Herbs and Nutrition For Healthy Aging

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A recording of “Herbs and Nutrition for Healthy Aging” is available to all AHG members at our website – www.americanherbalistsguild.com. The following article, which readers can use to accompany this recording, was originally published in the AHG 2009 Symposium Proceedings book.

The population of North America and Europe is aging. Currently one in ten people in the United States is over 65. By the year 2050, it is estimated that one in five Americans will be over 65. Our life expectancy is higher than ever before and most of us want to live a long and healthy life. While many of us want to live to be 85 or 90, the reality is that what we really want is to be 35 or 40 years old and physically stay that age for another 50 or 60 years. Perhaps someday science fiction dreams (or nightmares) of cloning new organs, 20-something octogenarians, and cellular regeneration may be a reality, but in the present we are stuck with the reality of growing old. As we reach our 60s, 70s, and 80s, we heal more slowly, our bones become more brittle, our skin sags, our energy is not what it once was. No one has discovered Ponce de Leon’s Fountain of Youth, but we do know that herbs, diet, lifestyle, and supplements can slow aging, enhance memory, help prevent cancer and heart disease, and keep us as healthy as possible throughout our lives. In this talk we will focus on common conditions associated with aging and examine a range of herbal and nutritional therapies that can help you, your loved ones, or your patients.

The Circulatory System

Alzheimer’s disease
The cause of Alzheimer’s is still unknown, but many studies have shown that regular mental exercise and the use of dietary/herbal antioxidants and circulatory stimulants may reduce the risk of developing this terrible disease and slow its onset if it develops. Nutritional deficiencies, impaired digestion, poor circulation, insulin resistance, smoking, and chronic stress all can contribute to diminished cerebral function and may be part of the Alzheimer’s puzzle.

Herbs for enhanced cerebral circulation (nootropics)
Bacopa herb (Bacopa monnieri)
Blueberry Solid Extract (Vaccinium spp.)
Chinese Polygala root (Polygala tenuifolia)
Ginkgo standardized extract (Ginkgo biloba)
Gotu Kola herb (Centella asiatica)
Holy Basil herb (Ocimum sanctum)
Lavender flower (Lavendula angustifolia)
Lemon Balm herb (Melissa officinalis)
Periwinkle herb (Vinca minor)
Rosemary herb (Rosmarinus officinalis)
Sage herb (Salvia officinalis)

Some supplements including Phosphatidyl Serine (PS), DHA (from fish oil), B-complex and Acety-l-carnitine have all shown benefits for enhancing memory and cognitive function. A new study found low levels of vitamin D were associated with increased dementia and cognitive decline.
Atherosclerosis
For many years atherosclerosis was seen as a disease caused by excessive consumption of saturated fats. A low fat diet was seen as a way to lower LDL & VLDL cholesterol and prevent deposition of fatty plaques on the arterial walls. We now know that poor quality fats (trans-fatty acids, fried foods, rancid fats) do play a role, but systemic inflammation, insulin resistance, oxidation of fats, and low grade infections play equal if not greater roles in this condition. We also recognize that good fats, especially Omega 3 fatty acids, as well as dietary antioxidants and nutrients (Vitamin A, C, D, E, zinc, selenium. Alpha lipoic acid, grape seed extract, CoQ10), are very important for maintaining cardiovascular health and preventing arterial disease.

Herbs for preventing and treating atherosclerosis
Blueberry Solid Extract (Vaccinium spp.)
Cinnamon bark (Cinnamomum spp.)
Dan Shen root (Salvia miltiorrhiza)
Garlic bulb (Allium sativum)
Green Tea (Camellia sinensis)
Gum Guggul gum (Commiphora mukul)
Hawthorn berry/flower (Crataegus spp.)
Linden Flower (Tilia spp.)
Lycium fruit (Lycium barbata)
Pomegranate (Punica granatum)
Rosemary herb (Rosmarinus officinalis)
Sage herb (Salvia officinalis)
Turmeric rhizome (Curcuma longa)

Hypertension
Hypertension has become increasingly common over the last 50 years. Stress, obesity, insulin resistance, atherosclerosis, diabetes, magnesium and calcium deficiency, and excess sodium are all contributing factors. A study done in 2002 (ALLHAT) found that simple diuretics were as effective as the more expensive beta blockers, ACE inhibitors, and calcium channel blockers for treating mild to moderate hypertension. Not only was the therapy much less expensive, adverse effects were significantly reduced as well. For mild to moderate hypertension and white coat hypertension, herbs, diet, supplements (Co-Q-10, magnesium) and lifestyle changes are an appropriate and usually effective treatment protocol.

Herbs for hypertension
Black Haw bark (Viburnum prunifolium)
Chrysanthemum (Chrysanthemum morifolium)
Coleus Forskohlii standardized extract
Dandelion leaf (Taraxacum officinale)
Du Zhong bark (Eucommia ulmoides) – tea only
Garlic bulb (Allium sativum)
Gou Teng hooks (Uncaria sinensis)
Hawthorn berry/flower (Crataegus spp.)
Huang Qin root (Scutellaria baicalensis)
Linden Flower (Tilia platyphyllos)
*Mistletoe herb (Viscum album)
Motherwort herb (Leonurus cardica)
Olive leaf (Olea europaea)
*Rauwolfia root (Rauwolffia serpentina)

*Professional use only

The Digestive System
Achlorhydria (deficient gastric HCL)
As we age our secretion of hydrochloric acid diminishes. This can lead to feelings of gastric pain, gas, borborygmus, and impaired digestion/absorption. Many people assume that gastric pain is caused by excess acid and then take antacids or acid blockers to relieve symptoms. In the elderly, the chances are they have too little HCL, not too much. The OTC medications do temporarily reduce symptoms only to have them return soon after – worse than before. Herbs are a very effective treatment for this condition, enhancing digestion, absorption, and elimination.

Herbal digestive stimulants
Angelica root (Angelica archangelica)
Artichoke leaf (Cynara scolymus)
Chicory root (Intybus chicorium)
Cinnamon bark (Cinnamomum spp.)
Dandelion root (Taraxacum officinale)
Fenugreek seed (Trigonella foenum-graecum)
Ginger rhizome (Zingiber officinalis)
Orange peel (Citrus spp.)
Prickly Ash bark (Zanthoxylum spp.)
Turmeric rhizome (Curcuma longa)
Bowel function – constipation
As digestive function diminishes, a lack of HCL and bile salts creates a tendency towards slow transit time and constipation. A diet rich in soluble fiber, bitters, and adequate water helps to offset this problem. One to three bowel movements per day are normal and average transit time is 12-24 hours. Many medications can also contribute to constipation (iron supplements, morphine, sedatives) and dysbiosis (antibiotics) of the GI tract. Avoid using stimulant laxatives on a regular basis as they can cause bowel dependence (this includes senna, Cascara sagrada, buckthorn bark, and rhubarb root).

Herbal aperients and mild laxatives
Artichoke leaf (*Cynara scolymus*)
Butternut bark (*Juglans cineria*)
Culvers root (*Veronicastrum virginicum*)
Dandelion root (*Taraxacum officinale*)
Prune juice (*Prunus domestica*)
Red Alder bark (*Alnus rubra*)
Triphila – Ayurvedic bowel tonic

Bulk laxatives – Psyllium seed, Flax seed, Slippery Elm, Marshmallow, Agar, Pectin, Chia seed, Guar gum. Always be sure to drink plenty of fluids when taking bulk laxatives.

The Endocrine System

Fatigue
Fatigue is a common side effect of aging. Elders have increased sleep problems, often less exercise, and age-related diseases such as osteoarthritis can cause pain and interfere with good rest. Endocrine dysfunction (hypothyroidism, adrenal exhaustion, HPA depletion) all decrease vitality and energy and impaired digestion can lead to nutritional deficiencies that cause or exacerbate fatigue as well.

Many elders are also on many pharmaceutical medications which can cause drug/drug interactions and some medications interfere with sleep, cause nutritional deficiencies (statin drugs inhibit synthesis of CO-Q-10), and cause feelings of fatigue and mental fog. Adaptogens and herbal stimulants (in small amounts) can increase energy and feelings of vitality. Nervines and nootropics can reduce stress, mental fog, and help improve sleep.

Adaptogens
American Ginseng root (*Panax quinquefolium*)
Ashwagandha root (*Withania somnifera*)
Asian Ginseng root (*Panax ginseng*)
Cordyceps fungus (*Cordyceps sinensis*)
Dang Shen root (*Codonopsis pilosula*)
Eleuthero root (*Eleutherococcus senticosus*)
Holy Basil herb (*Ocimum sanctum*)
Jiaogulan herb (*Gynostemma pentaphylla*)
Licorice root (*Glycyrrhiza glabra*)
Rhaponticum root (*Rhaponticum carthamoides*)
Rhodiola root (*Rhodiola rosea*)
Schisandra berry (*Schisandra chinensis*)

CNS Stimulants
Cola nut (*Cola acuminata*)
Green Tea (*Camellia sinensis*)

Cerebral Stimulants (Nootropics)
Bacopa herb (*Bacopa monnieri*)
Ginkgo standardized extract (*Ginkgo biloba*)
Gotu Kola herb (*Centella asiatica*)
Rosemary herb (*Rosmarinus officinalis*)

Nervines
Damiana herb (*Turnera diffusa*)
Fresh Oat (*Avena sativa*)
Lemon Balm herb (*Melissa officinalis*)
Linden flower (*Tilia spp.*)
Mimosa bark (*Albizia julibrissin*)
St. John’s wort herb (*Hypericum perforatum*)

Thyroid insufficiency
Hypothyroidism has been called a “new epidemic”, with certain areas of the U.S. more affected than others. Unlike years ago when iodine deficiency was responsible for most thyroid deficiency, today there may be other causes including exposure to nuclear radiation from leaks from our nations aging power plants. The northeastern U.S., with its high number of nuclear power plants, also has high levels of hypothyroidism. There may indeed be a link. Other factors that may be linked to hypothyroidism include chronic stress, HPA axis depletion, and insulin resistance. Most books suggest seaweeds as a way to stimulate the thyroid, but it would seem in a time where most people have ample...
iodine (iodized salt, seafood, one-a-day multiple vitamins) in their diet, this would be unnecessary. Unfortunately this is often not true. Due to common iodine antagonists in the environment and diet (fluoride, bromine, and chlorine), people who actually have adequate iodine intake may still be iodine deficient. Reducing foods that inhibit thyroxin synthesis (fresh brassicas, possibly soy) can help, as well adding the amino acid tyrosine, selenium (100-200 mcg per day) and the following herbs:

**Enhances peripheral conversion of T4 to T3**
- Gum Guggul gum (*Commiphora mukul*)
- Myrrh gum (*Commiphora molmol*)

**Stimulates Thyroid Function**
- Bacopa herb (*Bacopa monnieri*)
- Nettles leaf (*Urtica dioica*)
- Blue Flag rhizome (*Iris versicolor*)
- Ashwagandha root (*Withania somnifera*)

**Good source of iodine & trace minerals**
- Bladderwrack (*Fucus vesiculosus*)
- Kelp (*Laminaria spp., Nereocystis spp.*)

**Stimulates HPA axis function**
- Asian Ginseng root (*Panax ginseng*)

*Professional use only

**Decreased immunity**
As we age, our thymus gland shrinks, our immune systems work less efficiently, and we become increasingly susceptible to viruses, bacterial infections, and cancer. Supporting essential body systems (digestion, circulation, elimination, sleep) helps to optimize the immune system, as does stress reduction. Herbs, diet, and supplements can dramatically enhance our ability to ward off colds, flu, pneumonia, and cancer.

**Immune stimulants/antivirals/antibacterials**
- Andrographis herb (*Andrographis paniculata*)
- Boneset herb (*Eupatorium perfoliatum*)
- Echinacea root (*Echinacea angustifolia*)
- Elderberry berries (*Sambucus nigra*)
- Forsythia/Lian Qiao fruit (*Forsythia suspensa*)
- Gardenia fruit/Zhi Zi (*Gardenia jasminoides*)
- Honeysuckle flower (*Lonicera japonica*)
- Houttuynia/Yu Xing Cao leaf (*Houttuynia cordata*)
- Isatis leaf/root (*Isatis indigotica*)
- Lomatium root (*Lomatium dissectum*)
- Osha root (*Ligusticum porteri*)
- Thyme herb (*Thymus spp.*)
- Yarrow herb (*Achillea millefolium*)

**Immune modulators**
- Astragalus root (*Astragalus membranaceus*)
- Cat’s Claw/Una de Gato bark (*Uncaria tomentosa*)
- Chaga mushroom (*Inonotus obliquus*)
- Cordyceps mushroom (*Cordyceps sinensis*)
- Eleuthero root (*Eleutherococcus senticosus*)
- Licorice rhizome (*Glycyrrhiza glabra*)
- Ligustrum berry (*Liustrum lucidum*)
- Maitake mushroom (*Grifola frondosa*)
- Reishi mushroom (*Ganoderma lucidum*)
- Turkey Tail mushroom (*Coriolus versicolor*)

**The Nervous System**

**Depression**
Depression is a common emotional/physical condition that can strike at any age. In the elderly, the combination of age-related illness and depression can be devastating. There are several theories as to the cause of depression, with the serotonin deficiency model as the primary focus. While SSRI’s temporarily increase serotonin levels and, in many cases, relieve some or all of the symptoms of depression, they are not curative. Depression is unlikely to have only one cause and simplistic treatments are likely to have only partial success.

When I am treating depression I look at stress, family and social integration, digestion and bowel health (much of the body’s serotonin is manufactured in the gut), emotional and spiritual beliefs, sleep patterns, hormonal issues, and age, as all can contribute to depression. The nutritional supplement SAMe can be very effective as a general antidepressant; do not use it in patients who have bi-polar disorder. Adequate vitamin D levels are necessary to help prevent seasonal affective disorder (SAD) and fish oil has been shown to help relieve bi-polar conditions.
Herbal antidepressants
Black Cohosh root (*Cimicifuga racemosa*)
Damiana herb (*Turnera diffusa*)
Evening Primrose herb (*Oenothera biennis*)
Holy Basil herb (*Ocimum sanctum*)
Lavender flower (*Lavendula angustifolia*)
Lemon Balm herb (*Melissa officinalis*)
– use with Hypericum for SAD
Linden Flower (*Tilia spp.*)
Mimosa bark (*Albizia julibrissin*)
Night Blooming Cereus stem (*Selenicereus grandiflorus*)
Rosemary herb (*Rosmarinus officinalis*)
St. John’s wort flowering tops (*Hypericum perforatum*)

Adaptogens which are useful for depression
Asian Ginseng root (*Panax ginseng*)
Eleuthero root (*Eleutherococcus senticosus*)
Holy Basil herb (*Ocimum sanctum*)
Rhaponticum root (*Rhaponticum carthamoides*)
Rhodiola root (*Rhodiola rosea*)
Schisandra berry (*Schisandra chinensis*)

Anxiety
Anxiety can range from a mild uneasiness to a crippling state of fear and uncertainty. Mild anxiety is normal when we confront an unknown situation or problem. Chronic anxiety is associated with stress, but like depression, it has no definite organic cause. It can be exacerbated by insomnia (it can also cause insomnia), excess caffeine, stimulant medications, chronic fear, Alzheimer’s and cardio-vascular disease. Severe anxiety attacks (panic disorders) may require medication, especially in the early stages of treatment.

Bacopa herb (*Bacopa monnieri*)
Blue Vervain herb (*Verbena hastata*)
Chamomile flower (*Matricaria recutita*)
Chinese Polygala root (*Polygala tenuifolia*)
Fresh Milky Oat (*Avena sativa*)
Kava root (*Piper methysticum*)
Motherwort herb (*Leonurus cardiaca*)
Passion Flower herb (*Passiflora incarnata*)
Pulsatilla herb (*Anemone spp.*)
– Professional use only
Skullcap herb (*Scutellaria lateriflora*)

Insomnia
Insomnia can affect people of all ages, but can become worse in the elderly. Increased sleep latency (difficulty falling asleep) and difficulty staying asleep are all associated with aging. Anxiety, depression, diabetes, pharmaceutical medications, BPH, menopause, pain, muscle spasms, nutritional deficiencies, and irritable bowel or bladder can easily affect sleep. The inability to get good quality sleep affects mood, overall health, and physical function. Lack of sleep can cause or exacerbate anxiety, depression, heart disease, muscle pain, impaired cognitive function, and immuno-suppression. Helping to restore normal sleep to an ill patient should be one of a clinician’s first priorities.

Herbal sedatives and nervines
California Poppy herb/root (*Eschscholzia californica*)
Chamomile flower (*Matricaria recutita*)
Corydalis tuber (*Corydalis yanhusuo*) – insomnia with pain
Hops strobiles (*Humulus lupulus*)
Lavender flower (*Lavendula angustifolia*)
Lemon Balm herb (*Melissa officinalis*)
Linden flower (*Tilia spp.*)
Passion Flower herb (*Passiflora incarnata*)
– insomnia with circular thinking
Skullcap herb (*Scutellaria lateriflora*)–
– insomnia with anxiety and muscle tension
Valerian root (*Valeriana officinalis*)
Zizyphus seed (*Zizyphus spinosa*)

The Musculoskeletal System
Arthritis
Arthritis can have several causes. The most common form of arthritis is osteoarthritis, associated with age related “wear and tear” or trauma. Other forms of arthritis include rheumatoid arthritis (autoimmune), gouty arthritis (excess uric acid), and psoriatic arthritis (an autoimmune arthralgia). Osteoarthritis is the most likely condition associated with old age. Orthodox therapy is palliative – it includes NSAID’s, therapeutic exercise, rest, and hot or cold applications. Herbal/nutritional treatment can also offer medications with antiinflammatory and pain relieving qualities. Hydrotherapy, acupuncture, magnet therapy, and supplements (glycosamine and MSM) can be helpful for
relieving arthritis pain. In addition, by treating the whole person, their digestion, elimination, circulation, immune systems, etc., we can often provide more complete and effective treatment with few if any side effects for arthritis.

Ashwagandha root (*Withania somnifera*)
Black Cohosh root (*Cimicifuga racemosa*)
Boswellia gum/resin (*Boswellia serrulata*)
Celery Seed (*Apium graveolens*)

– especially for gouty arthritis

Devil’s Claw root (*Harpagophytum procumbens*)
Drynaria root/Gu Sui Bu (*Drynaria fortunei*)
Ginger root (*Zingiber officinale*)
Magnolia bark (*Magnolia spp.*)
Meadowsweet herb (*Filipendula ulmaria*)
Ox-Knee root (*Achyranthes bidentata*)
Sarsaparilla rhizome (*Smilax spp.*)
Turmeric rhizome (*Curcuma longa*)
Willow bark (*Salix spp.*)
Wood Betony herb (*Pedicularis spp.*)

Topical applications: Hypericum oil, Trauma oil

**Osteoporosis**

Osteoporosis is most often associated with menopausal and post-menopausal women. Men can develop osteoporosis, but it is less common. Loss of bone density and bone loss actually start well before menopause. An old folk saying was that for every child you bear, you lose a tooth. A lifetime of poor nutrition (lack of calcium, magnesium, boron, essential fatty acids, Vitamin D, C, and K, and excess phosphorus, protein, and saturated fat), lack of exercise, smoking, excessive alcohol consumption, hyperthyroidism, and long-term use of corticosteroids all are significant risk factors for osteoporosis. The real key is prevention, rather than taking Fosamax after bone loss has occurred.

Alfalfa herb (*Medicago sativa*)
Amla fruit (*Emblica officinalis*)
Dandelion leaf (*Taraxacum officinale*)
Drynaria root/Gu Sui Bu (*Drynaria fortunei*)
Horsetail herb (*Equium arvense*)

Nettle leaf (*Urtica dioica*)
Oat Straw (*Avena sativa*)
Peppergrass herb/seed (*Lepidium spp.*)
Processed Rehmannia root (*Rehmannia glutinosa*)
Teasel root (*Dipsacus asper, D. japonicus*)

Supplements such as soy isoflavones (as well as isoflavones extracted from Kudzu and Red Clover) and resveratrol have shown the ability to improve bone density and prevent osteoporosis.

**Sciatica**

Sciatica is a painful inflammation of the sciatic nerve. The pain usually is felt from the buttocks (right or left), down the inside or back of the thigh. The pain is severe and worse with motion. The majority of cases resolve within 6 weeks and chiropractic, acupuncture, heating pads, indirect massage, and herbs can offer pain relief and speed the healing process.

Clematis root (*Clematis chinensis*)
Horse Chestnut seed (*Aesculus hippocastanum*)

– for dull, throbbing pain, tissue is edematous

Ox-knee root (*Achyranthes bidentata*)
Prickly Ash bark (*Zanthoxylum spp.*)
St. John’s wort flowering tops (*Hypericum perforatum*)
Sweet Melilot herb (*Melilotus officinalis*)

– sharp, stabbing pain

Teasel Root (*Dipsacus asper, D. japonicus*)

Topical application – Trauma oil (contains Arnica, Lobelia seed, Hypericum, and essential oil of Black Birch)

**Female Reproductive System**

**Menopause**

For some women, the cessation of their menses is a relatively minor change in their lives. They suffer no significant menopausal symptoms and they are free from possible undesired pregnancies. Others experience mild to moderate symptoms and approximately 1/3 of women have more serious and debilitating symptoms. A lifelong healthy diet with adequate nutrients (especially vitamin C,D, E, isoflavones, antioxidants, calcium, magnesium, etc.) have been shown to reduce risk of cardiovascular
and musculoskeletal symptoms associated with menopause. Women who smoke or are overweight often have more serious menopausal symptoms.

**Hot flashes**
Black Cohosh root (*Cimicifuga racemosa*)
Chaste Tree fruit (*Vitex agnus-castus*)
Licorice root (*Glycyrrhiza glabra*)
Motherwort herb (*Leonurus cardiaca*)
Soy or Red Clover isoflavones
Er Xian Tang (Two Immortal Decoction)  
— contains Dang Gui, Epimedium, Anemarrhena, Phellodendron, Morinda, and Curculiginis

**Excessive sweating**
Sage herb (*Salvia officinalis*)
Ox-eye Daisy herb (*Chrysanthemum leucanthemum*)
White Peony root (*Paeonia alba*)

**Mood swings or anxiety**
Blue Vervain herb (*Verbena hastata*)
Chinese Polygala root (*Polygala tenuifolia*)
Fresh Milky Oats (*Avena sativa*)
Motherwort herb (*Leonurus cardiaca*)
*Pulsatilla herb (*Anemone pulsatilla*)  
— Professional use
Scullcap herb (*Scutellaria lateriflora*)

**Menopausal depression**
Black Cohosh root (*Cimicifuga racemosa*)
Night-blooming Cereus stem (*Selenicereus grandiflorus*)
*Pulsatilla herb (*Anemone pulsatilla*)
Tiger Lily bulb/herb (*Lilium lancifolium*)

**Vaginal dryness**
Dang Gui root (*Angelica sinensis*)
Licorice root (*Glycyrrhiza glabra*)
Mai Men Dong bulb (*Ophiopogon japonicus*)
Milky Oat (*Avena sativa*)
Processed Rehmannia root (*Rehmannia glutinosa*)
Shatavari root (*Asparagus racemosus*)
Also, Omega 3 fatty acids (fish oils are best) and Vitamin E

**Male Reproductive System**

**Benign Prostatic Hypertrophy** (BPH)
Most men by the age of 55 have some evidence of prostate enlargement. Adequate essential fatty acids, lycopene, zinc (20-30 mg per day), and vitamin E can help inhibit the promotion of BPH and prostate cancer.

Collinsonia herb/root (*Collinsonia canadensis*)
Nettle root (*Urtica dioica*)
Partridge vine herb (*Mitchella repens*)
Pumpkin seed oil (*Cucubita pepo*)
Pygeum bark (*Prunus africana*)
Saw Palmetto berries (*Serenoa repens*)
Small flowered Willow herb (*Epilobium parviflorum*)
Tickseed herb (*Bidens spp.*)
White Sage herb (*Salvia apiana*)
Wintergreen herb (*Gaultheria procumbens*)
Also beta-sitosterol (120 mg TID) and flower pollen can help prevent or reduce BPH symptoms

**Erectile dysfunction**
ED can be either physiological or psychologically induced. In older men, most ED is caused by circulatory disease (diabetes, atherosclerosis, prostatic disease, heart problems, hypertension) or medication (antidepressants, beta-blockers, steroids). The new medications for this condition (Levitra, Viagra, and Cialis) are very effective but do not work for all men and are contraindicated for men taking nitroglycerin, nitrates, or alpha-blockers. An amino acid, Arginine, has been found to help improve penile blood flow in several clinical trials.

Ashwagandha root (*Withania somnifera*)
Asian Ginseng root (*Panax ginseng*)
Ginkgo standardized extract (*Ginkgo biloba*)
Muira Puama root (*Psychotropical olacoides*)
Rou Cong Rong herb (*Ginsanche salia*)
Suo Yang herb (*Gynomorium songaricium*)
Yin Yang Huo leaf (*Epimedium spp.*)

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