

Disorders of the Intestines

The small intestine is continuous with the stomach at the *pyloric sphincter* and has a length of 16-19 feet (5-6 meters). It leads into the large intestine, which is about 3.5-5 feet (1-1.5 meters) long. The small intestine secretes intestinal juice to complete digestion of carbohydrates, protein and fats. It also absorbs nutrient materials necessary for nourishing and maintaining the body, and protects it against infection by microbes that have survived the anti-microbial action of hydrochloric acid in the stomach.

When acid food (*chyme*) from the stomach enters the duodenum, it is first mixed with bile and pancreatic juice, and then with intestinal juice. Gallstones in the liver and gallbladder drastically reduce secretion of bile, which weakens the ability of *pancreatic enzymes* to digest carbohydrates, protein and fat. This, in turn, restrains the small intestine from properly absorbing the nutrient components of these foods (e.g., *monosaccharides* from carbohydrates, *amino acids* from protein, and *fatty acids* and *glycerol* from fats).

Since the presence of bile in the intestines is essential for the absorption of fats, calcium and Vitamin K, gallstones can lead to life-threatening diseases, such as *heart disease*, *osteoporosis* and *cancer*. The liver uses the fat-soluble Vitamin K to produce the compounds responsible for the clotting of blood. In case of poor Vitamin K absorption, *hemorrhagic disease* may result. This vitamin cannot be adequately absorbed if there is any problem with fat digestion, due to lack of bile, pancreatic lipase and a certain amount of pancreatic fat. For the latter reason, following a low-fat diet can endanger one's life. Calcium is essential for the hardening of bone and teeth, the coagulation of blood and the mechanism of muscle contraction. What applies to Vitamin K also applies to all other fat-soluble vitamins, including Vitamin A, E and D. Vitamin A and carotene are also only absorbed sufficiently from the small intestine if fat absorption is normal. If Vitamin A absorption is inefficient, the epithelial cells become damaged. These cells form an essential part of all the organs, blood vessels, lymph vessels, etc., in the body. Vitamin A is also necessary to maintain healthy eyes and protect against or reduce microbial infection. Vitamin D is essential for calcification of bones and teeth. It may be noted at this point that supplementing these vitamins does not resolve the problem of deficiency. To sum up, without normal bile secretions, these vitamins are not digested and absorbed properly and, therefore, can cause considerable damage to the lymphatic and urinary systems.

Inadequately digested foods tend to ferment and putrefy in the small and large intestines. They attract a vast number of bacteria to help speed up the process of decomposition. The breakdown products are often very toxic and so are the chemicals produced by the bacteria. All of this strongly irritates the mucous lining, which is one of the body's foremost defense lines against disease-causing agents. Regular exposure to these toxins impairs the body's immune system, 60% of which is located in the intestines. Overburdened by a constant influx of toxins, the small and large intestines may be afflicted with a number of disorders, including *diarrhea*, *constipation*, *abdominal gas*, *Crohn's disease*, *ulcerative colitis*, *diverticular disease*, *hernias*, *polyps*, *dysentery*, *appendicitis*, *volvulus*, *intussusceptions*, as well as *benign* and *malignant tumors*.

Ample bile flow maintains good digestion and absorption of food, and has a strong cleansing action throughout the intestinal tract. Every part of the body depends on the basic nutrients made available through the digestive system, as well as the efficient removal of waste products from the digestive system. Gallstones in the liver and gallbladder considerably disrupt both of these vital processes. Therefore, they can be held accountable for most, if not all, of the different kinds of ailments that can afflict the body. Removal of gallstones helps to normalize the digestive and eliminative functions, improve cell metabolism and maintain balance throughout the body.