

Demulcents

This relatively simple and straightforward herbal action is likely one of the most important and overlooked actions in western herbalism. Demulcents are essentially plants which will increase the moisture content of tissues, in particular the mucosal membranes. The word "demulcent" comes from the Latin verb, "demulcere" meaning to soothe or "to caress." They have a soothing, gently cooling, and hydrating action and in this way are used to balance relative amounts of dryness and atrophy in the tissues.

When we consider the pattern of dryness, it's important to consider the importance of fluids within the organism. The fluids of the body are not only responsible for maintaining the lubrication of the tissues, but are also the vehicle through which nutrients, metabolic waste products, and substances in general are carried throughout the organism. When we see constitutional dryness it's important to consider that the cells are less able to receive their nutrients and that metabolic waste products are more difficult for the body to detoxify. This pattern can ultimately lead to wasting, deterioration, and atrophy of the tissues, as well as a potential for an accumulation of cellular waste products.

While it's common to think of the bodies moisture content as being solely achieved through water, it's important to remember that the other primary fluid that nourishes the organism is oils. It's certainly common for many people in the modern world to be water dehydrated, but most are also **oil dehydrated**. This typically occurs through poor nutrition and inadequate intake of appropriate dietary fats and oils. It's common knowledge now that unnatural and processed oils create havoc on the internal ecology of the system through promoting systemic inflammation. This heat and inflammation further dries out the system and leads to vicious cycle which is theorized to be the root of many common degenerative diseases afflicting the modern western world.

From the Chinese perspective, dryness within the tissues or constitution as a whole is referred to as "yin deficiency." Yin is the principle of coolness, moisture, downward bearing energy, and helps to provide nourishment to the body. We can think of it as the primal waters of the body which help to keep in check the primal fire of the body, or yang. When yin becomes deficient it is unable to "hold down" the yang, meaning that we will commonly see heat signs. This is technically not considered "true heat" in the sense that there is too much fire in the system, but rather there just isn't enough water to maintain the balance. We all know that dry wood burns much hotter and readily than wet wood- and the yin deficient body is like a dry piece of timber ready to light up.

This is a critical pattern to understand for western herbalists, for it is considered a root pathology that is behind many common symptoms and conditions that afflict our modern culture. I can remember taking a workshop with the herbalist Michael Tierra on yin deficiency and he says it is *the most* common error amongst western herbalists to not be able to recognize this pattern and is one of the major contributing causes for someones herbal remedies, formulas and protocols to not work.

Here's a simple list of common symptoms associated with yin deficiency in a few different organ systems:

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- Lung Yin Deficiency: dry cough, loss of voice, thirst, dry throat, dry skin, spitting up thick sputum, chronic cough, low-grade afternoon fevers, night sweats, coughing up blood, a thin rapid pulse.
- Stomach Yin Deficiency: lack of appetite, irritability, thirst, dry mouth, constipation, occurs often after severe febrile diseases.
- Liver Yin Deficiency: visual acuity, dry, dull eyes, night blindness, dizziness, tinnitus, dry nails, low grade sensation of heat, red tongue, dry mouth and throat, fast and thin pulse.
- Kidney Yin Deficiency: many chronic diseases, dizziness, tinnitus, weakness of the lower back and knees, heat in the five palms, afternoon low-grade fever, diminished sexual function, scanty and dark urine, a red and dry tongue, and a thin pulse without strength (usually with liver yin deficiency).

Think of it, if someone is deficient in yin (they are dry), they do not have enough fluids within the organism to effectively absorb, distribute and utilize not only their foods, but also the herbs you are giving them! Correcting an underlying constitutional yin deficiency is often the first step towards making your herbs and protocols more effective and efficient for your clients.

This is where our demulcents come in. As mentioned previously, demulcents have a net moisturizing effect upon the tissues of the body, increasing their innate secretions, lubricating dried out membranes, and softening any hardness that ensues from long term dryness. As mentioned above, these are specifically indicated for the dry/atrophy tissue state, an excess of vata, or yin deficiency- these are all basically different ways of saying the same thing which is that the constitution or afflicted tissues are dry.

Most often, the action of demulcent is seen as being solely responsible due to the presence of a certain category of plant constituents called “mucilaginous polysaccharides,” or simply mucilage. As the name sounds, these constituents yield a thick, sludgy sort of gruel that has the consistency of mucous. It sounds gross, but for someone that is dry these are like heaven! What’s interesting to note about mucilaginous polysaccharides is that they can only be extracted in water- they do not tincture well. I find it interesting that these particular constituents that essentially operate on the entire water economy of the body can only be extracted in water!

Another interesting factor with mucilaginous polysaccharides is that they are very large compounds, so large in fact that they are unable to physically cross the gut wall. So when you take a demulcent and feel it moisten your lungs, it’s not like those compounds are crossing the gut wall, traveling through the bloodstream, and binding to some receptor in the respiratory system to increase the mucosal membrane secretions. It’s a stellar example of a **reflex action** of an herb, meaning that the body is reacting the presence of the plant- there is a communication happening between the plant and the vital force of the body that is triggering the demulcent action upon the mucosa.

There are theories of specific pharmacological mechanisms of action, such as that they are triggering the vagus nerve to stimulate secretions- but I like to think of it in the way that these herbs hold the energetic signatures of the Water Element and the Moon and communicate

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that influence to our own astral body which then affects the physical body. This is not to say there isn't a physiological mechanism, but I believe this astral action is occurring as well through the intelligence of the vital force of both plant and person.

The primary tissue affinity we see our demulcents have are the mucosal membranes. I always think of these membranes as like the protective moat that surrounds the body, as they line the organ systems which are in direct contact with the outside world: the urinary tract/ reproductive systems, respiratory system, and the digestive tract. These membranes secrete mucous which is rich in antibodies and other immunological components in order to protect the organism from invading pathogens, trap any airborne particulates (with the respiratory system), allow digested materials to move swiftly through the GI, enhance sperm motility (female reproductive system), and protect the walls of the urinary tract from irritation. When these membranes lose their capacity to secrete mucous effectively, they become dried out, more prone to infection, irritation and inflammation and have increased sensitivity.

Most herbs that have a demulcent action will taste sweet to some extent. It's important to remember that in the modern world our definition of the sweet taste is on the extreme, as it is based on the flavor of refined sugar, honey and other *really* sweet substances. From a traditional perspective, the sweet flavor is really the taste of carbohydrates- it is relatively bland and neutral in flavor. In Ayurveda, they say that the sweet taste helps to nourish and build tissues and strengthen the organism as a whole, and is thus used as a primary treatment for vata constitutions. In excess, the sweet flavor builds kapha and can thus lead to damp accumulation, obesity, heaviness, and dullness.

It's interesting to note that the primary site of accumulation of kapha in the organism is the stomach which then reflexes into the lungs. This is why oftentimes when people eat dairy (which is kapha-genic) they will feel more mucous build in their lungs, because the kapha in the stomach essentially rises to the brim and "spills over" into the body and then builds in the lungs. Conversely, many traditional systems of medicine would cleanse the respiratory system through administering emetics which induce vomiting. Most of our herbal emetics are also those which have an action on the respiratory system (such as Lobelia, Licorice, and Calamus).

Because they increase dampness and hydration in the tissues, it's *critical* to remember that this herbal action is completely contraindicated in any situation where there is dampness, stagnation of fluids, or the kapha constitution. Oftentimes if they are given and contraindicated, the person will feel nauseous as it builds up too much dampness in the stomach. They are best given to thin, nervous, dried out vata type constitutions, or overly hot pitta types that have dryness in their constitution. The most straightforward way to tell if someone is dry is to look for dryness on the tongue, dry skin that feels rough to the touch, constipation, dry eyes, cracked nails, dry hair/scalp, creaky popping joints, low back pain, knee pain, nervousness, tension, anxiety, and insomnia. Demulcents will effectively soothe any irritation, cool any inflammation and heat, nourish deficient tissues, and moisten the dryness.

The demulcent action is one of those herbal actions that is actually pretty specific and doesn't necessarily require much breaking down as we have seen with some other actions (like

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alterative or expectorant). The only consideration that I find to be important is the affinities the plants will have to different organ systems of the body, and selecting an appropriate remedy for where the imbalance is located.

Below is a list of some of our most commonly used demulcents in western herbalism, with a few Chinese and Ayurvedic herbs thrown in as well. To make your remedy selection more precise, I have also included some of the primary organ affinities of the plants so you can see their main site of action.

Demulcent Materia Medica

<u>Herb Name</u>	<u>Primary Organ Affinities</u>
Aloe vera (<i>Aloe vera</i>)	Digestive, topical
American Ginseng (<i>Panax quinquefolius</i>)	Kidney, Respiratory
Coltsfoot (<i>Tussilago farfara</i>)	Respiratory
Comfrey (<i>Symphytum officinale</i>)	Respiratory, Digestive
Cornsilk (<i>Zea mays</i>)	Urinary
Couchgrass (<i>Agropyron repens</i>)	Urinary
Fenugreek (<i>Trigonella foenum-graecum</i>)	Digestive
Goji (<i>Lycium barbarum</i>)	Liver, Kidney
Irish Moss (<i>Chondrus crispus</i>)	Respiratory
Licorice (<i>Glycyrrhiza glabra</i>)	Respiratory, Liver, Kidney, Digestive
Ligustrum- Nu Zhen Zi (<i>Ligustrum lucidum</i>)	Liver, Kidneys
Lilly bulb- Bai He (<i>Lillium brownii</i>)	Respiratory
Marshmallow (<i>Althea officinalis</i>)	Respiratory, Digestive, Urinary
Mullein (<i>Verbascum thapsus</i>)	Respiratory, musculoskeletal
Peony (<i>Paeonia lateriflora</i>)	Liver, Respiratory
Plantain (<i>Plantago major</i>)	Respiratory, Digestive
Red Clover (<i>Trifolium pratense</i>)	Respiratory, Lymphatic
Rehmannia (<i>Rehmannia glutinosa</i>)- raw root	Stomach, Respiratory
Shatavari (<i>Asparagus racemosus</i>)	Kidney, Respiratory, Female Repro
Slippery Elm (<i>Ulmus rubra</i>)	Digestive, Respiratory, Urinary
Solomon's Seal (<i>Polygonatum multiflorum</i>)	Respiratory, Stomach, Musculoskeletal
Violet (<i>Viola odorata</i>)	Digestive, Female Repro