Herbal formulation is an art (and a healing, tasty one at that!) and a way of life. To be a good herbalist is to find balance everywhere, not just in your tea blend or tincture. The herbalist philosophy is for everyone, and it’s essential to understand in order to be an effectual healer. Life, and herbalism, is all about balancing the dynamic forces both within and around us. We do this by utilizing energetics, or a classification system based on 4 complementary qualities: hot/cold, dry/damp (De La Foret). Understanding energetics requires perception: paying attention to our body’s responses to the things we do, foods we eat, people we surround ourselves with, and places we go. To be an herbalist is to awaken the senses so you can read the signs and find the best remedy. This philosophy is simple and yet profoundly effective. If you start living this way, healing will inevitably follow.

Unfortunately, our medical world (for the most part) still follows the “Magic Bullet” or “One Solution” paradigm. This means naming the disease and then matching a drug to it. The Magic Bullet method was effective when the prevalent diseases were acute infections requiring specific antidotes. However, today’s world is riddled with chronic disorders created by ignoring the body’s signs and not respecting each person’s unique bioindividuality when it comes to prescribing a medication (modern medications also disregard the domino effect that results from interfering with the body’s natural mechanisms for healing; hence all the unwanted side effects). Bioindividuality sees each human as incredibly unique with varying energetics and specific requirements to achieve health. There is no one-size-fits-all in herbalism. You must understand the individual’s constituent before you can find their remedy.

Talented herbalist David Winston said, “Herbs are becoming more popular, but herbalism isn’t”. This means we still use the Magic Bullet paradigm for herbs (both because of this paradigm’s prevalence and the ability for companies to make money from it). Can’t sleep? Take valerian! Sick? Take Echinacea! Curcumin is a cure-all! Rather than take the time to understand a person’s constitution and balance their energetics, we slap on an irrelevant band-aid that masks the root of the issue. Valerian isn’t good for everyone, and Echinacea can do more harm than good if the energetics aren’t first assessed. True healing can and will never come with this mindset.

I’d like to insert the wise quote from The Hobbit here, “Shortcuts make long delays”. Yes, it takes a bit of time to understand an individual’s constitution and match the remedy accordingly. In the long run, however, this sort of practice will bring about such profound change: deep-rooted healing, an awakened perspective, and even a shifting of the modern medical paradigm. Take insomnia for example. There are herbs to cure insomnia, but insomnia can come from hot situations or cool ones. A woman going through menopause with a damp (i.e. mucusy) constitution will not respond well to Valerian (Valeriana officinalis), an herb known for its hot and damp energetics. To take valerian would only exacerbate the situation. On the other hand, another insomniac with a cool and dry constitution might benefit profoundly from this useful root.

Plants have energetics. Humans have energetics. Illnesses and situations have energetics. When we find the balance between these opposing forces, healing follows. Now let’s get formulating!
The Sweet Spot
(Rosalee de la Foret)
You will always find an effective herb or formula if you first consider how to balance these 3 forces: your constitution, plant energetics, the current situation

Herbal Energetics
When formulating, pay close attention to the herb’s energetics- all the best formulas contain herbs that balance one another. Does it dry your mouth out? Does it make your nose run? Some herbs can simultaneously have 2 opposing energetics. Take peppermint for example: it is cooling but can bring heat to the stomach. As you continue working with herbs, it will become much more apparent which herbs are hot, cold, drying, or dampening for you. Practice placing the herbs from your bitter formula on the chart below based on their energetics.
Life is Better with Bitters

Bitters are “not a medicine, but a necessity” and a “forgotten flavor” crucial for our survival as a species (Daniel Charles-Davies).

On the “Bitter Deficiency Syndrome”: It is my opinion that the nearly complete lack of bitter-flavored foods in the overall U.S. and Canadian diet is a major contributing factor to common cultural health imbalances such as PMS, hormonal imbalances, hypoglycemia, diabetes, etc.” (James Green, The Male Herbal)

Bitters are “our antennae to the world, alerting us to action” and compelling us to rise to the challenge (Guido Mase).

...eat with bitter herbs... (the Bible)

You are not what you eat, but how well you digest. –Italian proverb

Almost all the beneficial phytochemicals taste bitter (Guido Mase). All you need are some taste buds and it becomes glaringly obvious if something is bitter. Bitters are empowering, because rather than providing specific remedies, they provide components necessary for allowing our bodies to find overall good health (Jim McDonald). We need them for a truly thorough digestive experience. Bitters are a great example of how our body already has the tools for optimum health- we just need to facilitate this process by providing the proper raw materials.

Bitters have been bred out of our modern diet, and it’s a shame. The bitter accent stimulates digestion, opens airways, calms the heart, and awakens the soul. Above all, bitters stimulate adequate digestive juice flow. This allows for complete digestion with none of the unpleasant side effects of mal-digested food (bloating, burping, heartburn, allergies, etc.). When food isn’t completely digested before leaving the stomach and entering the small intestine, it not only causes discomfort, but it serves as a food source for bad bacteria, setting the stage for low or high grade allergy and auto-immune conditions to develop. Those large, un-broken down food particles can eventually leach through the barriers of the digestive tract, causing our body’s immune systems to go into high alert. Over time, repeated offenses exhaust our immunity, causing all sorts of chronic conditions.

The effect of bitter in the body is profound: bitter receptors (T2R) are located all over our bodies, from our tongues to our testes. When occupied, the T2R receptors stimulate our parasympathetic (rest and digest) response. In the sinuses, this helps dilate passageways and produce more snot with more immunoglobulins. This decreases the level of inflammation, making the tissue is less swollen and constrictive. In the lungs, T2R receptors signal our body to open our airways and increase dilation to facilitate easy breathing. In the heart, bitters cause parasympathetic vasoconstriction of peripheral T2R taste receptors. This mechanism directs blood towards the belly without the heart having to do all the work. Therefore, bitters can also lowers high blood pressure. Take preventative steps to reduce this probability by making bitters part of your daily regime.

How did human bodies evolve to depend on bitters?

Upon observation, one can see how herbivores/omnivores selectively choose mildly bitter tasting plants (think about your dog eating grass before/after meal). In this process, they are building up an immunity to protect themselves from more toxic bitter plants, and instinctively looking for ways to stimulate their digestive juices. As ancient plant eaters, we did the same thing. The bitter-tasting components of plants are its secondary compounds produced to protect that plant from predation, environmental stressors, and competition. A bit of nibbling on a plant will stimulate that plant to produce more secondary defense compounds, making it stronger in the long run. Of course, if you munch the whole thing down, that you kill the plant. So both plant-eaters and plants have been evolving this delicate dance of secreting just enough secondary compounds to stay alive and not die.

We embody the power of these secondary compounds when we eat bitter plants. Our internal protection designed to expel these potentially poisonous compounds was tamed and transformed into an invaluable reflex that both stimulates and tonifies our entire body (Mills and Bones). Humans eventually recognized the digestion-stimulating effects of bitters, and began to apply them in the diet for this purpose. Eventually, the bitter reflex evolved to be a critical part of our healthy functioning.
**Materia Medica**

*Women who are pregnant or lactating should stay away from most herbs unless otherwise instructed by trusted health professional*

**True Bitters**

*Wormwood* - *Artemisia absinthium, Asteraceae*

Taste/smell: intensely bitter, pungent, “blue”

Tendencies: extremely cooling

Actions: vermifuge, *euphaptic* bitter, digestive stimulant

*Wormwood is a very powerful herb only necessary in very small doses.*

*Yarrow* - *Achillea millefolium, Asteraceae*

Taste/smell: bitter, pine, “clean”

Tendencies: cooling, drying, toning

Actions: wounds: premier vulnerary (wound healer), hemostatic, antiseptic, styptic; digestion: stimulating bitter and tonic, antispasmodic; fever: blood-flow regulator, diaphoretic; sinuses: anti-catarrhal, astringent, anti-inflammatory, lymph-mover

**Aromatic Bitters**

*Calamus* - *Acorus calamus, Acoraceae*

Taste/smell: sweet, bitter, earthy, pungent, spicy, aromatic

Tendencies: grounding, cooling, warming, awakening, relaxing

Actions: digestion: tonic for heartburn, indigestion, and dyspepsia, bitter and appetite stimulant; head/mind: remedy for brain fog, clears the head and spirit, decongestant, breath-fresher; endocrine: decreases insulin resistant (blood sugar regulator)

*Cardamom* - *Elettaria cardamomum, Zingiberaceae*

Taste/smell: slightly bitter, slightly sweet, aromatic

Tendencies: warming, drying, astringent, relaxing

Actions: specific for GERD, digestive bitter, toning (tonic) to digestive system, strengthening to the Solar Plexus (where our gut instincts and intuitive faculties reside), headache remedy (particularly from tension, over-thinking, stress), expectorant, styptic, nervine

*Rosemary* - *Rosemarinus officinalis, Lamiaceae*

Taste/smell: woodsy, pine, aromatic

Tendencies: warming, drying, uplifting, grounding, circulating

Actions: carminative, antibacterial, antifungal, anti-spasmodic, anti-emetic, laxative; other: antidepressant, diuretic, antispasmodic, aphrodisiac, circulatory stimulant, nerve tonic, breath-fresher, cephalic

**Nutritive Bitters**

*Burdock* - *Arctium lappa, Asteraceae*

Taste/smell: sweet, bitter, mucilaginous

Tendencies: cooling, distributes moisture (although ultimately drying)

Actions: bitter stimulant, antibiotic, antifungal, mild laxative; cleansing organs: alterative, blood and lymph circulating, liver tonic, choleric; general: anti-inflammatory antimutagenic, antioxidant, anti-tumor
**Dandelion root** - *Taraxacum officinale, Asteraceae*
Taste/smell- bitter, sweet, nutty, earthy
Tendencies- mildly cooling, drying, salty, mineral-y
Actions- bitter stimulant, stomachic (digestive aid), inulin-rich (promote gut flora), hepatoprotective, choleric, hepatic enzyme induction, anti-inflammatory, nutritive, alterative, diuretic, blood-sugar stabilizing

**Elecampane- Inula helenium, Asteraceae**
Taste/smell- woody, bitter, fresh/earthy
Tendencies- bitter, mildly sweet, warming
Actions- specific for acute and chronic upper respiratory tract conditions: expectorant, demulcent, antitussive, mildly analgesic, antibacterial, bitter, nutritive, inulin-rich (promote gut flora), vermifuge, antifungal

**Licorice- Glycyrrhiza glabra, Fabaceae**
Taste/smell- excessively sweet, a bit earthy
Tendencies- cooling, moistening, mucilaginous, nourishing, strengthening, harmonizing
Actions- adaptogenic, adrenal support, anti-inflammatory (specific to irritated GI tract), harmonizer, demulcent, expectorant, nutritive, antispasmodic, estrogenic, immunomodulator, mild laxative, hepatoprotective

*Long term use is contraindicated for high blood pressure, heart failure, kidney disease, liver cirrhosis, and cholestatic liver disorders. Licorice mimics aldosterone by increasing sodium resorption and potassium excretion via the kidneys due to glycyrrhizin. Can raise blood pressure. Licorice inhibits 5-beta-reductase which regulates cortisol and aldosterone metabolism, reducing metabolic excretion of corticosteroids.

**Resources**
Cech, Richo. *Making Plant Medicine*
De la Foret, Rosalee. *Alchemy of Herbs*
Winston, David. *Herbal Therapeutics, 10th Edition*

Thank you for joining us!