Herbs for Digestive Function

**Astringents:** Astringent herbs have a binding action on mucous membranes, skin and other tissue. Tannins are the active constituents in herbs creating an astringent effect. Tannins precipitate or curdle protein, which means they are binding and drying, causing a tight barrier that is resistant to inflammation and microbes. Tannins work to:

- reduce irritation and inflammation on the surface of tissues
- create a barrier against infection to open wounds and contract surfaces, reducing discharges and secretions.

Tannins are useful addition to a throat gargle, for swollen glands or bleeding (internal or external) and are useful for diarrhea because they decrease the amount of fluid lost from the bowels. Agrimony (Agrimonia eupatoria), Oak (Quercus rubur), Witch Hazel (Hamamelis virginiana), Tormentil (Potentilla erecta), Red Raspberry (Rubus idaeus), Meadowsweet (Filipendula ulmaria), Yarrow (Achillea millefolium) and Bayberry (Myrica cerifera) are all considered astringents.

**Bitters:** when taken before meals, bitters act to:

- stimulate digestive enzymes in the digestive tract
- increase one’s appetite and help to stimulate gastric juice
- have a general tonic action on digestion, stimulating self repair mechanisms

Bitters work by reflex action, stimulating the bitter taste receptors in the mouth, (found on the posterior third of the tongue). Tasting the bitters is part of the therapeutic effect and the bitter taste needs to stay on the tongue for a few seconds. During this time a message is sent from the glossopharyngeal nerve to the brain stimulating the gastric cells in the stomach (via the vagus nerve) to produce hydrochloric acid. Further down in the digestive tract thru reflex peristalsis, bitters stimulate the release of enzymes in the small intestine to ‘neutralize’ the chyme (food mixed with stomach acid), the liver is stimulated to produce bile and the gallbladder contracts, moving bile into the jejunum. Bitters need to be tasted for effectiveness and capsules of bitters are essentially useless! Bitters work thru taste receptors in the mouth and there is no direct action on the stomach. Goldenseal (Hydrastis canadensis), Wormwood (Artemisia absinthium), Yarrow (Achillea millefolium), Centaury (Centaurium erythraea), Gentian (Gentiana lutea), Dandelion root (Taraxicum officinalis radix) and Barberry (Berberis vulgaris) are all bitters.

**Demulcent Herbs:** The mucous membrane healers of the plant world, mucilages and gums are the main constituents in plant carbohydrates. Mucilages contain uronic acid when, mixed in water, produce a slimy substance. The function of uronic acid in plants is to increase the water holding capacity of cells. In humans, it is this slimy substance that soothes and protects the lining of all mucous membranes in the body. Mucilages work by reflex action in the body, when ingested they relax and soothe the endoderm lining in the gut and, via the spinal reflex, affect all other embryonically related tissues in the body (digestive, respiratory tract, urinary and reproductive tract). Licorice (Glycyrrhiza glabra), Fenugreek (Trigonella foenum graecum) and Slippery Elm (Ulmus fulva) are some common demulcant herbs.

Mucilages function to:

- decrease any irritation to the gastro-intestinal tract
- soothes and protects mucous membranes
- decreases sensitivity of the gut wall to gastric juices, enzymes, hormones, bitters and acids
- absorbs toxins from ingested substances and foreign bacteria
- decreases peristaltic action in cases of intense spasm
- decreases spasms and cramping of the urinary, respiratory and reproductive tract

**Digestive Relaxants:** Relaxant herbs generally contain Volatile oils, which decrease spasms in the gut through a reflex reaction from the taste receptors in the mouth and nerve endings in the gut lining. Useful for excessive peristalsis, diarrhea, gas and cramps; volatile oils help to digest protein, have antiseptic qualities, are antimicrobial and sedative. Lemon Balm (Melissa officinalis), Chamomile (Chamomilla recutita), Wood Betony (Stachys betonica.)

**Carminative Herbs:** Carminatives are herbs rich in volatile oils, their main action in digestion is to soothe and settle the gut wall, easing cramping and expel wind from the stomach and intestines. These herbs work to tone mucous surfaces and increase peristaltic action. Volatile Oils: Stimulate the olfactory nerves in the nose, which carry nerve impulses messages to the brain, particularly to the limbic system, a center of the brain, which governs emotional states in the body. There are many uses of volatile oils, from being strongly antiseptic and antifungal to antispasmodic and relaxing in nature. They are excreted from the body through the lungs, kidneys and through the skin, thus have an effect on these systems also. Caraway (Carum carvi), Fennel (Foeniculum vulgare), Peppermint (Mentha piperita), Cardamom (Elettaria cardamomum), Ginger (Zingiber officinalis), Anise (Pimpinella anisum) are examples of herbs containing volatile oils.

The information provided here is for consumer education only. It is not meant to replace the advice of a qualified health care professional in a clinic environment nor is it meant for self diagnosis.