When I first started studying herbs, I was confused...

- For instance, I read that White Oak Bark was good for:
  - Hemorrhoids
  - Bleeding
  - Varicose Veins
  - Excessive Menstrual Flow
  - Swelling

- My question was: how can one herb be good for so many “different” health problems
Tasting Herbs

“This practice of tasting herbs and roots has been of great advantage to me, as I have always been able to ascertain what is useful for any particular disease, by that means."

“I was often told that I should poison myself by tasting everything I saw; but I thought I ought to have as much knowledge as a beast, for they possess an instinct to discover what is good for food, and what is necessary for medicine.”

— Samuel Thomson

Herbal Energetics

- The basic constituents that give herbs their various properties can easily be detected using our own senses
- The effects of these basic constituents can also be felt (and observed), in other words, experienced directly
- This is the basis of what herbalists call energetics, or how herbs affect the energies of the body
My First Energetic Model

- Air = Bitters (loosening, detoxifying)
- Fire = Aromatics (stimulating, dispersing)
- Earth = Astringents (tightening, consolidating)
- Water = Demulcents or Mucilants (cooling, moistening)

Seven Element Energetic Model
Current Energetic System

- **Energy Production**
  - **Warm** (Stimulate or speed up metabolism, relieve tissue depression)
  - **Cool** (Sedate or slow down metabolism, reduce tissue irritation)
  - **Neutral** (Does not warm or cool)

- **Tissue Density**
  - **Moisten** (Lubricate and soften hard tissue, reduces atrophy)
  - **Dry** (Remove excess fluid from tissue, relieves stagnation)
  - **Balancing** (normalizes tissues from either atrophy or stagnation)

- **Muscle and Tissue Tone**
  - **Constrict** (Increase tone, reduce secretion, counteracts relaxation)
  - **Relax** (Relax spasms, increase secretion, counteracts constriction)
  - **Nourishing** (provides nutrients to help tissues heal)

12 Basic Herbal Categories

- **Pungent**
- **Aromatic**
- **Bitter**
  - **Simple** (Non-Alkaloidal)
  - **Alkaloidal**
  - **Fragrant**
- **Salty**

- **Astringent**
- **Sour**
- **Acrid**
- **Mucilant**
- **Sweet**
- **Oily**
Possible Arrangement?

Pungent Herbs

- Characteristics
  - Spicy or hot taste, biting aroma
- Constituents
  - Resins
  - Allyl-sulphides
  - Alkamindes
  - Some essential oils (monoterpenes)
- Energetics
  - Warming and drying
Examples of Pungent Herbs

- Capsicum (Chili Peppers)
- Ginger
- Mustard
- Garlic
- Horseradish
- Black pepper
- Thyme
- Eucalyptus

Properties of Pungent Herbs

- Move blood and energy upward and outward (towards skin and mucus membranes)
- Dispel stagnation
- Diaphoretic – induce perspiration
- Stimulating – increase blood circulation and enhance energy production
- Carminative – expel gas and aid digestion
- Digestive Aids – stimulate production of digestive secretions, enhance appetite
- Tonify metal, increase defensive qi (TCM)
Contraindications for Pungent Herbs

- Overuse depletes energy reserves and cools the body, due to perspiration and dispersal of energy
- May irritate digestive membranes in some people
- Not for people who are “hot” already: flushed, red, feverish, irritated, irritable

Aromatic Herbs

- Characteristics
  - Strong aroma, generally used as seasonings for adding flavor to food
- Constituents
  - Essential or volatile oils (oils that evaporate)
- Energetics
  - Warming and drying, but milder than pungent herbs
Examples of Aromatic Herbs

- Catnip
- Peppermint
- Chamomile
- Sage
- Lemon balm
- Basil
- Oregano
- Rosemary

Properties of Essential Oils

- Strong nervous system effects
- Diaphoretic – induce perspiration when taken hot
- Stimulating (mildly) – increase blood circulation and enhance energy production
- Carminative – expel gas and aid digestion
- Digestive Aids – stimulate production of digestive secretions, enhance appetite
- Nervine – calm or stimulate the nerves
- Disinfectant – help to destroy harmful microbes
- No contraindications for aromatic herbs, but pure essential oils should be used primarily topically and well diluted
Simple (Non-Alkaloidal) Bitters

- **Characteristics**
  - Bitter taste
- **Constituents**
  - Diterpenes
  - Glycosides
    - Athraquinone glycosides
- **Energetics**
  - Cooling and drying, but there are a few that are warming and drying

Examples of Simple Bitters

- **Cooling and Drying**
  - Alfalfa
  - Artichoke leaf
  - Gentian
  - Wild lettuce
  - Kale and other dark greens
  - Cascara sagrada
  - Turkey rhubarb
  - Hops
- **Warming and drying**
  - Turmeric
  - Dong Quai

Artichoke from Wikipedia
Properties of Simple Bitters

- Move energy inward and downward
- Digestive Stimulants: Stimulate hydrochloric acid production as well as secretion of bile and pancreatic enzymes when tasted
- Detoxifying: Bitters tend to stimulate detoxification processes in the liver, which can reduce tissue irritation and have a cooling effect
- Sedatives: some have calming, relaxing effects
- Anodynes: A few help to ease pain
- Stimulant laxative: Herbs with anthroquinone glycosides stimulate intestinal peristalsis

Contraindications for Simple Bitters

- Cooling bitters can deplete digestion over time, while warming bitters are unlikely to have this effect. The effect of cooling bitters is modified by adding aromatic or pungent herbs to digestive tonics.
- Bitters should be avoided by thin, weak, emaciated and dry people
- Excessive use of bitters is wasting (i.e., promotes depletion of tissue moisture)
Alkaloidal Bitters

- **Characteristics**
  - Bitter taste

- **Constituents**
  - Alkaloids (alkaline compounds, names end in –ine)
  - Examples: caffeine, nicotine, berberine, lobeline, hydrastine

- **Energetics**
  - Cooling and drying

Examples of Alkaloidal Bitters

- Goldenseal
- Oregon grape
- Lobelia
- Coffee
- Chocolate
- Chinese ephedra
- California poppy
- Barberry
- Scotch broom

Oregon Grape—Photo by Steven Horne
Properties of Alkaloidal Bitters

- **Digestive Stimulants**: Stimulate hydrochloric acid production as well as secretion of bile and pancreatic enzymes when tasted
- **Detoxifying**: Bitters tend to stimulate detoxification processes in the liver
- **Specific nervous and glandular effects**: depending on the alkaloids, alkaloids can have stimulating or sedating effects on the nerves and glands

Contraindications for Alkaloidal Bitters

- Alkaloidal bitters can have very specific indications and contraindications which should be learned for each herb
- Bitters should be avoided by thin, weak, emaciated and dry people
- Excessive use of bitters is wasting (i.e., promotes depletion of tissue moisture)
**Fragrant Bitters**

- **Characteristics**
  - Bitter taste; strong, but not necessarily pleasant aroma

- ** Constituents**
  - Sesquiterpene lactones and triterpenes

- ** Energetics**
  - Slightly warming and drying

**Examples of Fragrant Bitters**

- Elecampane
- Black walnut hulls
- Wormwood
- Tansy
- Wormseed

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*Tansy—Photo by Steven Horne*
Properties and Contraindications

- **Properties**
  - Digestive Stimulants: Used to stimulate digestion like other bitters
  - Antiparasitic: Used to dispel parasites

- **Contraindications**
  - Generally not used long term or in large doses
  - Most are contraindicated in pregnancy
  - Same general contraindications for all bitters

Acid Herbs

- **Characteristics**
  - Bitter, nasty, burning taste

- **Constituents**
  - Resins
  - Alkaloids

- **Energetics**
  - Relaxing, may also be cooling and drying
Acrid

- Lobelia
- Kava kava
- Echinacea (angustifolia)
- Black cohosh
- Skunk cabbage
- Blue vervain

Properties of Acrid Herbs

- Antispasmodic: relax cramping and muscle spasms
- Relieve “wind” disorders in TCM: problems involving alternating symptoms
- Contraindications:
  - Some are emetic (induce vomiting) in large doses
  - Large doses or long term use may adversely affect nerves
Astringent Herbs

- Characteristics
  - Slightly bitter, with drying, slightly puckering sensation
- Constituents:
  - Tannins
- Energetics
  - Drying and Constricting

Astringent

- White oak bark
- Uva ursi
- Bayberry
- Sage
- Green Tea
- Yarrow
- Wild geranium
- Willow bark
- Witch hazel

Uva Ursi—Photo by Steven Horne
Properties of Tannins

• Very Drying: Arrest excessive secretion
• Tone: tighten lose tissue and reduce swelling
• Syptic: help blood coagulate to stop bleeding
• Slow intestinal peristalsis, tone up leaky gut
• Antivenomous: help to neutralize animal venom when applied topically

Contraindications for Astringents

• Reduce digestive function, interfere with mineral absorption, so best taken in between meals
• Large doses taken internally can cause constipation
• Long term topical use can be irritating to skin or mucosa
Oligomeric procyanidins (OPCs)

- Grapine®
- Condensed tannins with powerful antioxidant capabilities
- Found in pine bark, grape seed and green tea

Sour Herbs

- Characteristics
  - Sour taste
- Constituents
  - Fruit acids (citric, malic and ascorbic acid)
  - Flavonoids
  - Antioxidants
- Energetics
  - Cooling, balancing (may moisten or dry), nourishing
Sour

- Lemon
- Bilberry, Blueberry
- Cranberry
- Rosehips
- Lycium
- Hawthorne
- Schizandra
- Mangosteen
- Noni

Properties of Sour Herbs

- Antioxidant: reduce free radical damage, cool heat and irritation
- Tonic: strengthen capillary integrity, tighten tissue
- Hepatic: Aid liver function, gently stimulate bile production, tonify liver qi according to TCM
- No real contraindications
Salty Herbs

• Characteristics
  – Slightly salty, grassy or “green” taste (think of celery or spinach)

• Constituents
  – Salts of magnesium, potassium, sodium and calcium

• Energetics
  – Balancing (may moisten and/or dry tissues) and nourishing

Examples of Salty Herbs

• Spinach, celery
• Alfalfa
• Mullein
• Nettles
• Chickweed
• Red clover
• Dandelion leaf
• Horsetail
• Seaweeds (kelp, dulse)

Mullein—Photo by Steven Horne
Properties of Salty Herbs

• **Nutritive**: supply trace minerals to help tone and heal tissues
• **Non-irritating diuretics**: help to support kidney function by supplying potassium
• **Lymphatic**: Help to promote lymph flow and relieve lymphatic congestion
• **Decongestant**: help to loosen mucus
• **Alkalizing**: tend to increase alkalinity, which aids general health
• **No contraindications**

Sweet Herbs

• **Characteristics**
  – Bitter-sweet flavor, not sugary or starchy, more like the sweetness of dark chocolate
• ** Constituents**
  – Polysaccharides
  – Saponins
• **Energetics**
  – Moistening and neutral (may be slightly warming or cooling, too)
Examples of Sweet Herbs

- Licorice
- Stevia
- American ginseng
- Korean ginseng
- Eleuthero root
- Bee Pollen
- Astragalus
- Codonopsis

Properties of Sweet Herbs

- Nutritive and tonic: builds up weakened conditions, counteracts wasting, strengthens glands, builds energy reserves
- Adaptagenic: Many sweet tonics modulate stress and improve overall health
- Moistening: Counteract dryness and aging of tissues
- Immune Tonics: Often strengthen the immune system
- Often used for elderly people to regain or maintain good health
Contraindications for Sweet Herbs

- Most of these remedies are very benign and suitable for long term use
- Tend to encourage weight gain
- Some of the stronger tonic herbs (especially the ginsengs) can be abused as stimulants, especially by younger people

Mucilant Herbs

- **Characteristics**
  - Slippery slimy feel when moist, generally bland or slightly sweet taste
- **Constituents**
  - Mucopolysaccharides (mucilage and gums)
  - Glucoaminoglycans
- **Energetics**
  - Moistening, cooling and nourishing
Examples of Mucilant Herbs

- Aloe Vera
- Slippery Elm
- Psyllium
- Marshmallow
- Comfrey
- Irish Moss
- Kelp
- Okra
- Chia Seeds

Properties of Mucilant Herbs

- Cool and moisten hot, dry and irritated tissues
- Bulk laxative: hold moisture in bowel to promote normal elimination
- Vulnerary: Help injured tissues heal
- Immune Stimulant: Enhance immune activity, especially on mucus membranes
- Feed friendly gut bacteria to promote intestinal health
- Absorb irritants from GI tract and skin
- May help to reduce cholesterol
Contraindications

• Can reduce absorption of nutrients and medications
• Can also cool and slow down digestive function with excessive use, but this can be counteracted by adding a little pungent or aromatic herbs

Oily Herbs

• Characteristics
  – Oily taste and texture
• Constituents
  – Oils
  – Fatty acids
• Energetics
  – Moisten, Cooling and Nourishing
Examples of Oily Herbs

- Flaxseed
- Black current seed
- Evening primrose seed
- Pumpkin seeds
- Sunflower seeds
- Borage seeds
- Hemp seeds
- Coconut
- Olives

Blue Flax—Photo by Steven Horne

Properties of Oily Herbs

- Nourishing: provide the body with fatty acids for energy, immune, nerve and glandular function
- Cooling: can help reduce irritation
- Mild laxative: lubricate the stool for better elimination
- Moistening: lubricate dry tissues, aid tissue flexibility
- No contraindications
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Any Questions?