## The Action Formula

#### Lisa Ganora

Action Formulation: the art of balancing traditional herbal energetics and clinical actions to create a powerfully targeted formula (one that is tailored to an individual's constitution and the energetics / characteristics of their particular condition). This formulation strategy takes into account the traditional energetics and actions of the herbs themselves, as well as the energetics of the client's temperament (constitution).

In contemporary American herbalism, we have a tendency to either formulate in 'kitchen sink' style, tossing a bunch of different 'good for' herbs in together, or we sometimes follow a formulaic or protocol approach: one size fits all. There is also a contemporary trend toward dispensing or formulating based on pharmacology and/or phytochemical constituents. Every approach has its place, but for complex or chronic situations, it can be very helpful to formulate based on a consideration of the totality of an herb's energetic characteristics and clinical actions.

### **Herbal Actions**

#### Herbal Uses vs. Actions

The following are examples of 'actions' that describe what the herb is used for, rather than being true actions of the herb or responses of the body's vital intelligence as it encounters the herb.

AdaptogenAntifungalHemostaticAnodyneAntitussiveHypoglycemicAnti-arthriticAntiviralParturientAntibacterialBronchodilatingStomachicAntidepressantFebrifugeVermifuge

#### **Traditional Clinical Actions**

Contrast the list of uses above to this list of traditional clinical actions: these are effects on the human body, brought about as it encounters and processes the physical and energetic qualities of the herbs taken in. These actions/responses/effects are experiential, observational, and clinically useful; they form the basis for choosing herbs in an action formula.

**Alterative** – Having a steady, moderate, reliable, long-term effect on specific organs/systems or on the entire body: improves assimilation of nutrients, enhances detoxification, corrects 'Bad Blood' syndrome.

**Antiseptic** – A topical antimicrobial, antibacterial agent that deals with infection via direct contact. 'Topical' includes mucous membranes that may be contacted by the remedy (in respiratory, GI, urinary, digestive and reproductive tracts), as well as the skin.

**Antispasmodic** – Reduces irritability, constriction and cramping in muscle; may act through the nervous system, or directly on the muscle tissue itself. Can affect smooth muscle, skeletal muscle, or both.

**Aperient** – a gentle opening/releasing action; usually used to refer to a gentle laxative. Removes obstructions in the GI system.

**Aromatic** – Expressing the diffusive character via essential oils. Aromatics are to some extent warming, but certain herbs may be contradictory in this respect (e.g., *Achillea* – cooling bitter quality and also warming aromatic quality; or the complex Mints). They tend to be antispasmodic and/or carminative.

**Astringent** – Having a firming, invigorating effect on the tissues; usually cooling, draining, drying. Generally based on tannin constituents, but there are exceptions (e.g., berberine alkaloids).

**Bitter** – Refers to the organoleptic quality, and the tonic, cooling, draining and drying effect of bitter herbs; generally, stimulating to the digestive system. Bitter principles include sesquiterpene lactones.

**Carminative** – A type of antispasmodic, specifically applies to reducing spasms in the gut. Carminatives may act through nerves and/or muscle, and by releasing or increasing the circulation of energy, blood, and/or lymph in the GI system.

**Cholagogue** – Stimulates production and release of the bile, thus enhancing digestion (especially of fats) and nutrient absorption, aiding in detoxification, and supporting healthy bowel movement.

**Demulcent** – Soothing, cooling, moistening, lubricating to the mucous membranes (respiratory, digestive, urinary, reproductive) and skin. Demulcent herbs may also be constitutionally moistening as they help a dry person to retain more water.

**Diaphoretic** – Relaxant diaphoretics open the pores, 'open the surface' – and may thus moisten the skin, helping to release the heat of a high fever, or promoting perspiration. Stimulant diaphoretics add the qualities of a circulatory stimulant, opening the dermal capillary beds and bringing heat up to the surface. Diaphoretics are constitutionally drying.

**Diuretic** – Increases the drainage of accumulated fluid from the tissues, and/or enhances the flow of urine. Diuretics tend to be constitutionally drying.

**Emetic** – provokes vomiting, but is non-toxic (e.g., *Lobelia, Eupatorium*). An *anti-emetic* quells nausea/vomiting.

**Emmenagogue** – promotes the flow of menstrual blood, especially when blocked by physical or energetic tension; releases pelvic congestion. Some emmenagogues are also parturients. Emmenagogue does not necessarily mean "abortifacient," although it was a code-word used that way in more restrictive times.

**Emollient** – Very similar to *demulcent*; sometimes used more to denote a topical action as opposed to an internal one. Cooling, moistening, soothing, lubricating.

**Expectorant** – Increases the flow of mucous from the respiratory membranes. May act through tonification or relaxation. The effect is not necessarily limited to or focused on the lungs, although this is the general usage. Most of these herbs can affect all of the mucous membranes.

**Galactagogue** – stimulates the production and/or flow of breast milk.

**Nervine** – relaxes, tonifies, nourishes, or relieves pain in the nervous system. In Physiomedicalism, this word can be used for those agents which other systems might call *anodynes* and *sedatives*.

**Nutritive** – provides minerals, vitamins, phytonutrients; nourishing to tissues, organs, systems. Nutritives are a foundation of Vitalist medicine.

**Parturient** – Stimulates the power and efficiency of the uterus during childbirth. Some parturients are also emmenagogues.

**Rubefacient** – A topical agent that attracts blood to the area; stimulates circulation & detoxification of the tissues & tissue fluids.

Sialagogue – Stimulates the flow of saliva.

**Tonic** – In a more general sense, a tonic supports, strengthens, restores, or invigorates. Tonics may affect the entire system, or can be more focused, as in 'uterine tonic' or 'digestive tonic.' This term is sometimes used as a rather mooshy catch-all description of an herb that's "good for" a system or a person, in some unspecified way.

**Vulnerary** – Aids in wound healing. May do so through a number of different actions.

## **Traditional Herbal Energetics**

Vitalist / Physiomedicalist energetic actions in Western herbalism include:

- Relaxant
- Stimulant
- Tonic/Astringent
- Vital Stimulant
- Diffusive (several meanings)
- Trophorestorative

- Cooling (cool, cold)
- Warming / Heating (warm / hot)
- Moistening (moist)
- Drying (dry)

Each of these categories has subtypes. For instance, the action *Relaxant* can more specifically be muscle relaxant, nervine relaxant, mucous membrane relaxant, etc. *Warming* or *Heating* imply the quality of an herb that is stimulating to the metabolism in general, warming to the digestion, warming to the skin, stimulating to the peripheral circulation, strengthening to a particular metabolic process, accelerating an effect, etc. Cooling may indicate general metabolic slowing or calming effects, relieving excess heat in the digestive tract, cooling a hot, red infection or inflammation, etc.

#### **Temperature and Moisture**

In the Unani (Greek/Arabic) system, a major root of Western herbal energetics, temperature is a relational quality between herb and human constitution. It is ranked in degrees from 1–4, with 4 being the most intense (e.g., cold in the first degree is mildly cooling, and gently brings an overheated condition back to normal; hot in the fourth degree is very hot and could burn tissue – e.g., topical Garlic). A similar understanding applies to the qualities of moisture and dryness.

- A Heating (warm/hot) herb is one which increases circulation, raises the pulse, increases metabolism, or which 'feels' hot with the vital temperature meter of intuition.
- A Cooling (cool/cold) herb is one which helps reduce pathological heat in fever or inflammation; which slows the pulse or causes it to sink; which reduces metabolism or individual processes; or which reduces nervous system activity.
- A Moistening (wet) herb is one which causes the skin or mucous membranes to become
  moist, or which promotes fluid retention. In herbalism, the demulcent herbs are generally
  moistening to the entire system.
- A Drying (dry) herb is one which dries up the skin, mucous membranes, or the system in general. Diuretics, astringents, and most diaphoretics are all drying herbs to some degree.

It is important to identify the different moisture and temperature states in both the client and the herb (by degree, when possible) in order to avoid constitutional aggravation from an imbalanced formula. According to William Cook, a prominent Physiomedicalist, a hot herb like Cayenne is "as out of place in a hot constitution as a bonfire on the Fourth of July." Similarly, prolonged use of cooling herbs can chill a person

with a cold constitution. The same principles apply to drying and moistening: a cool, moist herb may not be the best agent for a person with a colder, boggy condition or constitution.

## **Physiomedicalist Energetics/Actions**

The following terms were developed by the North American Physio-Medical physicians of the 19<sup>th</sup> and 20<sup>th</sup> centuries. First among these was William Cook, who published his classic work on therapeutics and *Materia Medica*, *The Physio-Medical Dispensatory*, in 1869. He was followed by TJ Lyle, whose *Physio-Medical Therapeutics*, *Materia Medica*, *and Pharmacy* came along in 1897. These terms, though somewhat foreign to today's herbalist, are very useful once you get the hang of them. A key point is that, like the hot/cold, warm/moist energetics of Unani tradition, the Physiomedical actions can be felt and experienced – so part of learning them is to repeatedly experiment with individual herbs until the descriptive energetic terms take on embodied significance. It is most helpful to do this when looking the herbs up in Cook and Lyle.

**Diffusive** – This term has a somewhat dual meaning. First, it can be opposed to 'permanent' when referring to the speed/duration of the impression made by the herb. *Diffusive* can mean an immediate and transient vital/neurological 'communication' effect of an herb; while *permanent* is a longer-lasting, more systemic or pharmacological effect. The second meaning of *diffusive* refers to the quality of an herb that directs circulation and/or vitality from the core towards the surface, and/or diffuses the effects of the herb (or other herbs with which it is given) more widely throughout the body. The diffusive quality is often associated with aromatic constituents, warm constituents, or circulatory stimulants. Examples: *Zingiber*, *Capsicum* 

**Relaxant** – Relieves excess tension, rigidity, hypertonicity, etc. An herb can be relaxant to a tissue, process, organ/system, etc. Soothing, calming, releasing. Can remove obstructions to the circulation of blood, life energy, etc. Relaxants can have a secondary stimulating quality, in that when they remove obstructions, the vitality of the affected tissue or system can rebound. Example: *Lobelia*, *Asclepias* 

**Stimulant** – Enhances function and energy/expression of a tissue, process, organ/system, etc. Accelerates processes, movement. Empowers, strengthens. Counteracts excess laxity of a tissue, system, or function. Examples: *Inula*, *Symphytum* 

**Tonic/Astringent** – "Imparts a fuller vigor and a stronger acting power to the system ... slowly and permanently [gives] greater firmness to the tissues" – Wm. Cook. The word *tonic* is also used in a more general sense, as in 'uterine tonic' or 'digestive tonic' as well as in the more focused sense of tonic/astringent. This energetic action is often associated with the quality of astringency and with astringent constituents such as tannins. Examples: *Rubus*, *Achillea* 

**Trophorestorative** – Nourishes and restores the function of a tired, compromised, diseased tissue, organ, or system. Example: *Crataequs*, *Avena* 

**Vital Stimulant** – Evokes and supports expression / reaction of the Vital force. Any herb which grab's ones attention and evokes a perhaps startled or at least intrigued vital response. Examples: *Echinacea, Hydrastis* 

# **Herbal Pairing**

In Western herbalism, there is a long tradition of pairing herbs to modify their individual actions. This is sometimes called 'the alchemy of pairs.' In a pair, each herb might modify, moderate, accentuate, or bring out different personality traits of the other. The Physiomedicalists used pairing extensively (see classic writings by William Cook, TJ Lyle, and R. Swinburne Clymer). More recently, Priest and Priest's *Herbal Medication* has an extensive section on herbal pairing.

"The admixture of remedies should not be left to crude accident, but should be made a question of close scientific investigation; for the value of numerous articles can be greatly enhanced by giving them in suitable company."

Wm. Cook, 1869

Some of these classic pairs are still in clinical use today, such as *Lobelia + Capsicum*, *Matricaria + Mentha*, and *Hydrastis + Commiphora*. The importance of pairs is that they can be used to form the nucleus of a well-crafted action formula.

## Strategies for Pairing

Adding diffusive energy or circulatory stimulation – in order to accentuate or spread the action of a simple more widely around the body

Most simples plus Zanthoxylum, Capsicum, or Zingiber

#### Amplification – two herbs that do basically the same thing, but perhaps in different ways

Taraxacum and Mahonia (bitter liver stimulants)
Astragalus and Ganoderma (support immunity)
Selenicereus and Crataegus (strengthen and restore cardiac function)

#### Steering the herb to emphasize one of its actions

Agrimonia is a mild astringent for the gut, a mild hepatic, and also tonic/astringent to the urinary and female reproductive tracts.

- Agrimonia plus a hepatic: Taraxacum
- Agrimonia plus a urinary tract tonic: Arctostaphylos
- Agrimonia plus a uterine tonic: Mitchella or Rubus

*Grindelia* is a warming, aromatic, relaxant, antispasmodic, antiseptic anti-inflammatory that affects the mucous membranes ...

- Grindelia with Euphrasia sinuses
- Grindelia with Ligusticum bronchial tract
- Grindelia with Inula gastrointestinal tract

## Pairs that balance energetics

Gentiana lutea and Zingiber officinale (warming and cooling)
Valeriana officinalis and Humulus lupulus (warming and cooling)
Ligusticum porteri and Glycyrrhiza glabra (drying and moistening)
Mentha piperita plus Althaea officinalis (warm/cool, dry and cool, moist)

## Analyzing the Alchemy of a Pair

- Hydrastis: cold and dry; tonic/astringent, mucous membrane tonic, bitter tonic, cholagogue, mild laxative, topical antimicrobial
- Commiphora: warming, drying; aromatic, stimulant, tonic/astringent, bitter, antimicrobial

The Pair: mucous membrane tonic, general tonic/astringent, antimicrobial through separate mechanisms (involving various astringent, bitter, and aromatic constituents); balanced warm, cold; dry

This pair may be suitable for a boggy, infected, inflamed condition of the mucous membranes in a person who is not excessively dry.

# From Pair to Triplet

Add a third herb to direct or modify the pair for the client's condition or constitution.

- Hydrastis + Commiphora, as above, is dry
- Symphytum is moistening, and also acts on mucous membranes

Adding Comfrey to the pair makes the combination more acceptable for a dryer, inflamed condition or for a person with a dry constitution.

# **Strategies of Formulation**

- o Identify the primary focus of the formula and desired outcome
- Identify the constitution / temperament of your client
- Select a leading herb or pair based on actions and energetics
- Select a third and/or fourth herb to balance the energetics of the pair
- Consider using herbs to 'lead' the formula to the tissue of concern
- Think about what else may be needed to support or balance constitution
- Identify systems needing secondary support
- Eliminate redundancies, see if a polycrest herb might take the place of multiple others
- Analyze the formula for flavor, practicality, and compliance issues. No harm in adding something tasty, if that makes the difference between compliance and non-compliance.

## **Example: Antispasmodic / Carminative GI Formula**

Leading pair: *Mentha piperita* and *Matricaria*. Together they are relaxant, diffusive, diaphoretic, antispasmodic, carminative, anti-inflammatory, bitter, cooling (with a bit of warmth from the *Mentha*) and drying. To modify the drying effect, add: *Althaea* (also anti-inflammatory and antispasmodic) + *Glycyrrhiza* (also anti-inflammatory and neutral in temperature). To add warmth: *Foeniculum* (also carminative, antispasmodic, and anti-inflammatory). A touch of *Zingiber* would warm it up even more.

#### **Digestive Formula**

Mentha + Matricaria Glycyrrhiza +/or Althaea Foeniculum +/or Zingiber

## The Action Formula

## A Modern Formula for GI Mucous Membrane Integrity

Here is an action formula designed to help heal leaky gut syndrome, which can be both a contributor to, and a causal factor of, food intolerances. Secondarily, it provides symptomatic relief of GI irritation. This formula can easily be tailored to fit the individual client's constitution by either adjusting the proportions of each herb, or substituting more appropriate herbs.

Herb Actions

Calendula officinalis anti-inflammatory, antispasmodic, vulnerary, antiseptic,

immunostimulant, mild hepatic, warm, dry; mixed relaxant and

stimulant effects

Matricaria recutita digestive bitter, topical anti-inflammatory, sedative, nervine,

carminative, antispasmodic, neutral-to-cooling temp, dry;

mainly relaxant, with some bitter stimulant effects

Mentha piperita digestive antispasmodic, carminative, anti-emetic, antiseptic,

both warming and cooling, dry, diffusive

Foeniculum vulgare carminative, anti-inflammatory, antispasmodic, warming, dry,

relaxant, diffusive

Glycyrrhiza glabra systemic anti-inflammatory, immunostimulant, demulcent,

adaptogen, hepatoprotectant, moistening, neutral temp,

mainly relaxant

Althaea officinalis demulcent, immunostimulant, cooling, moistening, relaxant

#### Traditional pairs in the formula

Matricaria and Calendula: strong anti-inflammatories for GI mucous membranes

Matricaria and Mentha: carminative, antispasmodic, and tonic to GI system

Mentha and Althaea: cooling and relaxant for GI distress (e.g., cramps, heartburn)

#### **Action Formula**

Effects on GI tissues	Matricaria	Calendula	Foeniculum	Glycyrrhiza	M. piperita	Althaea
Anti-inflammatory	+	+	+	+		
Antispasmodic	+	+			+	
Antiseptic		+			+	
Carminative	+		+		+	
Demulcent				+		+
Digestive bitter	+	+				
Immunostimulant		+		+		+
Vulnerary		+				
Effects on liver						
Hepatoprotectant				+		
Mild hepatic		+				

Effects on Nervous/Endocrine	Matricaria	Calendula	Foeniculum	Glycyrrhiza	M. piperita	Althaea			
system									
Adaptogen				+					
Relaxant	+								
Nervine	+								
Energetics									
Warming		+	+		+				
Cooling	+				+	+			
Neutral Temp	+			+					
Moistening				+		+			
Drying	+	+	+		+				
Neutral Humidity									
Relaxant	+	+	+	+	+	+			
Stimulant		+			+	+			
Diffusive			+		+				
Tonic/Astringent	None of the herbs in this formula are tonic/astringent to a significant degree, but adding a bit of <i>Plantago</i> would introduce this quality to the formula.								
Trophorestorative	The formula is lacking in this quality (although we might make a case for <i>Calendula</i> ), but								
	adding a pinch of <i>Hydrastis</i> , a trophorestorative for the mucous membranes, would								
	introduce this quality to the formula.								
	Matricaria	Calendula	Foeniculum	Glycyrrhiza	M. piperita	Althaea			

## References

Cook, William. *The Physio-Medical Dispensatory*, 1869. You can search the entire book on Paul Bergner's website at <a href="http://medherb.com/cook/home.htm">http://medherb.com/cook/home.htm</a>

Lyle, TJ. *Physio-Medical Therapeutics, Materia Medica, and Pharmacy*, 1897. Online at David Winston's site: <a href="https://www.herbalstudies.net/">https://www.herbalstudies.net/</a> media/resources/library/Physio-Medical-Therapeutics.pdf

Priest, A.W. and L.R. Priest. *Herbal Medication: A Clinical and Dispensary Handbook*. 1983. Good luck finding one of these in print for less than \$275. Download a PDF by joining Scribd.com for a free trial.

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