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Energetics Related to Western Herbology

“We live in a world of energy. An important task at this time is to learn to sense or see the energy of everyone and everything—people, plants, animals... Go to the sacred places of the Earth to pray for peace and have respect for the Earth which gives us our food, clothing, and shelter. We need to reactivate the energy of these sacred places. That is our work.”

—Carlos Barrios (Australian artist, born Carlos Manuel Barrios Rosa in 1966 in San Salvador, El Salvador, Central America)

CHAPTER REVIEW

- The why and what of energetics in Western herbalism and its relationship to Chinese Medicine.
- The Three Primary Qualities: Taste (with energy directions), warmth, and moisture.
- The Six Secondary Qualities: Stimulate-sedate, restore-relax, and moisten-decongest.
- Tissue level qualities or descriptions: Astringe-eliminate, solidify-dissolve, thicken-dilute. These qualities appear in Western herbalism.
- Descriptive terms in Western herbalism: Diuretics, laxatives, dissolvents, antibacterials, alteratives, and so many more.
- Organoleptics, evaluating herbal energetics using the senses.

KEY TERMS

Anhidrotics
Antilipemics
Antidiarrheals
Antilithics
Astringents
Bland
Counterirritants
Decongestants
Demulcents
Diaphoretics
Dissolvents
Diuretics
Emmenagogues
Energetics
Expectorants
Hemostatics
Laxatives

Litholytics
Mucolytics/mucostatics
Nervines
Oily
Organoleptics
Primary Qualities
Purgatives
Quality
Relaxants
Restoratives
Secondary Qualities
Sedate
Stimulate
Tonics
Trophorestoratives
Vulneraries
Warmth

This chapter organizes, classifies, categorizes, and arranges herbs based on their energetics from Chinese and Western standpoints, providing the best of both worlds. The terms are found in numerous herb books worldwide and give information about how herbs work.

The Three Primary Qualities or characteristics are taste, warmth, and moisture. These qualities give data about a plant's effect on the body in relation to the senses, a plant's energy, and the direction it moves the qi. The Six Secondary Qualities are specific actions arranged as opposites—stimulate-sedate, restore-relax, and moisten-decongest—indicating what an herb does to the body in very broad terms.

Descriptive qualities are categories traditionally used in Western herbalism. They tell us what an herb does on a tissue level. These groups are also opposites: astringe-eliminate, solidify-dissolve, and thicken-dilute.

Further breakdowns involve the countless descriptive terms used in Western herbalism. They are action words, such as *diaphoretics* that cause sweating, *emmenagogues* that bring on menses, or *anxiolytics* that curb anxiety. Many come from Western allopathic medicine and are intertwined with Western herbalism.

Organoleptics refers to judging the potency, quality, and phytochemical composition of an herb or preparation by using the senses. By attentively tasting, smelling, or feeling, we experience and reach our own conclusions about how an herb acts in the body.

Energetics in Western Herbalism

Rationale for the Energetic Approach

There are countless books about Western herbs with various organizational principles, some more useful than others. One type assigns a descriptive term to a plant that tells about one of its actions, such as *demulcent* or *astringent*, a method typically done in the West. Raspberry leaf is astringent, meaning it pulls in and tightens—therefore a good choice for diarrhea. But if Raspberry leaf were considered only as astringent, another important use is omitted: its nutritive quality. For pregnant women, Raspberry leaf is a prime reproductive nutritive tonic with an affinity for the uterus.

Some books give long laundry lists of actions, but they might leave you wondering which herb to choose. Say there are 20 different antimicrobials listed. Are they all equally effective? Popular magazines often extol the wonders of a popular “herb of the year,” such as Echinacea root. Pictures of *Echinacea purpurea* with its purple rays and yellow center appear all over the media. It is supposedly *the* herb to take for colds and infections. But is Echinacea the best selection for every single viral and bacterial illness that comes along?

Herbalism is complex. How do we know which remedies to choose? In my experience, the best way to choose is to use a combination of Western categories of action, *property-based* concepts (actions), combined with Chinese methods that consider *energetics*. Western labels tell you very quickly at least one action for an herb: diuretic, antiinflammatory, or demulcent. Chinese energetics take into account diagnostics, helping to fit the correct herb to the correct condition.

Chinese Energetics in Western Herbalism

Energetics is a system used to organize herbs referring to its qualities, its nature or sensory characteristics, and the broad actions they have on the body. *Quality* refers to how an herb acts on contact

with tissues like the mouth, skin, stomach, or sense organs. When we eat a lemon, its sour taste causes the lips to pucker and constrict, producing an energy that pulls inward. This is a very different action and direction from that of sweet-tasting Licorice root, which restores or builds up mucous membranes and moves energy outward in gentle waves. Hot and pungent Cayenne pepper moves energy forcefully outward to the extremities, working differently from cold, bitter Gentian root, which pulls energy inward and downward. Chinese Medicine often refers to this directional pull of plants.

Another category of energetics refers to actions, the properties of an herb and its potential for achieving a particular outcome. Ginger root is a *stimulating* herb that warms the body and helps blood circulate outward to the extremities. Lobelia is *relaxing*—it calms down the nervous system. Corn Silk *restores*, or builds up, the urinary system. White Horehound herb *decongests*, or breaks up mucus, in the lungs. Dandelion root does two seemingly contradictory things but they are actually not. It is both *sedating* and *stimulating*, in that it decreases heat (sedates warmth) and encourages the liver to work harder (stimulates).

Western and Chinese traditions both have their place. Use them both in describing, categorizing, and selecting herbs—and end up with an excellent system and great tools. It is beneficial to appreciate the two ways of thinking. Cross-cultural healing deepens our understanding and ability to assess conditions in a patient and to formulate wisely and effectively. Ayurvedic medicine from India also uses energetics, being an important part of that system, as well.

The Three Primary Qualities: Taste, Warmth, Moisture

The three *Primary Qualities* of taste, warmth, and moisture provide information about a plant, helping us to choose wisely. They all have local and global effects on the body. We will go through the various tastes, the gradations of hot to cold, and the concept of moisture, ranging from dry to damp.

Taste: Sweet, Sour, Bitter, Salty, Pungent

There are four types of taste buds or chemoreceptors mapped out on the tongue in anatomy and physiology texts. Those receptors are for sweet, sour, bitter, and salty. In Chinese Medicine, five tastes are described: sweet, sour, bitter, salty, and pungent (sometimes called acrid or spicy).¹ In Ayurveda, they speak of six tastes: sweet, sour, bitter, salty, pungent, and astringent. Ayurvedic has added astringent to the mix (Box 10.1).

We will select the five tastes of Chinese Medicine for the discussion of the energetics of taste. In Chinese Medicine, tastes are also

• BOX 10.1 Tastes from Different Traditions

The Four Western Textbook Tastes

The Five Chinese Tastes

The Six Ayurvedic Tastes

Extra Qualities

Sweet, sour, bitter, salty

Sweet, sour, bitter, salty, pungent
(sometimes called acrid or spicy)

Sweet, sour, bitter, salty, pungent,
astringent

Oily and bland (neutral, pure, or no taste)

assigned *directions*, part of the desired action in a formula, indicating where those herbs will travel in the body.

Herbs usually have two or more tastes in combination, although one generally predominates and is considered the main taste. If you put an herb on your tongue, there will be a taste that you become aware of first, but in a few seconds, you'll probably detect others. Tastes derive from chemical properties in a substance (Chapter 8). Taste buds receive the chemicals, and the brain interprets them.

- *Sweet* comes from carbohydrates, fats, and proteins.
- *Sour* comes from ascorbic acid, citric acid, and acetic acid.
- *Bitter* comes from alkaloids or glycosides.
- *Salty* comes from mineral salts.
- *Pungent* comes from essential oils.
- *Astringent* comes from tannins. (In Chinese Medicine, astringent is considered a subcategory of the sour taste; in Ayurvedic, it's a separate taste.)

Sweet

- *Constituent:* Carbohydrates.
- *Direction:* Moves qi in calming waves, flowing outward.
- *Actions:* Nourishing, moistening, cooling, restorative, harmonizing, and tonifying.

The sweet taste is universally loved and pleasing to all people, regardless of age or culture. It is the first one babies experience with mother's milk. The other tastes, particularly bitter, take some getting used to. Very few children like bitter foods. When experimenting with new plants, ancient tribes found that sweet tastes were generally not poisonous. The macronutrients—carbohydrates, proteins, and fats—are the major food groups necessary for good nutrition. Carbohydrates and proteins contain sweet tastes, and fats enhance the flavor of sugar.

Sugar is a water-soluble carbohydrate, has a crystalline shape, and tastes sweet. The more complex the sugar molecule, the longer it takes the body to digest and the less stress it puts on the pancreas. Simple sugars, such as found in donuts and bagels, cause frequent fluctuations in insulin production, whereas complex carbohydrates in whole grains and vegetables take longer to digest, causing fewer insulin swings. An interesting sweet tasting herb that is not a carbohydrate and that does not cause blood sugar swings is *Glycyrrhiza Gan Cao* (Licorice root; Box 10.2).

In Chinese Medicine the sweet taste is calming and moist. One often sees honey or sugar being used as the base of cough syrups and other medicines. It is harmonizing. It soothes, coats, and calms irritated throat mucous membranes. It blends together all the herbs in the syrup. In the West, we are so accustomed to eating simple sugars in the form of candies, cakes, and ice cream, that sometimes we don't appreciate the incredible sweetness of a carrot, a sweet potato, or a slice of bread (Fig. 10.1). The Chinese also consider grains, meats, beans, and nuts to be sweet.

Refined sugars in small amounts can be calming. However, if children overconsume sweets, they may become anything but. If sugar were an occasional treat, rather than a major part of the diet, the sugar would be in balance and thus not lead to hyperactivity. The energy of the sweet taste is comforting, with a smooth, soft, wavy feeling and direction. Think of how good an amazing chocolate bar or your favorite sweet makes you feel.

In Chinese Medicine, the sweet taste is considered tonic. **Tonics** build, nourish, energize, and treat deficiencies. If one is nourished, the body can make energy. If one has energy, the immune system benefits. If one is calm, there is balance and

• BOX 10.2 Licorice: An Exception to Sweet



Glycyrrhiza Zhi Gan Cao (Honey fried Licorice root) is warm and nutritive with a calming outward energy.

The glycyrrhizin in *Glycyrrhiza glabra Gan Cao* (Licorice root) is not a sugar or carbohydrate at all (it's a saponin in the terpene category), although if you chew on the yellow insides of its root or rhizome, it tastes 50 times as sweet as cane sugar. Licorice has many tastes, the dominant one being the taste of Anise. But it is also bitter. Raw Licorice root tastes sweet, but to make Licorice into a truly sweet tonic, the Chinese bake it with honey and sugar to neutralize some of the bitter, cooling, and antiinflammatory actions. It then becomes more tonifying.



• **Fig. 10.1** Sweet acorn squash, purple sweet potatoes, *Stevia rebaudiana*, and Licorice root sticks.

freedom from detrimental stress, a road toward optimal health. A class of herbs called *adaptogens* has these properties. They are building tonic herbs such as *Astragalus Huang Qi* (*Astragalus* root), or *Ashwagandha* root. These herbs *tonify* the Chinese Spleen, the organ of digestion and assimilation. According to the Five Element Theory of Correspondences, the sweet taste is attributed to the Spleen (Chapter 9). Examples of sweet herbs and foods appear in Table 10.1.

TABLE 10.1 Examples of Sweet

Sweet Herbs and Some Properties	Foods
<i>Astragalus membranaceus</i> Huang Qi Astragalus root Its polysaccharides proven to help immunity.	Most carbohydrates, honey, molasses
<i>Codonopsis pilosula</i> Dang Shen Downy Bellflower root Restores the GI system. Tonic.	Grains, pasta, rice, bread
<i>Matricaria recutita</i> Chamomile flower Calming and harmonizes digestion.	Carrots
<i>Cinnamomum cassia</i> Rou Gui Cinnamon bark Helps glucose metabolism.	Potatoes
<i>Glycyrrhiza glabra</i> or <i>G. sinensis</i> Gan Cao Licorice root. Much sweeter tasting than sugar. Often used to blend, moisten, and to harmonize other herbs in a formula. Tonic.	Meat, fish Winter squashes and pumpkins
<i>Althea officinalis</i> Marshmallow root Moistening.	Nuts
<i>Ophiopogon japonicus</i> Mai Men Dong Dwarf Lilyturf root Moistening.	Yams
<i>Symphytum officinale</i> Comfrey root Moistening and tissue nourishing.	Dates
<i>Ulmus fulva</i> Slippery Elm root Moistening and nourishing to the gut.	Dairy

Sour

- **Constituents:** Organic acids such as citric, malic, ascorbic, and asctic. Tannins are often present.
- **Direction:** Spiraling inward, sour foods pull in and pucker the lips (Fig. 10.2).
- **Actions:** Cooling, drying, astringent, refreshing, coagulating, and decongesting.

The sour taste is very common in foods, particularly fruits such as lemons, limes, and papayas. Because the sour taste is astringent in quality, it pulls tissue together and spirals energy inward. These actions translate into a tightening, astringent effect that reabsorbs escaping fluids, stopping discharges such as sputum, semen, vaginal fluids, and blood. It is drying to mucous membranes. It is *anhidrotic* (decreases sweating). It is cooling, so it can lower fevers. It is stimulating, meaning it increases the digestive enzymes of the liver, gallbladder, and small and large intestines.

Ayurvedic medicine uses sour tastes to stimulate digestion with foods such as tamarind or sour pickles. As part of the Five Element



• **Fig. 10.2** Rosehips fruit/seed pods, lemons, and yogurt are all examples of the sour taste.

Correspondences, the sour taste is associated with the Liver. Wine (with tartaric acid) and vinegar (mainly acetic acid) are sometimes used to process herbs that are to be used as liver and blood tonics because of their herbal properties that are similar to those of other sour materials (Table 10.2).¹

Bitter

- **Constituents:** Monoterpenes, sesquiterpenes, iridoids, alkaloids, and glycosides.
- **Direction:** Moves qi downward toward the feet.
- **Actions:** Grounding, cooling, stimulating, drying, detoxifying, antiinflammatory, antibacterial, and antiviral.

Bitter is widely prevalent in medicinal plants, probably more so than any other taste. Although the sweet taste is universally loved, bitter takes some getting used to for the uninitiated. Do most kids like kale? Many poisonous, toxic plants have a bitter, unpleasant taste, and the tastes were probably warnings to the ancients to spit out or beware. For the same reason some plants are dangerous, they also make strong valuable medicine when used judiciously. Bitter herbs range from the mildly bitter tastes of Chamomile and Yarrow flower to the intensely bitter tastes of *Gentian lutea* Long Dan Cao (Gentian root) and *Artemisia annua* Qing Hao (Sweet Annie herb) used in the treatment of drug-resistant malaria (Box 10.3).

Essential oils contain various kinds of volatile substances found in monoterpenes and sesquiterpenes (Chapter 8). They are found in the conifers, in Thyme leaf, Oregano herb, the Mints, Eucalyptus, White Sage leaf, and others. Citrus monoterpenes are bitter substances found in orange peels, especially the limonene component found in the white and the zest of the peels. They are rich in bioflavonoids, which fight cancer. Next time you eat an orange, be sure to eat some of the bitter peel and white membrane (Fig. 10.3).

The bitter taste has many uses and appears in healing plants used in most body systems. Because bitter is cold, it cools hot conditions and decreases fever, inflammation, and hot anger. Bitter is detoxifying and cleansing and works below the waist to pull off

TABLE 10.2 Examples of Sour

Herbs	Fermented Foods Produced by Microorganisms	Pickled Foods Made with Brine, Lemons, and Vinegar (Some could also be fermented.)	Foods
<i>Rumex acetosella</i> Sheep Sorrel herb	Yogurt, cheeses, kefir	Pickles	Lemons Limes
<i>Oxalis acetosella</i> Wood Sorrel herb	Wine	Pickled ginger	Blackberries
<i>Rosa</i> spp. Rosehips fruit	Vinegar	Pickled plums	Tamarind
<i>Rhus glabra</i> Sumac berry	Sauerkraut, Kombucha	Pickled cucumbers, beets, and other vegetables	Papaya Pomegranates Orange peels
<i>Sambucus nigra</i> Elderberry			
<i>Crataegus oxyacantha</i> Hawthorn berry			
<i>Schisandra chinensis</i> Wu Wei Zi Five Taste berry	Miso, soy sauce, Tempeh	Pickled herring	Greek lemon soup
<i>Paeonia suffruticosa</i> Mu Dan Pi Tree Peony root bark	Kimchi	Pickled olives and peppers	Raspberries

fluids, especially in the gut, kidney, and bladder, which is testament to their downward, grounding direction. They can help clear cholesterol from the liver, and some are laxative.

Because bitter is stimulating, it can decrease water retention and bloating, contributing to a drying action. An entire category of plants is called *digestive bitters* (Chapter 18). Examples are Gentian root, Yarrow herb, Dandelion root, Chicory root, Burdock root, and Chamomile flower. They stimulate the digestive system to secrete digestive enzymes and hormones, increase appetite, decrease sugar cravings, and aid the liver to increase its bile flow and detoxification.³ Because gastrointestinal (GI) bitters are so wonderful for digestion and glucose regulation, they play a major role in holistic herbal treatment and preventative medicine.

Bitter-tasting pyrrolizidine alkaloids (PAs) are found in Comfrey root, Coltsfoot leaf, and Echinacea root. Comfrey is a renowned wound healer, Coltsfoot an expectorant, and Echinacea an antimicrobial. Examples of antiinfectives and antiinflammatory bitter herbs are yellow-rooted, berberine-containing plants. These bitter alkaloids are found in Goldenseal, Oregon Grape, and Barberry root. Berberines are effective for deep, hot infections. Some notoriously poisonous plants, such as *Datura stramonium* (Jimsonweed), *Conium maculatum* (Poison Hemlock), *Hyoscyamus niger* (Henbane), and *Atropa belladonna* (Deadly Nightshade), contain strong bitter alkaloids.² In Chinese Medicine, the bitter taste affects the Heart in the Correspondences. This is no coincidence, because many bitter heart herbs and allopathic drugs contain alkaloids. The Chinese Heart organ system corresponds to the nervous and circulatory systems of Western medicine, both strongly affected by the bitter taste. Bitter herbs and foods are listed in Table 10.3.

Salty

- **Constituent:** Trace minerals, sodium, and electrolytes.
- **Direction:** Sinking, downward effect.
- **Actions:** Softening, dissolving, sinking, moistening, and antilithic.

The salty taste improves flavors of food, lubricates and moistens body tissues, helps retain body fluids, and stimulates digestion by promoting salivation. Salt can also act as a laxative as in Epsom Salts (magnesium sulfate). The ocean is salty, and some of our salty herbs come from the sea. Seaweeds or sea vegetables are great sources of trace minerals, especially iodine. Kelp thallus is type of red algae, or seaweed, that moistens the mucosa and relieves dryness. It contains macro minerals and trace minerals of iodine, potassium, magnesium, calcium, iron, manganese, germanium, zinc, and bromium.⁴ Irish Moss, Kelp thallus, and Dulse are other examples of sea veggies. Nori is type of seaweed that is used to wrap sushi (Fig. 10.4).

Salt is dissolving and softening. Salty ocean water corrodes metals. Taking this further, substances that stick and harden in the body can be broken down by salt. Salty herbs soften tumors, stones, and chronic lymph gland hardness. Salt can break down calcium deposits in atherosclerosis, keeping vessels soft. Echinacea root is primarily considered a pungent herb but is also salty and can reduce tumors and prostate enlargement. Because of salt's sinking, pulling-down action, it is diuretic and can decrease edema. This diuretic action is true of salty herbs, but not true of excess table salt, which can create an osmotic pull on water, causing fluid retention and edema.

A classification of herbs known as *antilithics* break down mineral deposits in kidney stones and gall stones. Examples of antilithic remedies include Gravel root, Horsetail herb, Cleavers herb,

• **BOX 10.3** Very Bitter *Artemisia Annua* and Malaria



Artemisia annua Qing Hao (Sweet Annie herb), young plant showing its fern-like leaves (left). Fragrant Sweet Annie herb showing its flowering top (right). It contains the sesquiterpene artemisinin. (Credit Mary Maruca.)

Artemisia annua Qing Hao, commonly called Annual Wormwood or Sweet Annie, is one of the most bitter plants known. It has been used in Chinese Medicine for more than a thousand years to treat low-grade fevers, skin diseases, parasites, fungus, bacteria, protozoa, and infections of all types, including malaria.

The World Health Organization endorses *A. annua* as a first-line treatment for drug-resistant malaria. Malaria is caused by *Plasmodium* parasites carried by the *Anopheles* mosquito. If bitten, the parasites invade human red blood cells, causing fever and, in severe cases, brain damage and death, especially in children. It is a huge problem in developing countries.

Sweet Annie contains artemisinin. This component, and its derivatives, are powerful medicines known for their ability to swiftly reduce the number of *Plasmodium* parasites in malaria patients. Artemisinin-based combination therapies (ACTs) are recommended for first-line treatment for uncomplicated *P. falciparum* malaria. Chemically, it releases “deadly free radicals once it enters the plasmodia.”⁴ In 2015 the Nobel Prize in Physiology was awarded to a Chinese woman, Tu Youyou, who revisited the ancient literature and discovered clues that guided her to successfully extract the active component from *A. annua*. Her discovery resulted in the drug artemisinin.



• **Fig. 10.3** Bitter Vitex berries, Coffee beans, and dark greens.

TABLE 10.3 Examples of Bitter

Herbs	Foods
<i>Artemisia annua</i> Qing Hao (Wormwood herb). Very strong.	Kale
<i>Gentian</i> spp. (Gentian root). Very strong.	Brussel Sprouts
<i>Carduus benedictus</i> (Blessed Thistle root).	Tomatillos
<i>Anemopsis californica</i> (Yerba Mansa root).	Water Cress
<i>Arctium lappa</i> Niu Bang Zi (Burdock seed) and <i>Cichorium intybus</i> (Chicory root). Mild.	Endive
<i>Taraxacum officinalis</i> Pu Gong Ying (Dandelion root and greens).	Coffee
<i>Achillea millefolium</i> (Yarrow herb).	Bitter Melon
<i>Humulus lupulus</i> (Hops flower).	Arugula
<i>Vitex Agnus-Castus</i> (Chaste Tree berry).	Broccoli



• **Fig. 10.4** Salty Swiss chard, Celery root, and pink Himalayan salt.

and Celery seed or root. They contain significant amounts of trace minerals or organic acids and have a salty taste.

In the Chinese correspondences, the salty taste is associated with the Kidneys and the Bladder. This association makes sense if you think about the organ’s relationship with water. The kidney’s physiological function is to balance out electrolytes in the blood.

TABLE 10.4 Examples of Salty

Herbs	Foods
<i>Echinacea</i> spp. (Purple Coneflower root)	Dark greens
<i>Apium graveolens</i> (Celery root)	Celery, Fennel
<i>Portulaca oleracea</i> Ma Chi Xian (Purslane herb)	Mineral and sea salt
<i>Stellaria medica</i> (Chickweed herb)	Dandelion greens
<i>Chondrus crispus</i> (Irish Moss thallus)	Lamb's Quarter
<i>Fucus vesiculosus</i> (Bladderwrack thallus)	Soy sauce, tamari, miso
<i>Laminaria</i> spp. (Kelp thallus)	Black olives
<i>Urtica dioica</i> (Nettle herb)	Lox, Gravlox

Chinese Medicine speaks of kidney essence, life force (*jing*) tonics with a salty taste. Examples here are animal products: deer antler, gecko, placenta, sea horse, turtle shell, tortoise shell, and mantis. The frequently used sour fruits of *Cornus Shan Zhu Yu* (Japanese Dogwood berry) and the adaptogen *Schisandra Wu Wei Zi* (*Schisandra* berry) also have a salty taste. They are used to nourish and astringe the essence.¹ Examples of salty herbs and foods are listed in Table 10.4.

Pungent (Acrid or Spicy)

- **Constituent:** Glycosides and essential oils, i.e., monoterpenes and sesquiterpenes.
- **Direction:** Pushes outward and disperses energy.
- **Actions:** Warming, stimulating, and relaxing.

The chemical constituents in pungent or acrid herbs are mainly glycosides and essential oils. Have you ever sniffed strong Tea Tree essential oil or put a Peppermint or Ginger Altoid candy on your tongue? These are pungent and very spicy. How about eating a bowl of hot chili or Japanese wasabi to open the sinuses? They can make your nose run. Essential oils are highly volatile, giving them a notable fragrance and a dispersing quality. They might feel warming and tingly. Other examples are Thyme, White Sage, and Lavender, which contain monoterpenes, and Chamomile, Ginger, and Turmeric, which contain sesquiterpenes.²

Pungent pushes outward. When energy pushes out to the extremities and the skin, it is not stuck or bound up inside the body. In the Chinese arena, energy or *qi* is supposed to flow easily and evenly throughout the 12 paired meridians, not too quickly and not too slowly. If *qi* becomes stopped up or blocked, pain results. So it makes perfect sense that an herb that pushes outward would relax and ease pain in the tissues, opening the *qi*. The Chinese refer to pungent herbs as those that regulate the *qi* and relieve pain. These pungent herbs tend to be warming and stimulating, like Juniper berry or Rosemary leaf (Fig. 10.5).

From a Western perspective, outward, dispersing energy increases and stimulates circulation. Healthy blood circulation



• **Fig. 10.5** Pungent onion, garlic, ginger, rosemary, nasturtium, and horseradish.

removes toxins and brings nutrients into a sore muscle so that the muscle fibers can heal. It removes waste products produced from an inflammatory response, driving them out and away from an edematous injury and thereby relieving pressure and pain. Stimulating circulation enhances lymphatic flow. Lymph and blood circulation are connected and related. Improved lymphatic flow helps the body detoxify and enhances immunity.

Further, increased blood circulation causes the surface capillaries under the skin to dilate, resulting in sweating and warming of the hands and feet. Consequently, a pungent, acrid-tasting herb increases sweating (*diaphoretic*), becoming a major remedy for early-onset respiratory infections, such as colds and flu. Fresh Ginger root tea accomplishes this, as does a Mustard bath. Sweating removes toxins and cools down a fever. Some lovely immune soups include pungent Onion and Garlic for this reason. Try stimulating the airway with acrid, pungent herbs such as Eucalyptus or Peppermint herb, and feel the sinuses open, creating mucus flow from the lungs. If the sinuses are open and flowing, head pressure is relieved, headaches disappear, and you can relax. Pain causes stress; when pain is relieved, stress dissipates, and you can calm down.

According to the Chinese correspondences, the pungent taste relates to the Lungs (Chapter 9). This relationship exists because the body parts associated with the Chinese Lungs are the skin and sweat glands. Sweat glands are anatomically located in the skin and pungent diaphoretics that help us sweat are frequently used in treating early-onset respiratory infections. A caution using this type of remedy is that sweating can also lead to water loss and dryness. For this reason, a pungent tasting herb should not be used as a simple with someone who is already dry because it could make the dryness worse. Such a client might be dehydrated, elderly, or experiencing an already dry condition, such as eczema. In these cases, the formula should be balanced out with an appropriate

TABLE 10.5 Examples of Pungent

Herbs	Foods
<i>Juniperus communis</i> (Juniper berry)	Cinnamon, Clove
<i>Rosmarinus officinalis</i> (Rosemary leaf)	Garlic, Onions
<i>Capsicum annuum</i> (Cayenne fruit)	Chili Pepper
<i>Mentha x piperita</i> (Peppermint herb)	Horseradish
<i>Eucalyptus</i> spp. (Eucalyptus leaf)	Ginger
<i>Melaleuca alternifolia</i> (Tea Tree leaf and essential oil)	Mustard
<i>Asarum canadense</i> Xi Xin (Wild Ginger rhizome)	Black Pepper

cooling, moist herb, such as Marshmallow root, Comfrey root, Asparagus root, Chickweed herb, Iceland moss, or Slippery Elm bark. See Table 10.5 for pungent herbs and foods.

Description of Oily

In addition to the previously described tastes, sometimes the herbal literature mentions *bland* and *oily*. I believe these are not really tastes but descriptions. They seldom appear in medicinal herbal plants or in foods.

- *Constituent*: Oils.
- *Action*: Slows things down, thickens, and moistens and is nutritive.

Oily is nutritive. It nourishes glands. Fats are needed for energy storage and hormone production. The human body uses fats to absorb and transport vitamins A, D, E, K, and carotenoids. Fat is the slowest burning but most energy-dense macronutrient, supplying nine calories per gram. In contrast, each gram of carbohydrate or protein yields only four calories of energy. As a result, fats represent the body's largest form of energy storage. It also forms the important lipid bilayer of cell membranes and is necessary for growth and development.

Fats move slowly. They are moistening to the skin. Very few herbs can be called fatty. Examples are Saw Palmetto berry, which is useful for underweight or depleted people; Heart of Palm; and Rehmannia Shu Di Huang (prepared Rehmannia root cooked in wine). Among the five tastes, sweet is the one closest to being oily. Fatty foods take a long time to digest, so they would not be recommended for weak digestion or overweight conditions.

However, some fats are necessary for good health. Examples are the *monounsaturated* fats in olives, almonds, peanuts, macadamias, hazelnuts, pecans, cashews, and avocados; the *polyunsaturated* fats in walnuts, sunflower, sesame and pumpkin seeds; and in cold-water marine fish, such as salmon, tuna, mackerel, herring, trout, and sardines (Chapter 8). These healthy fats are necessary for everyone in moderate amounts, and especially for individuals with weight problems.

Description of Bland

Bland is considered the absence of taste. The most important bland herbs are the medicinal mushrooms. Examples, such as Chinese Ganoderma Ling Zhi (Reishi mushroom) and Poria Fu

Ling (Hoelen fungus), are described as bland with a slightly sweet taste. Other examples are Couch Grass root, Slippery Elm bark, Pearl Barley seed, and Water Plantain root. These foods and herbs are generally neutral, calming, and restorative.

Warmth: Hot to Cold

When we speak of the *warmth* of an herb, we are considering the entire spectrum of gradations from hot to warm, to neutral, to cool, and to cold.⁵ Herbs are placed on this continuum for different reasons. Some herb books list temperature in their Materia Medicas; some don't. It is helpful to understand what is meant by this designation. Warmth may be described by the following criteria:

- *Topically*. Effect on the skin surface.
- *Environment*. Effect on the surroundings and air temperature.
- *Subjective taste*. A person's individual reaction to the plant.
- *Ability to alter subjective feelings of warmth*. Includes external and internal.

The quality of warmth or cold on the skin occurs locally as a topical application. Have you ever used Bengay? This common over-the-counter ointment is used as an analgesic rub for muscle and joint pain, sprains, and strains. A commercial preparation called Muscle Pain/Ultra Strength contains 30% methyl salicylate, 10% menthol, and 4% camphor. At first it makes the skin feel warm and tingly, followed by a cooling effect. Similar qualities are found in the Chinese liniment Tiger Balm.

Peppermint and Camphor are warming, and then cooling. Menthol is an organic compound found naturally in Peppermint. Camphor comes from the resin of the Camphor tree. They both initially warm us up and then cause sweating, which cools us down. They are *counterirritants*. Counterirritants create reddening of the skin caused by vasodilation, raise body temperature, cause sweating, and produce a mild irritation to the skin that reduces hot inflammation deeper in the body.⁶ The addition of methyl salicylate, the active ingredient in Aspirin, decreases pain.

We can also think of warmth in relation to the environment. In a hot country such as Mexico, hot herbs and spices like Chili pepper are routinely eaten to cool one down. Chilies and Cinnamon increase blood circulation to the skin surface, creating sweating and subsequent cooling. However, in cold countries, hot drinks may be used to warm one up. Some hot drinks have cold energetics, such as coffee, which in Chinese Medicine is considered to scatter qi.

Another way to consider temperature is from the subjective taste of an herb. Pungent tastes feel warm on the tongue. Think of warm cooking spices like Oregano herb, Rosemary leaf, or Thyme herb. When we swallow a pungent spice, we can feel the warmth as it travels down to the stomach. Choosing Ginger tea on a cold winter's day is warming. Conversely, a cucumber or watermelon eaten in the heat of summer is cooling. Salads are cooling. Spicy turkey stuffing with Sage and Pepper is warming.

We can further consider the hot-to-cold continuum based on a person's condition or what is happening inside. When out of balance, heat leads to irritability, fever, and inflammatory conditions. By its nature, heat rises, appearing as a red face and eyes, sore throat, or dizziness. In Chinese Medicine, if heat affects Heart or Liver, anger may result. Excess heat dries out body fluids. Excess cold can create copious fluids: frequent urination, too much mucus, slow pulse, and pale face. In general, warm conditions are treated with cooling herbs, and cold conditions are treated with warming herbs. It makes sense. Herbs that give energy and strength and activate circulation are warming. Herbs that make us sweat, urinate, or feel calm are cooling (Table 10.6).

TABLE 10.6 Ranges of Warmth

Hot Cayenne pepper and cold Dandelion leaf and root.

Quality	Taste	Warmth	Foods	Herbs
	Pungent	HOT	Spices Cinnamon Ginger	Cayenne pepper
Stimulants	Pungent		Pepper, Clove, Horseradish, Garlic	Snake root
	Pungent	WARM	Cooking Herbs Fennel Rosemary Thyme Basil Tarragon Oregano Marjoram	Calamus root Valerian root Osha root
Restoratives	Sweet, Bland, Oily, or Sour	NEUTRAL	Grains Millet, Barley, Buckwheat	Yarrow herb Lemon sorrel leaf Tamarind fruit
Relaxants	Sweet or Bland		Rice, Wheat	Slippery Elm bark
Sedatives	Sweet Bitter Astringent Salty	COOL	Wild Greens (<i>Spring blood cleansers</i>) Borage Chickweed Dandelion Cucumber Docks	Chickweed herb Nettle leaf Mullein leaf
Sedatives	Bitter	COLD (Absence of warmth)		Medium/Strong Goldenseal root Goldthread root Isatis root
	Bitter	VERY COLD (Nerve Death)		Poison Water Hemlock plant Henbane plant Yellow Jasmine plant

Based on class notes from Peter Holmes, L.Ac., M.H.

Moisture: Wet to Dry

In the human body, the degree of moisture or dryness affects the tissues and our health. We contain about 60% water. How many

times have you been told to drink more water? Water is held in the body in two main compartments: our intracellular fluids (ICF) within the cell and extracellular fluids (ECF) in fluid compartments outside the cells. The balance of ICF to ECF is very

important in physiology. Normally, the kidneys do a brilliant and miraculous job of balancing fluids. When dehydrated, water is retained, urine becomes concentrated and dark, and there is thirst. As we hydrate, our urine becomes lighter and less concentrated, and there is less thirst. Lymphatic circulation, which begins at the capillary level, brings excess ECF back to the heart for recycling.

It is easy to get out of fluid balance. The external environment, weather, and humidity take its toll. We experience dry skin in the low humidity of Colorado or moist dewy skin in wet, humid New Jersey. Stress can make us dry. Infections, such as a flu virus, can make the mucous membranes secrete more than their share. The inflammatory cascade brings fluids to places of injury, causing painful ECF swelling as the blood receives toxins it must remove and replace with nutrients. Dryness can make us constipated. Damp can cause diarrhea. Menopause and aging cause drying when mucous membranes have fewer secretions. Infection with fluid build-up makes us damp. Intestinal permeability causes dampness in the gut, which is called *Spleen damp*.

Fortunately, we have an arsenal of herbs in various categories to regulate damp and dry conditions. For *drier-uppers* in the astringent or cell-tightening category, there are *anbidrotics*, like Garden Sage, which stop excess sweating; there are antidiarrheals like Oak bark for loose stools; stiptics like Cranesbill Geranium herb for excess bleeding; there are *mucostatics* like Goldenrod herb to dry respiratory secretions. *Diuretics* like Dandelion root and leaf help with edema by stimulating urination.

In the *moistening* category for dry conditions, an array of *demulcents* are sweet, moist, and nutritive. The classic Western moisturizer for all organ systems is Marshmallow root. There is also Iceland moss thallus or Slippery Elm bark for the respiratory and gastrointestinal tract, Chickweed herb for reproductive dryness, or Comfrey root for wounds and wound healing.

If something is damp or wet, it gets soaked. If something is soaked, it gets heavy and bogged down and can take a long time to dry out. In Chinese Medicine, this dampness leads to a blockage called *stagnation*. Signs of dampness in the body are phlegm, edema, bloating, and discharges. Skin can ooze or crust, as in eczema. A person feels heavy and may become dizzy. As things become heavy, gravity pulls downward. If damp combines with heat, there is damp heat, indicated by dark, burning urine; thick, foul-smelling stools; yellow vaginal discharges; or jaundice. These symptoms occur in the lower part of the body. Causes can be cold, uncooked or greasy foods, and large amounts of dairy and ice cream, which can cause excess mucus.

If damp combines with cold, there is damp cold. In damp cold, we see pale, scanty urine; hard constipation with mucus; and clear discharges. Damp can also combine with external forces from outside the body, such as *wind*. If wind and damp affect the joints, there is wind damp joint pain, as in arthritis affected by barometric pressure. If wind and damp affect the respiratory system, there could be wind damp cold or even wind damp heat, as in a common cold.

One remedy for damp conditions in Chinese Medicine is to use *bitter*-tasting foods which have a draining property. Leafy green vegetables like kale, mustard greens, dandelion greens, parsley, and celery are good examples of bitter foods that drain damp. Citrus peels are bitter, so if they are added to meat dishes, they can help reduce dampness. Turnips, radish, kohlrabi, asparagus, and broccoli do this also. The Chinese also use pungent, stimulating, and aromatic herbs and diuretics, a favorite being the fungus Poria Fu Ling (Hoelen fungus), to dry up damp.

The Six Secondary Energetic Qualities: Stimulate-Sedate, Restore-Relax, Moistening-Decongest

The six *Secondary Qualities* give the key to choosing herbs to treat basic conditions or problems in the body. This group gives a specific clue as to which remedy to use. Herbs with these secondary herbal qualities are used to treat a person having the *opposite* condition.

- *Stimulating herbs*. Stimulants are warm and therefore treat cold conditions.
- *Sedating or cooling herbs*. Sedatives are cold and therefore treat hot conditions.
- *Restoring herbs*. Restoratives or *tonics* build up and therefore treat weak conditions.
- *Relaxing herbs*. Relaxants calm the nervous system and therefore treat tense conditions.
- *Moistening herbs*. Demulcents are wet and therefore treat dry conditions.
- *Decongesting herbs*. Decongestants break things up and therefore treat damp, thickened conditions.⁶

Energetics of Stimulating: Dispersing, Circulating

To *stimulate* or *disperse* in herbalism means to create movement in the body because of cold conditions. As things become cold, they slow down, causing stagnation and lack of flow. We need to move things along. If blood needs moving, we would use arterial *stimulants*. If lymphatic fluid were sluggish, we would use lymph *circulators*. A person might feel sleepy or sluggish because of deficient qi and so would require nerve *stimulation*. An organ might slow down, becoming sluggish and deficient, as can occur when the liver's detoxification processes need a boost, so liver *stimulants* would be used. The small intestine might require digestive enzyme *stimulation*. A muscle could slow down, be in spasm, and need a relaxant to *disperse* the tightness. A cough might be unproductive, requiring a *stimulating* decongestant. All of these examples require stimulating herbs.

Stimulants are warm and pungent. They have an outward energy. They loosen what is stuck, creating movement. The result is a warming effect as they relax, invigorate, and loosen what was sluggish and tight.⁷ From the Chinese Medicine standpoint, to stimulate is to tonify yang: warm the interior, transform damp, drain damp, and restore the Liver and Kidney.⁵

Example: Signs and symptoms of a person who needs blood stimulated because of a cold condition: has cold hands and feet, displays inactivity, and has low metabolism; feels cold all the time; and prefers summer and warm clothes. Such a client may like warm foods but might be addicted to cold foods and possibly shows signs of depression. **Pulse (P)** Slow, tight, and deep. **Tongue (T)** Pale and white coat, possibly excessively moist.

Herbs: Warm, pungent arterial circulators to warm and increase blood flow, such as: Prickly Ash bark, Western Angelica root, or Chinese Angelica Dang Gui (Dong Quai root), Ginger root, Rosemary leaf, Juniper berry, Cayenne pepper, Garlic bulb, and Horsetail herb.

Example: Signs and symptoms of person who needs nerves stimulated because of a cold condition: numbness and tingling