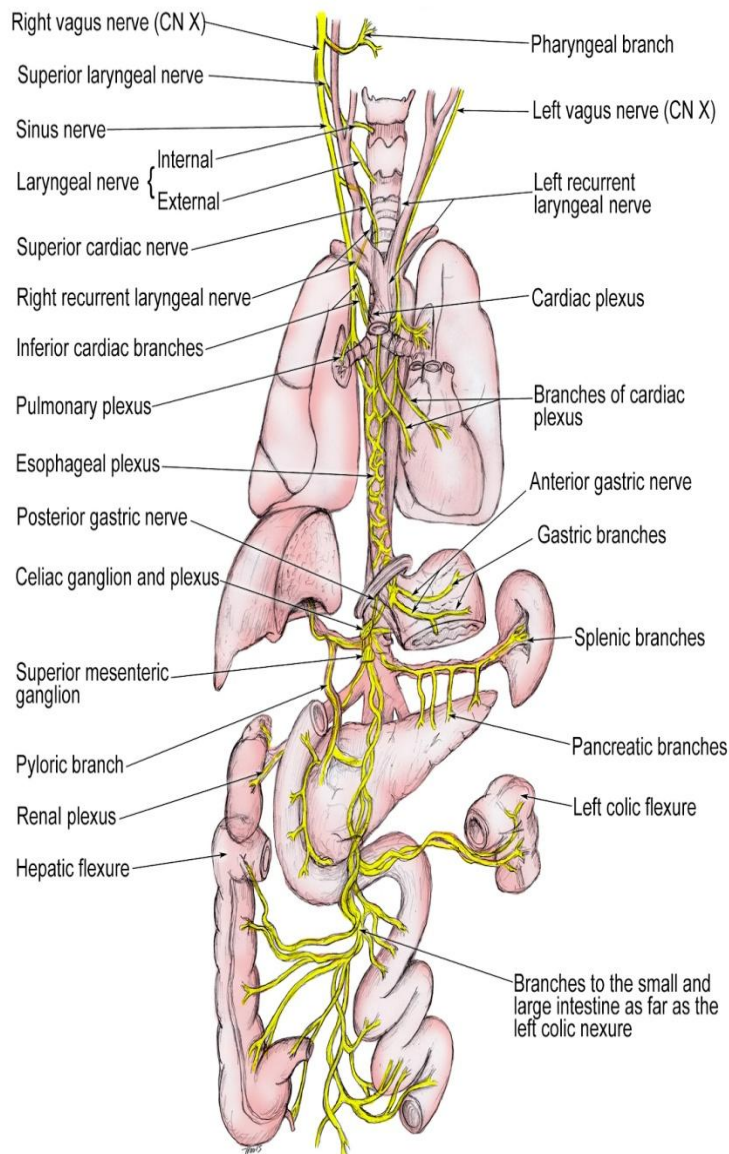


Bitters and Digestion

Digestion begins in the mind with the anticipation of a meal. Developing an appetite through postponement, exercise and infrequent snacking, encourages you to look forward to a meal. When a meal is prepared, the vagus nerve is stimulated by the senses and secretions are started in anticipation. In people with diminished digestion, this process is encouraged by taking Bitters 15 minutes before a meal.



Chewing well to mechanically break down food and mix it with saliva is important, so sit down and relax while eating but don't over do it. Digestion is governed by a branch of the autonomic nervous system called the parasympathetic nervous system (PSNS). Activation of the PSNS favours the secretion of saliva, stomach acid, pancreatic enzymes, bile, and it also stimulates peristalsis. These functions are optimized at rest. Sympathetic stimulation on the other hand occurs during activity and during stress, shifting energy resources away from digestion towards fast movement and alertness.

Taste buds send information to the brain via three nerves; the vagus nerve, glossopharyngeal, and facial nerves. This picture shows all the organs of digestion innervated by the vagus nerve. The heart and lungs are included indicating the general tonic role of Bitters.

The bitter taste buds on the back of the tongue can be stimulated with a little lemon juice or bitter herbs. Bitters have been traditionally used for this purpose, in the case of stimulating appetite as digestifs, apéritifs or bitters, or medicinally for underactive digestion i.e. quinine

and gentian. Examples are Angostura Bitters, Enzianschnaps, Campari, and lemon juice. The compounds responsible for the bitter taste are terpenoids such as amarogentin(gentian), sesquiterpine lactone(absinthin), and B-thujone(wormwood, Absinth).

The gastric phase of digestion begins when the stomach is distended, triggering stretch receptors. Protein breakdown begins with stomach acid and optimum secretions are required in this phase. Apple cider vinegar can help here, sipped with a meal, two teaspoons to a glass of water. Gastric secretions decrease with age leading to digestive disturbances such as dysbiosis, infection, bacterial colonization, and the poor absorption of nutrients. Other conditions related to low stomach acid are asthma, allergies, anaemia, B12 deficiency, gall bladder disease, rosacea, eczema, diabetes.



The intestinal phase of digestion begins when the stomach contents(chyme) are released into the duodenum. The efficiency of digestion and absorption relies on adequate secretions of acid for protein breakdown, pancreatic enzymes, bile from the liver, and healthy bacteria. Stress and poor diet, including inadequate fibre, will directly affect the quality of bowel bacteria and secretions. A diet high in refined carbohydrates will disorder bowel bacteria and blood sugar regulation.

Herbalist consider that Bitters are tonics when used over a long period of time, and work best if sipped slowly in concentrations of about 10 drops in 20ml of water. The main herbs used are gentian and wormwood. Bitter greens like dandelion can also be eaten first in a meal. All greens can be seasoned with lemon juice and olive oil.

Diet and eating habits are interrelated. Eating habits including relaxation while eating, stress and negative emotions which all affect digestion, while a person's age as well as ongoing state of vitality and health is also important. From the mouth onwards the interrelationship is evident, as the quality of the saliva affects oral hygiene and gum health, and reflects the diet eaten as saliva contains nutrients like enzymes. Stomach acid production requires zinc and adequate protein in the diet as well as vitamin B12, while food breakdown and absorption in the intestine utilizes enzymes that come from uncooked, raw, fresh, organic foods, and a healthy pancreas.

A western diet is not only nutrient-poor but it taxes all the organs of elimination with refined processed ingredients, chemicals, additives, pesticides and pollutants. Fibre from wholefoods like vegetables, nuts, grains and dark breads, is required to nourish friendly bacteria, feed intestinal cells and make nutrients, also preventing constipation and other bowel symptoms. Flatulence, offensive stools and bloating are signs of faulty digestion.

Some people eat on the run, a poor state for digestion, while others have the habit of resting and taking siestas or naps, allowing the body to operate in the optimal parasympathetic mode. That is why we say 'Rest and Digest.' The eye reveals personal tendencies or imbalances in the nervous system during an iridology examination, as well as the state of the digestive system as a whole.

References

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