

Understanding Stomach Function



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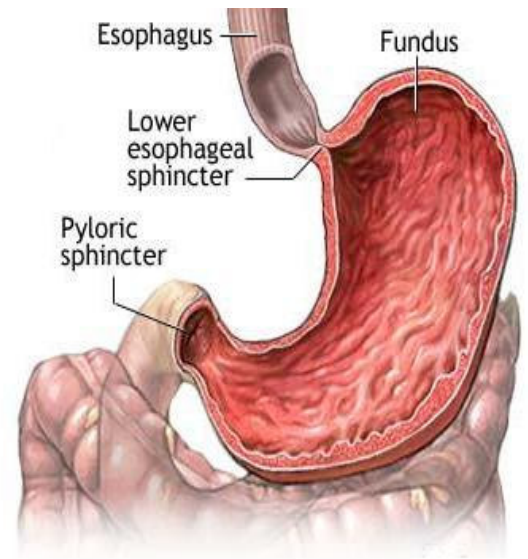
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Proper stomach function is vitally important for digestion and overall health. Complete digestion is necessary for proper absorption of the nutrients contained in the foods we eat. It's not what we eat, but more importantly, what we absorb. Digestion is the first step towards absorption of the necessary nutrients needed to maintain health and prevent disease and heal injured tissues. Recent research has estimated that as much as 80% of the illnesses in this country are due to the American diet. You are what you eat and absorb. You can prevent, control, and correct many of these illnesses with proper diet, digestion and the appropriate use of specific nutrients to improve the normal function of a gland, organ or system. It is estimated that 50% – 60% of adults have symptoms of low HCL production due to the typical American diet and lifestyle. As we age, especially after the age of 45 -50, the stomach's ability to produce HCL declines, as well as a decline of many other important enzymes and hormones, leading to the epidemic of nutrition related illnesses seen in the U.S. today. Researchers estimate that by the age of 80, we produce only 20% of the HCL that we produce as a young adult. This gradual reduction of HCL then leads to decreased protein and mineral absorption, which then can contribute to numerous health issues, such as osteoporosis, muscle and joint issues, electrolyte imbalances, cardiovascular issues. All the age related health concerns we are all faced with can be related to poor stomach function.

Diagram of Stomach

Initial digestion takes place in the mouth. Chewing your food thoroughly and completely is a very important step. Chewing food breaks down large pieces of food and mixes the food with enzymes in the saliva, which begins carbohydrate breakdown and prepares the food for the next step of the digestive process in the stomach. The secretion of saliva triggers the brain to signal the stomach to begin its secretions. Eating quickly, and not chewing completely, is the first stage of mal-digestion and is easily corrected by eating slower and chewing more completely.

The chief function of the stomach is the initiation of protein digestion and essential mineral breakdown. The specialized cells of the stomach produce and secrete a very strong acid called hydrochloric acid (HCL). This initial digestion of protein in the stomach allows the polypeptide protein chains to begin breaking down and become more accessible to the actions of the second phase of protein digestion occurring in the upper portion of the small intestine.

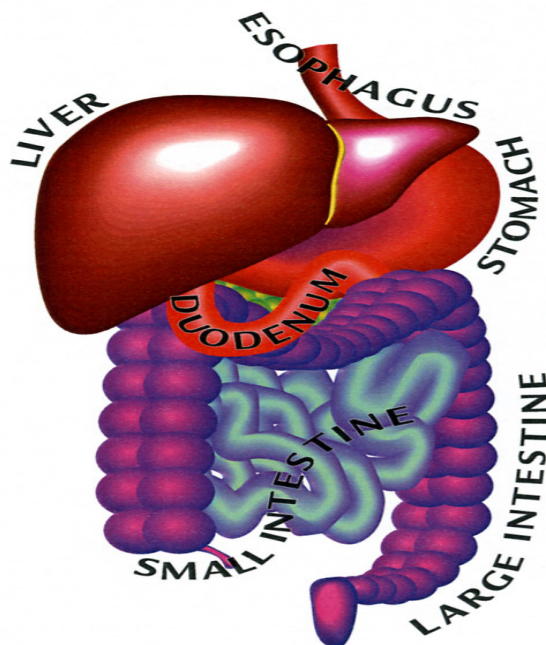


There are two other very important functions of the stomach. One is the regulation of the pH of the entire gastrointestinal tract. The emptying of an acid mixture from the stomach activates the duodenum of the small intestine to produce secretin which stimulates the flow of pancreatic juices, including bicarbonate, and the release of other important hormones of the GI tract which will complete the digestion process.

The other important function of the hydrochloric acid is to act as a barrier to ingested bacteria. The low pH of HCL (1.5 – 3.0) has the effect of destroying most organisms entering the intestinal tract. This way, HCL plays a role in improving immune function. The stomach also produces special mucus to protect itself from the strong HCL. When there is a decreased production of HCL due to poor diet, stress, antacid and other drug use, the HCL can not do its job of destroying the invading bacteria. This will lead to more complicated digestive problems and the development of ulcers.

The HCL is extremely important for the digestion and absorption of many essential nutrients; especially the minerals. In order for the body to absorb the essential amino acids, calcium, iron, magnesium, manganese, selenium, and zinc, a very low pH is needed. If you have indigestion symptoms and use antacids (Tums) or other acid blockers you may temporarily reduce your symptoms, but you will also interfere with absorption of these important minerals. If you do not absorb enough zinc, for example, you can not produce proper amounts of HCL, which will lead to more severe progressive indigestion symptoms. Reduced HCL can allow bacterial growth leading to ulcer formation. Zinc is also vital to immune function. If you can't absorb zinc because of low HCL, you will weaken your immune system. If you don't absorb calcium due to low HCL, you can develop osteoporosis and you greatly increase your risk of arthritis. If you can't absorb magnesium, you increase the risk for heart disease.

Excessive chemical, emotional, or physical stress can cause the adrenal glands to be over worked. This excessive stress on the adrenals leads to decreased HCL production; which leads to decreased protein absorption; decreased immune function because of low zinc absorption; a high risk for ulcers, osteoporosis, muscle cramps and spasms; hormone imbalances; weight gain; lack of energy. A diet high in refined, processed foods and caffeine trigger adrenal stress.



Heartburn or hyperacidity is when the stomach contents flow back up into the esophagus. The esophagus does not have the same mucologenuous protective layer as the stomach, so the acidic stomach contents flows backwards causing pain and irritation of esophageal tissues. This is also known as reflux esophagitis and if long-term chronic problem is called gastroesophageal reflux disease or GERD. This is usually worse when lying down and / or eating too much which increases intra-abdominal pressure. Smoking, obesity, eating irritating or fried foods, alcohol and coffee, emotional stress are all contributing factors. This condition is not due to too much acid, rather due to a weakening of the muscular valve separating the esophagus and the stomach, as well as a lack of stomach acid necessary for proper and complete digestion.

STOMACH FUNCTION TEST

Please read each question and enter the corresponding number and /or answer which Best describes your symptoms.

0 = Never / No symptoms

1 = Mild and/or Occasionally have it, effect is minimal

2 = Moderate and/or Occasionally have it, effect is moderate

3 = Frequently have it and/or effect is significant

4 = Frequently have it and/or effects are severe / Diagnosis of condition

STOMACH INFLAMMATION / IRRITATION

No Yes History of Ulcers or Gastritis

No Yes Past or current diagnosis or history of Hiatal Hernia

No Yes History of GERD / Esophageal Reflux

No Yes Using Ulcer Medications

0 1 2 3 4 Stomach pain, burning, aching 1-4 hours after eating

0 1 2 3 4 Feeling hungry 1 - 2 hours after eating

0 1 2 3 4 Heartburn, especially when lying down

0 1 2 3 4 Heartburn from spicy / fatty or specific foods

0 1 2 3 4 Pain or difficulty when swallowing foods or beverages

0 1 2 3 4 Constipation, difficult bowel movements

0 1 2 3 4 Black, tarry stools

0 1 2 3 4 Relief from symptoms with antacids /foods

0 1 2 3 4 Digestive problems subside with rest / relaxation

These symptoms deal with excessive stomach acid, stomach inflammation, sensitivity to hydrochloric acid and / or stomach ulcers. The stomach lining must be allowed to heal. Gastric repair products will support proper GI health, assist digestion, maintains healthy absorption of nutrients and enhances the development of normal protective mucosal barriers.

Gastric repair products should contain some of the following: DGL (deglycyrrhizinated licorice), okra, glutamine, bismuth, berberis, aloe vera. These ingredients work to reduce inflammation while repairing the protective mucosal lining. I recommend Gastic Repair formulated by clinicians and researchers at Biogenesis.

STOMACH FUNCTION

- No Yes History of Psoriasis
- No Yes History of anemia / Iron deficiency
- No Yes History of Food Allergies
- 0 1 2 3 4 Use Antacids for Heartburn or Indigestion
- 0 1 2 3 4 Use of Acid reducing OTC or prescription medications
- 0 1 2 3 4 Heartburn, Indigestion, Sour Stomach after Meals
- 0 1 2 3 4 Gas/ flatulence, belching, burping, bloating after meals
- 0 1 2 3 4 Itching around the rectum
- 0 1 2 3 4 Sense of fullness during and/or after meals
- 0 1 2 3 4 Small amounts of food fill you up immediately
- 0 1 2 3 4 Do you have a poor appetite or disinterest in food
- 0 1 2 3 4 Metallic or Bad taste in mouth
- 0 1 2 3 4 Partial loss of taste or smell
- 0 1 2 3 4 Constipation or difficult bowel movements
- 0 1 2 3 4 Undigested food in stool
- 0 1 2 3 4 Nausea / upset stomach after taking vitamin supplements
- 0 1 2 3 4 Chronic Candida infection
- 0 1 2 3 4 Distaste for Meat / Vegetarian out of necessity
- 0 1 2 3 4 Fingernails are cracked, peeling, weak
- 0 1 2 3 4 Spoon shaped nails
- 0 1 2 3 4 Sores in corner of mouth
- 0 1 2 3 4 Chronic or severe Acne

These symptoms are common if the stomach is not producing sufficient amounts of HCL and Pepsin, which are needed to begin digestion and activate other enzymes and hormones. Stress, poor diet, alcohol, smoking, caffeine, and aging all result in decreased production of HCL and pepsin in the stomach. The following nutrients should be used to assist the stomach in the production of digestive acids: betaine HCL, glutamic HCL, pepsin, ammonium chloride.

We recommend **PanZyme**, a combination of both stomach and pancreatic enzyme necessary for proper digestion all in one product. One with each meal will help improve digestion and reduce symptoms associated with poor diet and the aging process. Numerous additional nutrients are also needed. These can be found in a professional, complete, comprehensive multi-vitamin / multi-mineral such as **UltraGenesis**



If you suffer from digestive difficulties, rather than focus on blocking the natural digestive process with antacids or acid blocking drugs, the natural approach to indigestion will focus on improving digestion with safe, natural products that have a long history of safety and efficacy. We personally use and only recommend pharmaceutical grade nutraceutical products from leading nutritional manufacturers. These products are offered only through health care providers because of their purity, quality and potency. Having researched these companies, we can guarantee the purest raw materials from around the world, processed under the strictest manufacturing practices that are in compliance with strict Good Manufacturing Practices (GMP) guidelines and based on current scientific research and clinical experience.

For Ongoing Daily Foundational Nutritional Support and Health Maintenance I recommend:

UltraGenesis Multivitamin: take 2 with each meal for a total of 6 per day OR

Multigreens: consume 2 with breakfast and three with dinner.

You can safely order these products on our web site: www.NaturalWellnessClinic.com

Go to: Order Products Tab

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