios, but to give you tools and empower you to bring herbalism to the streets of your community and how to grow your skillset without licensure. I will use lessons learned over the past 20 years of offering first aid. As with most things in herbalism, if this is your path, you must find ways to make yourself and your offerings accessible. Think proactively, don’t wait for clinical opportunities. Create them.

General Guidelines and Why you may want to consider pursuing this form of 1st aid

• Clinical Experience
You can create your own clinical experience at festivals, during disaster response, or at street protests.
By putting yourself out in to the community, you can gain clinical experience, which many herbalists have to look long and far for. You do not have to live in a progressive city for this to happen, you only need to think creatively and be persistent.

• Decision Making Skills
Spontaneous support helps you to have to make quick decisions, and not overthink something. It helps you to be more efficient when you don’t have time to spend 2 hours with someone to offer first aid.

• Acute Care and how it differs from longer term clinic support
Acute support many times thinks less about humoral energetics and constitution and more about symptom management, so that someone can get stabilized. Later constitution can be addressed more thoroughly.

• Additional Skillsets to acquire sans Licensure
Sometimes not being a licensed medical worker can be beneficial. In some circumstances, folks with licensure cannot help out in first aid response without risking the loss of their license. Some things to look into if you would like to pursue this path would be becoming a Minister, First and CPR certification, Wilderness First Aid or First Responder training. See the MASHH trainings with Greta and many other street medic trainings going on around the country. Just ask Dr Google.
• Scope of Practice
If a situation presents itself that is outside of your scope of practice do not feel obligated to act on it. Do not pretend that you can handle something if you can’t or are not sure. Guessing in an emergency first aid situation can have undesirable results…or not. I don’t know are 3 powerful words. Just because you take a class in some sort of first aid doesn’t mean you are ready to handle emergencies that arise. Always consider your level of knowledge. Some things are truly better left to our medical system, and using herbs is only if you absolutely had no other choice.

• Look before you leap
Ask yourself: Why are you here? What is your commitment level to the situation or first aid support you are offering? Safety. Having a buddy is always a good idea. Going by yourself into herbal first aid situations can be a bad idea. Is the situation you are entering safe for you? Are you trying to participate out of an emotional response, or are you trying to be the hero? You don’t have run to Standing Rock or far away corners of the country to offer herbal first aid. All communities have needs, including the one you live in.

• How to dose safely
Drop Pulse testing and asking the right questions are keys. When acting as a street medic, stick to herbs you know very well. Don’t offer things that were donated you don’t know how to use or how they act on the body. Test everything on yourself first if in doubt. Don’t use herbs that were donated by people you don’t know or were already open when delivered. This is especially important if it is a political action. When in doubt, don’t. Simple substances can have very effective results without any question as to their side effects and/or contraindications—i.e. ice packs, vinegar, honey, isotonic solutions of water, etc.

Types of temporary clinics

**Backwoods/Lacking City Infrastructure:** Clinic support in areas without power, water or other infrastructure and basic access to supplies to support it.
Pros: Usually lots of space available to you and it is usually a laid-back experience. Consults can be both for both short and long-term support. Easier to follow up, most people who are partaking of your services know you are there.
Cons: Lack of supplies like ways to administer can be a problem. Dealing with waste needs to be considered, plan B and Plan C for emergencies that cannot be dealt with there should be thought of ahead of time.

**City Streets:** Clinic support offered on the streets of cities, may be for disaster support or protest support.
Pros: Access to first aid supplies and other needs, donations, and other emergency first aid workers can be more easily come by.
Places like bus stops and other structures can be made into shelters.

*Figure 1 Hurricane Katrina Common Ground Clinic*
Cons: Hard to keep a space without police harassment, especially if it is protest oriented. MANY times we have had supplies confiscated by police, you can end up more easily in a potentially volatile situation. Harder to follow up with clients if you have to change locations.

**Mobile:** Clinic support offered as you move around an area. This can be done with a bike, on foot, or even a car (for disaster support)
Pros: You can move to where you are needed and find people who need help. You can get out of dangerous areas
Cons: Follow up is hard. Amount of supplies you can carry is limited. Always have a buddy

**Event Oriented:** Clinic support at a single event—usually 1-2 days. This may be for a festival, or other community event, farmer’s market, health fair, natural disaster etc.
Pros: May end up with a lot of clients, fast-paced, and fun if not for a natural disaster. You can usually set up all of the supplies you need to have. Form an aftercare clinic for best results to deal with any PTSD.
Cons: No follow up. People’s attitudes can be mixed, depending on the event.

*Setting Up A Temporary First Aid Station/Clinic: A Herbalist’s Perspective*

**Things to Consider:** Besides herbs, what other supplies are needed? Tables, chairs? Covered structure? Where are you going to put your supplies? Waste? How many people you are serving? How long you will be there? When will you take breaks? What’s the weather like? Do you have water? Who is at the herb station with you? Who is going to be administering? Do not work with people you do not know unless they can have 2 people vouch for them in person.

Best type of water is plastic water bottles with squirt tops#1. Dress for the weather—carry a backpack with your own stuff(Hats). For political protests: do not wear contact lenses and Gas Masks are not a bad idea. Long sleeved light-colored clothing, things that can be shed easily. Armbands signifying you are a medic that can come off quickly if you need to disappear. Do not carry identification while at an action or any important personal items except for any medications you may need. You must be able to disappear if you need to.

*The Herbal Street Action First Aid Kit*
These kits are geared more for potentially volatile situations and can be amended and added to in different scenarios. They should be small and easy to move. Keep in mind if you are going into a political action, there is a chance you will have to assist with the after effects from crowd and riot cops, as well as chemical weapons. Just because your intention is peaceful, and the group you are supporting is peaceful, doesn’t mean it will end peacefully.

**Stationary Kits:** Divide set up into herbal and non-herbal supplies. No one should be touching the supplies who is not part of the herbal clinic. Set up can be to your own liking, choose a place for waste and a way to hand wash.

**Mobile Kits:** Non-herbal supplies that are helpful: A bag with multiple pockets, bandages, nonlatex gloves, saline solution or water bottles with squirt nozzles, pads of different sizes, tape, rehydration solutions, epi pens, inhalers, plastic bags for waste, ---sweets of some sort like energy goo or bar, sharpies, hot cold packs, band aids, gauze, whistle, tampons, pad of paper, camera, Arnica homeopathic---for any trauma, Rescue remedy for Stress and people freaking out. Can even add it to water, clay.

**Basic Herbal Supplies for both Mobile and Stationary Clinics by Condition**

![Figure 3 Achillea millefolium](image)

**Blunt trauma causing Blood, Bleeding, Bites, Bruises (stypsics, astringents):**

- Yarrow (Achillea) - stops blood flow, blood mover internally—good for bruises and swellings, concussions, relieves itchy bites—don’t use if in first trimester
- Plantain (Plantago) - stops bleeding, relieves itchy bites
- Cayenne (Capsicum) — for shock, pain or bleeding (unless they have an allergy)

Notes:
Infections/Poisons to prevent or treat(antimicrobials):

- Agarita/Goldenseal/Barberry (Mahonia or Berberis sp)—not for first trimester alternative with affinity to GI tract
- Chaparral (Larrea sp) also a potent antioxidant see dehydration/Sun
- Echinacea—topical for poisons, internal for energy shifts—to stimulate and energize—may cause allergies if person is allergic to Asteraceae
- Essential Oil Spritzers (see lavender below)
- Plantain see above, also treats fungal, urinary tract and other infections
- Charcoal/Clay

Notes:

External Shock, Trauma, Pain, Inflammation, Spasms, Bruising to the body (antispasmodic calming agents, anti-inflammatories):

- Anemone—for shock and trauma—drop dosage-drug like effect of grounding the person. I have also found a mix of peppermint and vetiver that someone sniffs will bring someone back. XXX
- Arnica—Homeopathic—internally. Full strength Arnica oil—external for swellings, pain and bruising—Allergies and Toxicities to consider here
- St Johns Wort Oil (Hypericum perforatum)—burns, spinal injuries, inflammation, neural pain, may cause photosensitization
- Ephedra—drug like effects—will stop asthma attacks, other inflammatory responses XXX
- Lobelia—drug like effects—can immediately stop spasming, coughing fits, and calm someone down—drop dose too much can make someone nauseous
- Flower Essences

Notes
Internal Shock, Trauma, Pain, Spasms, Anxiety, Depression, Hysteria, Sleep (calming agents)

- Anemone—for shock and trauma trained practitioner only—see above
- Skullcap (Scutellaria) calms them down helps them sleep—helps reduce pain—gras

- Wild Oats (Avena)—helps to rebuild nervous system and calm folks down gras and RESTORATIVE
- Lavender (Lavendula) or other Essential oil spritzers, to calm folks and clean wounds and first aid stations
  - Lobelia see above
  - Flower Essences

Notes:

Stomach and Reproductive Complaints, Diarrhea, Indigestion, Cramping Pain, Poison

- Aloe Juice: Gel of leaf in a drink for stomach and reproductive pain, mild diarrhea
- Ginger(Zingiber)- carminative for upset stomachs, cramps, nausea, and pain and reproductive cramping and pain. Topical Pastes are wonderful
- Astringents for diarrhea--Walnut Leaf-(Juglans), Plantain(Plantago), Oak(Quercus)

- Catnip(Nepeta), Mint (Menta), or Chamomile (Matricaria) to calm stomach or reproductive pain
• Yarrow see above to regulate bleeding if reproductive, good digestive bitter aromatic for digestive irregularities
• Echinacea/Charcoal/Clay for poisoning

Notes:

Energy and recovery (Adaptogens and Energizers)

• Echinacea (see above) drop dosage to shift and energize
• Eleuthero—helps strengthen the entire body, gives greater endurance against stress
• Schizandra- stimulating and brings focus
• Flower Essences

Notes:

• Tricks and tips to help teach you how to be a little more covert with your tactics, (aka how to be sneaky when you need to be)
• Any additions for your First Aid kit?
• Any subtractions?
• Is this the right role for you? The value of working to support street actions, and in aftercare.

Scenario One

Scenario Two
Notable Herbal First Projects

- **Herbalists Without Borders**
  
  
  International with chapters everywhere. Health Justice & Humanitarian Aid Herbalists Without Borders is a nonprofit local to global network of volunteers devoted to providing compassionate care to communities and countries in need impacted by natural disasters, violent conflicts, poverty, trauma and other access barriers to health and wellness. Herbalists Without Borders humanitarian aid and actions center around health justice: Borderless Medicine, Free People's Clinics, Street Medic Workers, Trauma Trainings, Education, Advocacy, Technical Assistance and more.  
  
  **Gigi Stafne Director**

- **MASHH**
  
  [https://mashhclinic.com/](https://mashhclinic.com/)
  
  N California and Oregon
  
  MASHHH is an all-volunteer grassroots collective based in far northern California and Oregon. We are primarily Street and Forest Medics who are experts in herbal first aid. We volunteer our skills and help get medical supplies & clinical support to a variety of off-grid events including nonprofit gatherings of herbalists, primitive skills gatherings, forest defense campaigns, native lands rights actions, base clinics at social justice movements, as well as disaster zones around the world. Our mission is to provide accessible, sustainable, affordable, natural medicine for all people but especially those engaged in environmental and social justice, and particularly those engaged in nonviolent direct action campaigns to defend wilderness ecosystems and biodiversity. We take direct action against the industrial medical complex and provide traditional, plant-based first aid and preventative healthcare. -Grizz founder

- **Herb Bus**
  
  [http://herbbus.org/](http://herbbus.org/)
  
  Atlanta, Georgia
  
  The Herbalista Health Network recognizes healthcare as a fundamental human right and works to protect health access through clinical services and educational opportunities. We strive for a community based model of healthCARE that is based on solidarity and not charity. Our web of programming is built to spread the knowledge, keep costs down, and give us all opportunities to share the love we have for our neighbors and planet. We hope you will join us as we Build Community through Herbalism! The Herbalista Free Clinic started serving Atlanta in February of 2013 out of a 1990 VW Westfalia, aka the Herb Bus, with a focus to provide consistent health care to underserved communities. We set up monthly stops at both the Open Door Community and what was formerly the Big House, now 368 Ponce. We provided free clinical care, a spot of tea, and herbal education.

- **Third Root**
  
  [https://thirdroot.org/](https://thirdroot.org/)
  
  380 Marlborough Rd. Brooklyn, NY 11226
  
  At Third Root, our mission is to provide accessible, empowering & collaborative holistic health care. Our on-going Anti-Oppression Initiative responds to the shifting and emergent needs that we identify as crucial to maintaining our vision. This initiative includes staff trainings, screening and accountability, community education, social justice engagement locally, nationally, globally, and support in the form of visibility and referrals.
We are committed to providing skilled practitioners & high quality services that center the experiences of marginalized communities. One tool of this aim is shown below. Our patients and students can expect compassionate consciousness from our staff & worker-owners!

- **Common Ground** [http://www.cghc.org/](http://www.cghc.org/) 1400 Teche St., Algiers, New Orleans, LA 70114

**Mission:** The Common Ground Health Clinic is a non-profit organization that provides quality health care for the greater New Orleans community, and develops and provides programs to address community health care needs through collaborative partnerships.

**Purpose**

- To provide quality integrative healthcare
- To provide quality healthcare education for preventive self-care
- To create an environment conducive to patient, staff and volunteer learning
- To work in an anti-racist paradigm

**Programs and Projects**

- Latino Health Outreach Project (LHOP)
- Community Health and Strength Initiative (CH&SI)
- Mind-Body Medicine Groups
- Community Health Needs Assessment Project
- CGHC/ACC Video Voice Project

Rachel Reeves/Wendy Hounsel and others

- **Occupy Medical** Sunday at the downtown Eugene, OR Park Blocks (8th and Oak) between 12-4pm

Occupy Medical started as a humble first aid tent at the Occupy Eugene site on October 15, 2011. A handful of medically trained volunteers began to serve the movement with their specialized skills. We had a pop-up canopy, a few blankets and donated medical supplies from the local emergency clinic. Mostly, we had enthusiasm. The Occupy Eugene camp included a wide variety of people, ranging from street kids to middle-aged elders. As people learned that Medical was there to treat patients and not to judge, our client load increased.

The complexity of the medical conditions that we treated increased as well. We tracked patients with hepatitis, MRSA, HIV, and pneumonia. Our medical staff saved lives by sending Occupiers to the hospital for conditions that they were unaware of. We also saved lives by CPR. Our volunteers restarted the hearts of three patients during our brief occupation.

-Sue Sierralupe

- **Herb Geek:** Great Blog full of interesting ideas
- **Herbal Aide Documentary:** [http://herbalaide.blogspot.com/](http://herbalaide.blogspot.com/)

herbalism and activism [http://www.cultureunplugged.com/documentary/watch-online/play/12336/Herbal-Aide](http://www.cultureunplugged.com/documentary/watch-online/play/12336/Herbal-Aide)
--Mary Blue

Other ideas from our Herbalists without Borders Group:

Safe Place Rape Kits

March for Science

Free Classes
The fear of cervical dysplasia is associated with its potential to progress to cervical cancer. Instead of viewing this condition as an ominous threat, it is more empowering to gain an understanding of this condition, while learning tools to strengthen one’s body and promote healing. Through becoming familiar with the risk factors associated with cervical dysplasia, we can understand why some women diagnosed with cervical dysplasia have abnormal cells that return to a normal state over a period of months, while other women have abnormal cells that progress to ‘carcinoma in situ’, or invasive cervical cancer.

According to the Canadian Medical Association Journal, every year an estimated 371,000 new cases of invasive cervical cancer occur worldwide. In the year 2000, nearly 1,500 new cases of cervical cancer were diagnosed in Canada and an estimated 430 Canadian women died from the disease. In 1998 it was estimated that 13,700 cases of cervical cancer and 4,900 deaths due to cervical cancer occurred in the United States. Fast forward to recent statistics, the Public Health Agency of Canada states that cervical cancer accounts for 2% of all new cancers in women and estimates that 1,500 women could develop cervical cancer in 2016 and that 400 will die from it. Statistically speaking, 1 in 152 women is expected to develop cervical cancer during her lifetime, resulting 1 in 475 associated deaths. Most cervical cancer, an estimated 67%, occurs in women between the ages of 30-59. Comparing statistics, the National Cancer Institute estimates 12,820 new cases in the United States in 2017; with an estimated 4,210 possible deaths. Cervical cancer is now the thirteenth (*note in 1999 it was the eleventh) most frequently diagnosed cancer among Canadian women, and the third most common cancer in women worldwide, yet it is also one of the most preventable.

The cervix is located in the lower narrowest part of the uterus and is shaped much like a donut, forming a canal that opens into the vagina and leads outside of the body. The cervix is composed of mucous membranes, connective tissue and two types of epithelial cells: squamous and columnar.

Figure 1: Squamous Columnar Junction Adapted from: Benjamin I, Rubin S, Rubin M, Division of Gynecologic Oncology, University of Pennsylvania Cancer Center 1994.
Squamous cells are thin flat cells lining the outside of the cervix and vagina and are also found lining the respiratory and digestive passages. Columnar cells are typically found high up in the uterus, lining the cervical canal and leading from the inside opening of the cervix into the uterus. The point where these two cells meet is called the **squamo-columnar junction**. Cervical dysplasia and cervical cancer is thought to arise at this junction and it is this area where pap tests take cell samples for viewing. Depending on general health and hormonal fluctuations such as puberty, pregnancy and the use of oral contraceptives, the squamo-columnar junction may shift position in relation to the vagina and the uterus, unfolding lower into the vagina and making the cell junction more susceptible to abnormalities and infections.

<table>
<thead>
<tr>
<th><strong>Cervical cells can change position with normal hormonal fluctuations:</strong></th>
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<tr>
<td>As a result of decreased estrogen levels during menopause and in post menopausal women, the vagina becomes drier and less stretchy, the cervical opening becomes smaller and the squamo-columnar junction moves further up into the endo cervical canal, making the transition zone harder to determine, thus it becomes more difficult to obtain a good cell sample during a PAP test.</td>
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During pregnancy many hormonal changes occur, leading to a movement of the squamo-columnar junction lower into the vagina leaving the columnar cells more visible. Columnar cells are more often picked up in a pap reading during pregnancy, (due to their size and shape they can be falsely confused with abnormalities) thus it is important to distinguish between a ‘true’ abnormality or carcinoma and normal healthy columnar cells unfolding lower into the canal. During pregnancy, the endo cervical canal is filled with a thick mucous, which can block access to the cells underneath, making reading accuracy difficult. Furthermore, during pregnancy the placenta requires higher levels of folic acid, potentially leading to a deficiency of this nutrient in the body, cervical changes detected during pregnancy could simply be representing this deficiency.

Like the cells found in the inside of the mouth, these epithelial cells are frequently worn down and replaced. As the cervical cells age, they move from the underlying layer to the outer surface of the cervix, stacking new cells onto healthy cells in neat horizontal layers. Our bodies contain self-regulating mechanisms that destroy any irregular cells that disrupt this orderly horizontal arrangement. However, during stressful circumstances our bodies’ self-regulating mechanisms are impaired.

Cervical Dysplasia is the name given to abnormal cell growth arising in the endo-cervical canal or on the cervix itself. The term dysplasia simply means ‘bad molding’ or ‘abnormal cells’, yet it is often considered a pre-cancerous condition that inspires a great deal of anxiety. There are numerous grading systems for cervical dysplasia, which creates confusion among the general public around degrees of abnormalities and at what point they may be considered cancer. The chart below will assist in identifying the degrees of 4 classification systems:

<table>
<thead>
<tr>
<th>The Class System</th>
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<tbody>
<tr>
<td><strong>Dysplasia</strong></td>
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<tr>
<td>Class I</td>
</tr>
<tr>
<td>Benign</td>
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<tr>
<td><strong>Cervical Intraepithelial neoplasia (CIN)</strong></td>
</tr>
<tr>
<td>Benign</td>
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<tr>
<td><strong>Bethesda/Squamous intraepithelial lesions (SIL)</strong></td>
</tr>
<tr>
<td>Benign</td>
</tr>
</tbody>
</table>

**Figure 2:** Comparison of Cervical Cancer Classification Systems: The New Our Bodies, Ourselves, The Boston Women's Health Collective pg. 573, 1984.

Katolen Yardley, MNIMH, RH (AHG) ~ Medical Herbalist
The National Cancer Institute’s newest PAP test grading method is the Bethesda system seen at the bottom of the chart, which classifies cervical dysplasia by 2 grades of squamous intraepithelial lesions (abbreviated SIL).

Low grade squamous intraepithelial lesions, otherwise known as mild dysplasia or CIN 1 seen above, indicates early irregular changes in shape, size, and number of cells forming the outer surface of the cervix. The majority of abnormal pap tests show mild dysplasia and many mild dysplasia lesions will spontaneously return to normal. A report from the Dartmouth Medical School indicates that approximately 60 to 80 percent of CIN 1 will resolve itself on its own accord11.

High Grade (SIL) may be labeled moderate or severe dysplasia, CIN 2 or 3, or sometimes carcinoma in situ7. This grade indicates large numbers of abnormal cells affect the outer third of the epithelium. Categorized as self-limiting, such lesions may still return to normal on their own, but if progressive deterioration occurs, it may often take months or even years.

Carcinoma in situ (CIS) is also a high grade SIL, although there appears to be disagreement within the medical profession around whether it is to be classified and viewed as cancer.

Cervical cancer is more likely to occur when cells are dividing rapidly and are out of control. Illness, poor nutrition, prescription drugs and hormonal fluctuations all interfere with the body’s ability to eradicate these fast-growing irregular cells, and instead contribute to increased cell activity and turnover and ultimately increase the risk of abnormal cell growth. The following excerpt taken from the National Cancer Institute defines invasive cervical cancer as occurring when cells divide when they are not needed, forming a mass of tissue. This mass of tissue is called a growth or tumor, which may be either benign or malignant. Benign tumors are not cancer; they are self-contained, removable and do not spread to other parts of the body. Examples of benign cervical growths include polyps, cysts, and genital warts. Malignant tumors and cancer, on the other hand, may spread to distant organs and tissues via the blood stream or lymphatic system7.
Visible symptoms of pre-cancerous conditions often are not present until abnormal cells become cancerous and invade nearby tissues. Some general symptoms associated with abnormalities include: irregular watery vaginal discharge, backache and poor general health. However, the most common symptom is abnormal bleeding, which may stop and start between cycles or after intercourse, douching, or after a pelvic exam\textsuperscript{12}. It is important to note that abnormal bleeding AFTER menopause may also be a sign of uterine cancer and needs to be investigated.

Now that we have established the grades of abnormal cells, let’s look at some conventional medical treatment:

**Monitoring and conventional medical treatment**

**Pap Tests**

In the 1930’s the Greek physician Dr. Papanicolaou developed a test to monitor cervical health, hence the abbreviated name: PAP tests. PAP tests investigate the appearance of cells around the cervix. A small brush is used to collect a sample of dead surface cells from the cervix, taking a full sweep of the squamo-columnar junction and upper vagina. Cells are then placed on a glass slide and sent to the laboratory. The most ideal time for a pap test is around the time of ovulation, 10 to 20 days after day one of the menstrual cycle. During ovulation, the cells are flatter and easier to read due to elevated estrogen levels. Having a PAP test done right after menstruation is not recommended for there may be too many endometrial cells discharged from the uterus, making the test hard to read. To ensure the most accurate PAP reading, avoid using any topical applications that will wash away or hide abnormal cells for a minimum of 2 days before the test. Products to discontinue include: douches, spermicidal foams and jellies, creams and any topical applications of herbal medicine.

Medical opinion recommends that every woman over the age of 18 who is sexually active should have a PAP test annually; however there are mixed opinions about what age to DISCONTINUE testing. Some reports suggest discontinuing a PAP after the age of 65 if 2 consecutive normal smears are obtained; however contrary studies show that one in four cases of cervical cancer and 40% of deaths due to cervical cancer occur in women 65 years and older\textsuperscript{13}. Therefore it is crucial to continue periodic testing past age 65.

PAP tests do have limitations. For instance:

- There are often errors due to faulty collection procedures that result in a false negative rate in up to one third of all tests\textsuperscript{14}. This means that approximately 33% of women actually have cervical abnormalities that the PAP test fails to pick up.
- A pap test may contain very few cells making interpretation difficult, human error can accompany slide reading and test grading can largely depend upon personal, subjective experience rather than scientific methodology. It is also possible to have a different interpretation from the same person reading the same slide on different occasions. Readability of a slide depends largely upon the conditions of slide storage, how it was prepared and how the cell sample was taken\textsuperscript{15}.
- Undetected infections of the cervix or vagina can lead to inaccurate test results; pus cells, increased mucus, yeast cells or bacteria can block the cervical cells skewing the pap reading.
• Considering that many abnormal PAP tests return to normal on their own, the statement “we will always find what we are looking for” sums up many of the concerns about subjecting women to invasive treatment unnecessarily.

• Lastly, there is also question about what exactly the PAP test is identifying. Irregular cells can be the result of infections and nutritional deficiencies, particularly a deficiency in folic acid. Studies question whether an abnormal PAP test should warrant anxiety about a pre-cancerous condition or should be viewed more proactively as a tool – a tool that encourages a woman to pay attention to her physical health and to the many factors contributing to her overall health picture.

After the diagnosis of an abnormal pap, there is often pressure to schedule a woman for immediate surgical treatment, instead of taking a ‘wait and see’ approach and providing support for the body’s self-healing mechanisms.

| What is the risk of cervical dysplasia developing into cancer? |
| Research from the University of Toronto indicates that both mild and moderate cervical dysplasias were more likely to regress than to progress and the trend of mild dysplasia leading into severe abnormalities or cancer was 1% per year\(^\text{16}\). A review of follow up studies on 3529 women indicate a regression rate of 57\% for CIN I, 32\% indicated no change of dysplasia grade, a regression occurred in 43\% of cases of CIN 2 and the progression of CIN 1 to invasive cervical cancer was 1\%. Another sample cited in the same study concluded that over a 42 month follow up of 1269 women, spontaneous regression occurred in 53\% of cases with CIN I and 39\% of CIN 2\(^\text{17}\). We know that the probability of cervical lesions progressing to cervical cancer increases with the degree of abnormal cells, thus it is imperative not to ignore the test results; however these statistics put into perspective the pressure to seek immediate treatment and instead favors allowing time for monitoring and retesting. The roller coaster of emotions, of fear and helplessness that accompanies an abnormal pap test, together with the pressure to undergo invasive procedures as soon as possible to alleviate any pre-cancerous condition, is unnecessary. |

This observation is not meant to cast an aspersion on well-meaning health care workers, for most people are scared of cancer and images of the terminally ill weigh heavily on everyone’s mind. The medical professional’s principal means of reducing the risk of cancer is the eradication of abnormal tissue. Their training has not focused primarily on the prevention of disease. I question the tenet that surgery should be the first line of defense. Sometimes the attitude that it is easier to ‘cut it out’ is more prevalent than putting a priority on educating people about prevention and additional healing options.

The common trend after diagnosis of an abnormal pap is for a doctor to repeat the pap or progress to conventional treatment to remove suspicious tissue. There are a number of commonly performed procedures used for both treatment and biopsy.

Colposcopy

A Colposcopy microscope is a widely used procedure. A doctor performs a ‘Schiller test’ painting an iodine or vinegar solution onto the cervix, which turns healthy cells brown and any abnormal cells turn yellow or white for easier identification of irregular tissues. Many women who go in for a colposcopy are afraid they might have cancer and are under intense stress. In many clinics, to help minimize fear of the unknown, the colposcopy microscope can be connected to a video screen so a woman can see the cervix on a TV monitor, thus providing a useful tool with which to shed light on the hidden suspect area. If there is no monitor present, the gynecologist may be asked to draw a picture of what is seen. It is beneficial for women to keep copies of any reports in order to personally monitor changes and to regain a sense of empowerment over their bodies.
Doctor may remove cervical tissue for a biopsy, which may be done in a variety of ways:

**Cone Biopsy**

Another diagnostic and treatment procedure is called a Cone Biopsy. This consists of removing a large cone-shaped piece of tissue to determine whether the abnormal cells have invaded deeper layers of the cervix. Conization is also used to treat carcinoma in situ if the entire lesion can be removed. The cone biopsy removes up to ¼ to ½ of the face of the cervix and requires a local or general anesthetic in a doctor’s office or hospital. There are a number of drawbacks to this frequently performed procedure. Too much tissue may be removed, increasing the risk of second trimester miscarriage and premature labor. Scar tissue may also make the cervix less elastic and the endocervical canal less flexible, leading to future pain and dysmenorrhea.¹⁸

**‘LEEP’ Procedure, Laser Surgery and Cryptotherapy**

Loop Electro Surgical Excision Curettage (LEEP) removes a thin slice of cervical tissue by using an electric wire loop. This procedure results in immediate cramping and long term tissue scarring. Further treatments include Laser surgery, which offers precision in killing cancerous cells using a narrow beam of light and Cryotherapy, which involves using liquid nitrogen to freeze and destroy cells 3-4 mm into the cervix. Cryotherapy is the least costly method but poses the highest risk of disease recurrence. Total hysterectomy (removal of the uterus and the cervix) was once the preferred treatment of choice and is still a common occurrence for individuals with persistent CIN 3, carcinoma in situ or invasive cervical cancer.

**Summary of Conventional Treatment**

All of these procedures are effective for symptom removal and occasionally they save lives by eliminating the zone of abnormal growth. However when performed unnecessarily they subject women to needless invasive procedures without adequately addressing the underlying causes. Considering that many abnormal cervical changes are related to viruses, strengthening the immune system and improving the body’s general state of health is the key to long-term improvement.

Once a biopsy has been performed there are a few possibilities; the test can read:

- **Benign**: indicating no abnormality
- **Dysplasia**: which may be graded as mild, moderate or severe
- **Carcinoma in situ**: cancerous cells are contained within a localized area, not moving past the basement membrane nor affecting other tissues.
- **Micro invasive carcinoma**: penetration below the epithelial layer, not more than 5 mm
- **Invasive carcinoma**: abnormal cells go further than 5 mm affecting other organs and tissues.

If repeating a PAP test for follow up monitoring, it is advisable to wait for a minimum of 3 months between tests. Any surgical procedure or untreated infection will disturb the surface cervical cells and create a false reading until the underlying cell layers have had a chance to heal, regrow and fully develop.

The time spent waiting to retake a pap test can be viewed as a window of opportunity to plan a course of action, analyze what has been happening in one’s life and review one’s emotional and physical capabilities. The author and medical doctor, Christiane Northrup, describes cervical dysplasia as resulting “when a woman is conflicted about wanting to be all things to all people, such as the woman who is a mother, works full time and is worried that she does neither of these jobs well enough”¹⁹ this quote is taken from her book “Women’s Bodies Women’s Wisdom”. This is the ideal time to investigate the possibility of the superwomen...
persona, to eliminate other associated risk factors, and to seek creative solutions for empowerment and positive change.

In the second half of this paper, I will attempt to address some common questions:

- What factors create or contribute to irregular cells?
- Why do some cervical changes develop into cancer while others are self-limiting?

When investigating the cause of disease, there is a desire to find 1 causative factor. However, in the case of cervical dysplasia, there are a number of related factors that may increase the chance that cervical cells may become abnormal or cancerous. Many researchers believe that cancer can develop when 2 or more risk factors act together. It should be noted that not all statistical relationships necessarily reveal a direct causal relationship. Some factors may be correlated simply because they share a common underlying cause or a circumstantial statistical link to the real culprit. It's always important to investigate further whether a "link" points to the cause of disease, or just a relationship between symptoms.

**Risk Factors include:**

**Sexual Intercourse before age 20:** With age, the squamo-columnar junction moves further up into the endocervical canal. However, in younger women it may be more exposed, thus increasing the risk of infecting those cells during sexual activity. A 2005 study indicated that adolescents 18 years and younger with high grade squamous intraepithelial lesions (HGSIL) were in a high risk category for progression; after 36 months 31% of HGSIL progressed to CIN 3^20.

**An increased number of sexual partners** or having partners who themselves have had many sexual partners. This is simply due to the logic that the more sexual partners’ one has, the more likely it is that one will have a partner who is carrying an STD.

**Socioeconomic status:** Low income and socioeconomic status is a risk factor for cervical cancer. Incomplete Pap testing is most common among African, Native Indian and Inuit, Hispanic, the poor, elderly, women infected with HIV and people living in rural areas^21. Accessibility to optimal health care, cultural beliefs, lack of education and psychological issues may all play a role in keeping these women from getting screened, reporting disease, and seeing health care providers for treatment and follow-up care.

**Human Papilloma Virus (HPV):** otherwise known as viral or genital warts, is one of the strongest links between cervical dysplasia and its evolution into cancer^22. The viral wart implicated in cervical dysplasia is genital warts. Genital warts are benign non-cancerous tumors, transmitted through skin-to-skin contact and encouraged by tissue trauma and moisture. Women who have HPV, or whose partners have had HPV, are at a higher risk of developing abnormal cells, although not everyone who has HPV goes on to develop cervical cancer. Cancer related HPV might increase the likelihood that mild abnormalities may progress to more severe conditions.

When hearing about HPV it’s common to assume that this STD is a virus that ‘someone else’ contracts. However, it is alarming to note the frequency with which this infection occurs. HPV is the most commonly occurring STD. An article written by the American Social Health Association cites references from the 1997 American Journal of Medicine stating that “about 74 percent of Americans have been infected with genital HPV at some point in their lives. Among those ages 15-49, only one in four Americans has not had a genital HPV infection... Experts estimate that at any given time, only about 1% of all sexually active Americans have visible warts, and the virus can live in the body for months, years or even a lifetime without giving rise to observable symptoms^23”. The Center for Disease Control and Prevention estimates that “nearly 20 million
people are currently infected with HPV… 50-75% of all sexually active men and women will acquire a genital HPV infection at some point in their lives…and up to 5.5 million Americans will acquire a new genital HPV infection each year\textsuperscript{24}.”

Figure 50. Genital Warts — Initial Visits to Physicians’ Offices, United States, 1966–2013

\textbf{NOTE:} The relative standard errors for genital warts estimates of more than 100,000 range from 18\% to 23\%. See Section A2.5 in the Appendix and Table A5.
\textbf{SOURCE:} National Disease and Therapeutic Index, IMS Health, Integrated Promotional Services, IMS Health Report, 1966–2013. The 2014 data were not obtained in time to include them in this report.


There are more than 100 types of HPV\textsuperscript{25,20}, including the viruses involved in plantar warts that affect the hands and feet, which are very different from those affecting the genital tract. Approximately 40 viruses directly affect the genital tract; some are more strongly associated with cancer than others. High-risk types include: HPV, 16, 18, 31 and 45\textsuperscript{19,20}. According to the US Centers for Disease Control and Prevention, HPV types 16 and 18 account for approximately 70\% of cervical cancers worldwide, while HPV 6 and 11 are responsible for approximately 90\% of genital warts\textsuperscript{26}. HPV 16, which is predominantly seen in squamous cell carcinomas throughout the world. The Albert Einstein College estimates that HPV is found in 90 to 95\% of cervical cancers\textsuperscript{27}, and that HPV 16 is most commonly associated.”

According to the National Cancer Institute: “there are HPV types that are virtually never found in cancer, these are low-risk types known as HPV 6, 11, 42, 43 and 44\textsuperscript{28}. DNA testing can identify the high-risk HPV lesions and be a tool for determining the route of holistic support. Viral infection can damage DNA and other parts of the cell. It is thought that HPV produces proteins that interfere with cell functions that normally prevent excessive cell growth.

Medical treatment focuses on the removal of any raised growth, while nothing is offered to strengthen the body’s reserves to deter a viral outbreak. An important fact to note: since genital warts are viral, a holistic treatment protocol which includes strengthening the immune system does wonders for diminishing the infection and encouraging visible warts to disappear on their own (though the virus may still remain dormant in the body).

Abnormal Pap’s are sometimes incorrectly diagnosed Human Papilloma Infections. To complicate the situation, atypical cells from HPV can mimic abnormal cells, precancerous conditions and even invasive
cancer. Therefore it is crucial that any possible infections are correctly diagnosed and cleared up, before repeating a PAP test and scheduling surgery.

**Herpes Simplex 2 Virus (Genital Herpes) and Chlamydia** exposures are both linked with a 2-6 times increased risk of cervical cancer than when compared to the general population. It is thought that chlamydia interferes with one of the body’s natural safety mechanisms that work to destroy unhealthy cells.

**Cigarette smoking:** Statistics show that women with cervical cancer are most likely to be current smokers. The risk appears to increase with the daily number of cigarettes a woman smokes and with every year she has smoked. A 1982 study from the American Journal of Epidemiology theorizes over the impact cigarette smoke has on the health of the cervix “since the products of tobacco smoke are circulated in breast fluids of non-lactating woman fifteen minutes after smoking a cigarette, it is possible that a carcinogen can be inhaled from cigarette smoke, transported through the blood system and secreted by the cervical surface cells where it may act as a promoter or co-carcinogen on the cervical cells.” Cigarette smoking has also been found to deplete the body of cancer-fighting nutrients, including Vitamin C, E and beta-carotene.

**Diethylstilbestrol (DES):** A toxic synthetic estrogen drug used during the 1940’s through 1970’s, mistakenly used to prevent miscarriages, resulted in numerous birth defects, DES increased the incidence of cervical changes in women whose mothers were given the drug. Incidentally, for the last 20 years DES has been commonly prescribed as a morning after pill.

**Oral Contraception:** The epithelium or squamo/columnar cells of the cervix respond to hormonal changes and long term use of birth control pills are associated with cancer of the cervix. Studies indicate a strong correlation between the pill and cervical dysplasia, one reference theorizes that “one in every five pill users develops a suspicious pap after 3-4 years”. Birth control pills have been found to decrease nutrient levels of Vitamin C, folic acid, Vitamin B6, B12, riboflavin and zinc.

Additional studies report that abnormal cervical cells found in Pap tests of oral contraceptive users mirror those abnormal changes found in women with a folate deficiency. Therefore one could speculate that at least some abnormal PAP's could be really showing a folate deficiency. To support this theory:

A double blind study published in the American Journal of Clinical Nutrition has been conducted on the supplementation of folic acid in women with mild to moderate dysplasia, all of whom had been using an oral contraceptive for at least 6 months. The women received 10 mg folic acid for 3 months under double blind conditions. Before treatment, it was noted that the blood levels of folic acid in subjects using oral contraceptives were significantly lower than non-users. The studies indicate a derangement in folic acid metabolism that may sometimes be misdiagnosed as cervical dysplasia, and concluded that folic acid supplementation may arrest or reverse the abnormal cells.

According to Health Canada, June 1995, close to 70 million women take oral contraceptives, making birth control pills one of the most commonly used drugs in the world. By using oral contraceptives, is a woman unknowingly setting herself up for abnormal PAP’s, results that could really be indicating a nutritional deficiency caused by using the oral contraceptive?

**Intra Uterine Devices** used for birth control can also be a concern. The IUD string that penetrates the cervical opening can lead to an inflammation that mimics abnormal cancer cells. After an IUD has been removed it is best to wait up to 3 months before retaking a PAP test.
Depo Provera: one of the latest forms of birth control, an injectable contraceptive that suppresses ovulation and renders women infertile for 3-6 months, has been linked to the rise in cervical cancer in third world countries by studies conducted by the World Health Organization\(^{39}\).

Tampons and Synthetic Estrogens are two not so known risk factors. Tampons contain carcinogens such as talc fibers, bleach and asbestos, thus it is best to discontinue use and switch to non-bleached tampons or non-synthetic cotton pads. Lowering contact with synthetic estrogens found in the environment (otherwise known as xenoestrogens) is recommended, as estrogens are directly associated with gynecological cancers and abnormal cell growth. Some considerations include pesticide residue, agricultural chemicals, plastics (soft worse than hard), paint and saran wrap, birth control pills (as already mentioned), meats and dairy (due to injected hormones) and alcohol, particularly beer (a yeast used in the fermentation process, saccharomyces, produces estrogen which can have an effect upon vulnerable tissues\(^{40}\).

Immune System Health goes a long way toward suppressing viruses and abnormal growths. An immune system weakened by medications, infection, excessive stress, trauma, or surgery, may be unable to prevent abnormal conditions from surfacing. Thus individuals with a poor diet, those dealing with long term viruses, persons undergoing prolonged treatment with steroids and individuals receiving medication to suppress the immune system, are more likely to develop cancerous lesions. According to the book “A Feminist Approach to PAP Tests”, other drugs that may influence the immune system and create abnormal pap results include: digitalis, antihistamines, tetracycline, valium, aspirin, allergy shots and thyroid medication\(^{41}\).

It is also useful to consider one’s reaction to stress. A common human response to stress is illness, feelings of hopelessness, and self-blame, all of which have an impact on the immune system and can create a downward spiral effect.

Unfortunately there is a deficit of education in this area of women’s health. To this day, some researchers still categorize cervical cancer as an STD, and many doctors do not receive specific training nor do they follow up with current research\(^{42}\). Considering that many STD’s and vaginal infections mimic cervical dysplasia, misdiagnosis and unnecessary invasive procedures can result from lack of information and faulty testing procedures. Some doctors opt for immediate radical treatment for minor abnormalities, which may eventually resolve without intervention, thus it is important to question if it is a particular doctors’ standard practice to use aggressive treatment for mild abnormalities, or if he is more inclined to wait for tests to consistently show an abnormality over time. To provide optimal health care services to women, more accessible information is required to educate the public about causative factors, prevention and alternative treatment of dysplasia.

Creating a supportive environment for healing and immune response consists of eliminating harmful triggers while encouraging our bodies’ natural defenses to work. Unfortunately, many women are not actively encouraged to strengthen their constitution and heal themselves.

Nutritional Supplements

Supplements for immune system health should focus on antioxidant therapy specifically Beta Carotene, Vitamins A, C and E, folic acid and B vitamins. These supplements can be used to reverse dysplasia by protecting the body’s healthy molecules, neutralizing free radicals and enhancing the ability of the immune system to fight viruses and HPV while encouraging healthy cell growth.

A German study found a direct correlation between low tissue concentrations and blood levels of Beta-carotene, Vitamin A, C, folic acid and stages of cervical abnormality\(^{43}\). The lower the blood levels, the greater the risk of cervical dysplasia. Vitamin C works as a wound healer, to strengthen and promote

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epithelial cell integrity, and to inhibit carcinogen formation, while **Vitamin E** has a number of antioxidant properties and anti-proliferative properties that encourage controlled cell replication. Studies have found individuals with HPV to be significantly lower in serum vitamin E.

**Vitamin A** may help stop or prevent cancerous changes in cells on the surface of the cervix. Vitamin A plays a protective role against carcinogens in mucous-producing epithelia (lung, esophagus, larynx, and cervix). Vitamin A is fat soluble and can build up in the tissues, thus caution should be given with long term use. Beta carotene, which is converted into vitamin A in the body, can be used simultaneously or instead of Vitamin A, and does not contribute to long term toxicity and has also shown to be beneficial in cervical dysplasia treatment. Precursors to Vitamin A such as Beta-carotene and other members of the carotenoid family (lutein, lycopene and alpha carotene) can be found in green, orange and red fruits and vegetables.

**Folic acid** is a water-soluble vitamin found in leafy green vegetables, legumes, brown rice, wheat germ, brewer’s yeast, beef, chicken and liver and kidney organ meats. Since dietary folates are easily destroyed through cooking and processing and many individuals do not consume folate-rich foods, it is thought that folate deficiency is one of the most common nutritional deficiencies. Incidentally, a number of prescription drugs also reduce folate levels in the body. Some drugs of concern include: cimetidine, antacids, anticonvulsants, alcohol, and oral contraceptives, all of which lower serum and tissue concentration levels of folate. As mentioned earlier, there is a correlation between folic acid deficiency, the use of oral contraceptives and abnormal PAP’s, plus studies indicate a relation between low folate status and an increased incidence of HPV infection, particularly HPV 16.

Folic acid is involved in the synthesis and repair of DNA and influences gene stability. It may inhibit the carcinogenic potential of HPV by keeping the virus from becoming integrated into the human DNA. Folic acid can be taken as the more bioavailable form, L-methylfolate; preferable for many individuals, as about 40% to 60% of the population has genetic variations that interfere with the enzymatic conversion of supplemental folic acid to its active form, L-methylfolate.

Folic acid is generally regarded as safe, although some have thought that it may mask a vitamin B12 deficiency. It should also be noted that folic acid supplementation may impact seizures in drug-treated epileptics, and therefore should be administered with caution in these individuals.

There is also a close relationship between folic acid and other B vitamins. Low levels of **Vitamin B** are related to cervical cancer. A deficiency of B vitamins is linked with excess estrogen levels, due to an interference with the liver’s ability to inactivate excess estrogens; plus both folic acid and Vitamin B12 are inversely associated with homocysteine concentrations, a potential marker for cervical cancer.

**Case Study**

1½ years ago I saw a 29-year-old female client whose main concern was cervical dysplasia. She was currently single, though had a common-law partner and one son age 10. Some relevant points from her case history included: a history of smoking for 1 year as a teen and since childhood she experienced cold sore outbreaks (Herpes simplex 1) occurring usually once a year. As a teen, she was diagnosed with genital warts and treated with liquid nitrogen. At age 19, she experienced a recurrence of the warts when pregnant and again was treated with liquid nitrogen. At age 21, she was first diagnosed with cervical dysplasia, CIN 1 (mild dysplasia) and freezing was route of treatment, she then returned for yearly pap tests. In 2000 the dysplasia returned, worse, classified as moderate dysplasia CIN II. Her oral contraceptive history began at age 16, she used the same birth control on and off for 14 years, until age 25, when she changed oral contraceptive to Menistrin and experienced menstruation only 2 times per year, due to the drug. She presented with a yellow white discharge once a month (which the client recalled, began with the onset of birth control pills). Swabs identified candida yeast infections, which were in the past treated with over the
counter creams and suppositories. Her general health presented with no respiratory, musculoskeletal, urinary or cardiovascular complaints. With digestion she experienced bloating and gas. Her diet was high in red meat, eaten 7 days per week, she loved sweets, consumed dairy and had a low intake of fruits and vegetables

Treatment Protocol

The treatment protocol was focused on strengthening her immune system, improving tissue integrity of the reproductive tract and reducing yeast and discharge.

- As this woman was a typical ‘meat and potato’ person, my dietary recommendations encouraged a gradual decrease of red meat with a goal of switching to hormone-free white meats (turkey, chicken and fish).
- Recommended eliminating refined sugars and refined foods and increasing her intake of organic fresh fruits and vegetables particularly the Brassicas (offering antioxidant nutrients and cancer preventative benefits found in flavonoids, polyphenols and glucosinolates).
- Strongly encouraged other alternative contraceptive options
- Sitz baths were used 2 times per week for 2 months to increase pelvic circulation
- Consumption of organic green tea

Supplements

Vitamin B Complex 50 mg bid
Vitamin A 50000 iu for 3 weeks then switched to Beta-carotene 30 000 iu daily
Vitamin C to bowel tolerance
Vitamin E 400 iu daily
Folic Acid 5 mg daily

Internal Herbal Tincture: 5 ml of tincture was taken three times per day, mixed in warm water, taken before meals.

<table>
<thead>
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<tbody>
<tr>
<td>Thuja occidentalis</td>
<td>20 ml</td>
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<tr>
<td>Larrea mexicana</td>
<td>15 ml</td>
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<tr>
<td>Hydrocotyl asiatica</td>
<td>20 ml</td>
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<tr>
<td>Chamomilla recutita</td>
<td>15 ml</td>
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<tr>
<td>Achillea millefolium</td>
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<td>Lamium album</td>
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External Tincture: 1 teaspoon of the tincture was added to 1 cup of hot water, poured into a douche bulb (purchased from a drug store) and used as a retention douche. The easiest way for a woman to use a douche bulb is to put her feet up in the bathtub, insert the bulb and retain the liquid for 10 minutes. The douche was continued 3-4 times per week for 3 months.

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<td>Propolis</td>
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<tr>
<td>German Chamomile Essential Oil</td>
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<td>Chamomilla recutita (instead of Chamomilla recutita)</td>
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Pau’darco Tea: Tabebuia impetiginosa: 2 teaspoons of herb to one cup of water was simmered on stove for 20 minutes (with the lid on, while using a glass or porcelain pot). Taken 3 cups per day. I also recommended this tea be used as a douche, alternating the external tincture douche with the pau d’arco tea.

- After 4 months, a follow up Pap test indicated a regression to mild dysplasia, at this point I changed the formula, dropping the dose of Thuja and Hydrocotyl in the internal tincture and added in 15 ml of Astragalus to further support and build immune function. Seven months after continuing treatment, the pap tests detected no abnormalities. 1 ½ years later, I still see her occasionally for follow up visits and her pap tests have still been normal.

**Therapeutic rationale is as follows:**

**Thuja occidentalis:** Tree of life has been used for abnormal growths and epithelial tissue degeneration that are viral and fungal in nature and has a particular affinity to clearing up warts. Thuja should not be used in pregnancy and excessively high and prolonged dosages of Thuja (consuming more than 40 ml weekly) may result in neurotoxicity due to the constituent thujone, one of the first symptoms noted could be a headache.

**Larrea mexicana:** Chapparal is a powerful blood cleanser and antioxidant. Some constituents present in this plant are flavonoids and lignans, which contain anti biotic, anti tumor and anti microbial properties. Chapparal should not be used in pregnancy, during lactation or in individuals with decreased liver function.

**Hydrocotyl asiatica:** Centella or Gotu Kola contains saponins which include a terpenoid chemical called asiaticoside, an agent used to speed up healing of wounds by increasing collagen formation and decreasing inflammation while inhibiting formation of scar tissue. Gotu Kola's ability to stimulate the formation of new blood vessels is an important role in wound healing as the newly formed blood vessels assist hypoxic tissues to re establish previous healthy conditions. It also stimulates formation of hyaluronic acid, (large amounts of hyaluronic acid blocks a cancer-causing gene, thus inhibiting tumor cell growth). Additional phenol rich constituents of Hydrocotyl include: quercetin, rutin, luteolin, apigenin and naringin providing antiviral, antibacterial and antioxidant properties. Gotu kola’s anti viral properties are thought to directly inactivate viral particles or affect replication abilities of a virus once inside infected cells or both.

**Chamomilla recutita:** German Chamomile contains anti-inflammatory, anti microbial and decongestant properties; its constituents chamazulene and matricine are anti bacterial and gently soothing to irritated tissues.

**Achillea millefolium:** Both the flowers and the leaves of Yarrow are high in volatile oils, which encourage blood flow to the pelvic region, provide decongestant properties and local anti-inflammatory effects. Leaves are bitter, which promote liver activity, increasing hepatic clearance of estrogen from the body. If the liver is congested it is not effectively able to break down hormones, thus estrogens stay circulating in the body longer.

**Lamium album:** White Dead Nettle contains tannins and flavone glycosides increase pelvic circulation, act as a pelvic decongestant, and appear to have an overall tonic effect, working to cleanse, relax, and strengthen the reproductive tissues.

**Calendula officinalis:** Marigold possesses anti inflammatory, anti fungal and anti viral properties, an excellent anti yeast agent, therapeutic properties may be due to its volatile oils, terpenoid saponins and...
flavonoid content. Internally Marigold possesses lymphocyte activity and cytotoxic anti tumor activity, while in vitro studies conducted on human cervical adenocarcinoma cells, show the ability to induce apoptosis in tumor cells, interrupting DNA damage to cells.\textsuperscript{64}

**Propolis** has anti microbial effects by inhibiting cell division and anti mycotic effects inhibiting protein synthesis.\textsuperscript{65} Its flavinoids exhibit anti viral, anti bacterial and anti mycotic effects in vivo and in vitro studies, and have regenerative properties beneficial for cervical ulcers.\textsuperscript{66}

**Tabebuia impetiginosia:** Pau d’arco or Lapacho is frequently used for its anti cancer properties, it contains lapachol and flavones which is linked to its use as an anti oxidant while helping to suppress tumor formation.\textsuperscript{67} Pau d’arco is widely used to treat bacterial and fungal infections.

Other additional botanicals for immune enhancement include:

**Brassica vegetables:** All of the brassica vegetables are rich in sulfur containing molecules called glucosinolates. As cruciferous vegetables are being digested; enzymatic reactions and HCL create new molecules including indole-3-carbinol (I3C) and diindolylmethane (more commonly known as the nutritional supplement DIM).\textsuperscript{68} There molecules offer potent anti HPV effects and also enhance phase 1 liver detoxification shifting estrogen metabolism towards the more protective 2-hydroxylation and away from the more harmful, suspected carcinogenic estrogens 16α- and 4-hydroxylation.\textsuperscript{69}

**Camellia sinensis:** Green Tea or 3 grams powdered green tea extract contains polyphenols (catechins and flavonols) which offer antimutagenic, antioxidant, anti inflammatory and anti tumor properties. Green tea contains powerful antioxidant and cancer preventative constituents including the catechins: epigallocatechin-3-gallate (EGCG) and epicatechin showing anti-viral, and anti mutagenic effects, both in vitro and in vivo studies. EGCG spares vitamin C oxidation, is anti-bacterial and anti-viral offering some protection against HPV, HIV and HSV-2.

I would like to conclude by highlighting the 8 points of action for any woman who is diagnosed with an abnormal pap:

1. Monitor the condition with a frequent PAP tests every 3 months, and obtain copies of the reports to keep a personal health record.
2. Further tests should be done to eliminate any chance of additional infection. Tests should include gardnerella, candida albicans/yeast, chlamydia, trichomonas, herpes, and genital warts. Any infection should be cleared up before repeating a PAP test.
3. If on the birth control pill, IUD, or Depo Provera, switch to barrier forms of birth control such as condoms or a diaphragm for 6 months to one year.
4. Support the immune system and encourage whole body healing by identifying any emotional and environmental stressors, eliminating associative risk factors and supporting the body with whole foods.
5. Enhance the immune system by increasing antioxidants, Vitamin C, E, Beta-carotene, Folic acid and B vitamins.
6. Administer herbal medicine internally and externally as a douche to stimulate the body’s healing responses and support the integrity of the reproductive tract.
7. If diagnosed with mild or moderate dysplasia, repeat a PAP test in 3 to 6 months and use that time to support the body’s healing strategies. It is advisable for women experiencing high grade SIL, visible cervical lesions, persistent irregular bleeding or a woman who chooses complimentary medicine but consistently fails to follow the treatment to consult their physician for medical follow-ups.
8. Class 3 or 4 CIN may require surgical treatment. Eliminate possible aggravating factors while focusing on tools for immune system support can occur concurrently.
Many illnesses are the result of our complex emotional and physical relationship to the world in which we live. Cervical dysplasia is one of those conditions where one needs to question the impact the environment has on our health. For women with cervical dysplasia, tools for self-healing are possible. Education, eliminating potential triggers, strengthening the immune response and creating a supportive environment for the body's innate healing abilities can lead one closer to a return to optimal health.

An earlier version of this article was first published in the British Journal of Phytotherapy, Vol. 5 No. 4
Copyright 2001 ISSN 0959-6879

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