



# Tummy Troubles

Low Stomach Acid, Intestinal Dysbiosis, and Hiatal Hernia Are The Hidden Causes of Many Health Problems

There's a problem you've likely never heard of that contributes to the development of many chronic health problems, including excess or deficient weight, poor muscle tone, mood disorders, arthritis, osteoporosis, autoimmune diseases, and even cancer. And although you may be unfamiliar with this problem, there's a high probability that you have it. In fact, some health experts believe that your chance of having it are about the same as your age. So, if you're 50, there's a 50% chance you have it. If you're 70, the chance increases to 70%.

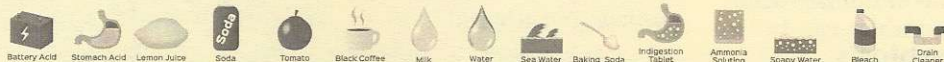
The problem is *hypochlorhydria*, a fancy name for low stomach acid. The ironic thing about this health issue is that most people who have it think they have the opposite problem. They believe they have too much stomach acid because they often suffer from acid indigestion, heartburn, or acid reflux.

Based on this incorrect assumption they take antacids, or even acid blockers, trying to fix their tummy troubles. This approach not only fails to correct the real problem, it actually causes their health to further deteriorate.

So, in this issue of *Sunshine Sharing*, you're going to learn about the importance of stomach acid, the problems associated with low stomach acid, and how to correct it properly with natural remedies. You'll also discover how to recognize and correct two other digestive issues that are typically associated with it—intestinal dysbiosis and a hiatal hernia.

## The Critical Importance of Hydrochloric Acid

Your stomach secretes an extremely powerful acid, hydrogen chloride (HCl), also known as hydrochloric acid, to help you digest the food you eat. Composed of one molecule of hydrogen and another of chlorine, HCl is one of the most acidic substances on earth.



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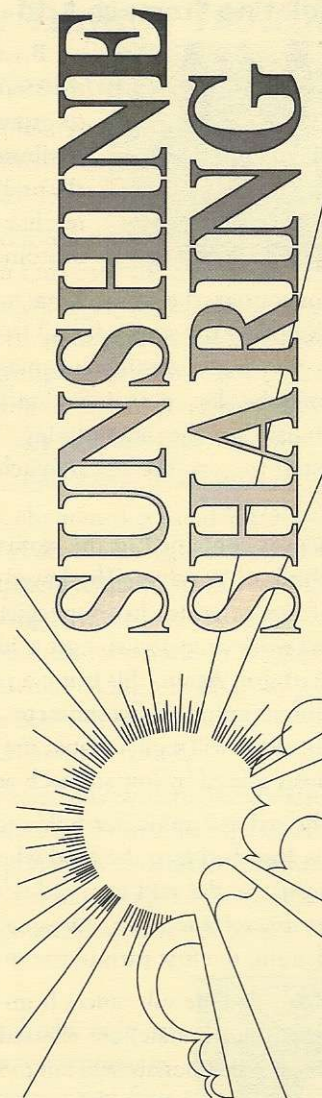
If you look at the pH scale above it extends from extremely acidic with battery acid at a pH of 0 to dangerously alkaline with drain cleaner at a pH of 14. Plain water is neutral at a pH of 7. Each step on the scale is 10 times stronger. From this scale you can see how strongly acidic stomach acid is at a pH of 1, just one step below battery acid.

Hydrochloric acid (HCl) has three main functions in the stomach. First, it breaks down proteins with the aid of an enzyme called pepsin. You can't properly digest protein without hydrochloric acid and pepsin. So, if stomach acid is low, your body can't digest and assimilate protein. This leads to poor muscle tone, loss of muscle mass, and a host of other problems. Poorly digested proteins also trigger allergic reactions.

Second, HCl prepares minerals like calcium, magnesium, zinc, copper, and iron for absorption by ionizing them. This allows these minerals to bond with amino acids or fatty acids for absorption. Without sufficient HCl, your body can't absorb minerals properly. This leads to problems with bones and joints, reduced immune reactions, anemia, and more.

Finally, HCl kills bacteria, yeast, and parasites present in food. This means HCl is an important part of your immune system. Low stomach acid means you're more likely to get infections, especially in the digestive tract.

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Your guide to better health the natural way.

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### Important Notice

The information in *Sunshine Sharing* is for educational purposes only and should not be used to diagnose and treat diseases. If you have a health problem, we recommend you consult a competent health practitioner before embarking on any course of treatment.

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## Regulating Stomach Acid



Because HCl is such a strong acid, the stomach needs a buffering system to protect itself. Problems commonly attributed to acid indigestion are actually problems with these acid-regulating mechanisms and not by overproduction of stomach acid.

For starters, the stomach has a thick lining of alkaline mucus which buffers the stomach wall from the acid. An ulcer develops when this mucus coating is damaged. Modern research suggests this may be due to an infection by a bacteria called *H. pylori*, which damages the mucus lining. The irony here is that *H. pylori* may start to grow because stomach acid was too low to inhibit it in the first place.

Acid is contained in the stomach by two sphincters that we can think of as valves. The lower esophageal sphincter prevents acid from entering the esophagus and burning it. If this valve doesn't work properly, you get acid reflux, commonly referred to as heartburn. Again, this is not a problem of too much acid; it is a malfunctioning of this sphincter, usually due to a hiatal hernia, which, as we will explain later, may develop because of intestinal dysbiosis caused by low stomach acid.

The pylorus sphincter holds food in the stomach while the acid is absorbed into the food where it breaks the food apart for digestion. As the acid is mixed with the food, a shift in the pH causes this valve to open, releasing the stomach contents into the duodenum, the first turn in the small intestines.

Here, alkaline substances from the gall bladder (bile) and the pancreas (bicarbonate) are released to neutralize the acid. A lack of bile and bicarbonate will fail to neutralize the acid, which may cause a duodenal ulcer, but again, this is a problem with acid buffering, not a problem with overproduction of stomach acid.

## Acid Indigestion and Intestinal Dysbiosis

This brings us to the primary reason why people get a sour stomach. A lack of HCl allows bacteria and yeast to grow in the stomach and intestines so that food starts to ferment, rather than digest. The process of fermentation by bacteria and yeast produce acid and gas as by-products.



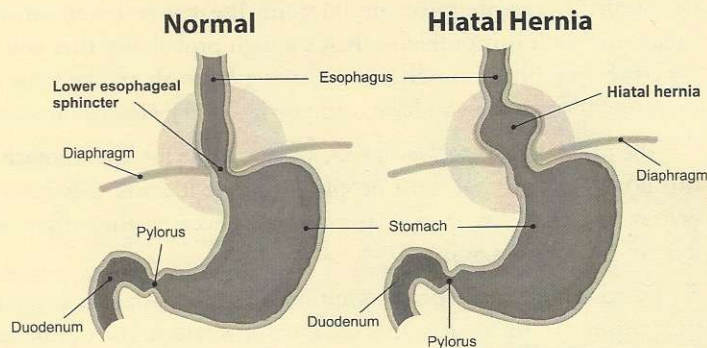
Fermentation is why yeast makes bread rise. The yeast feed on the sugar in bread dough and produce CO<sub>2</sub> causing bubbles of gas to form in the dough, making it rise. If the process is allowed to continue, they also produce enough acid to give the dough a sour flavor, hence the term sourdough.

This fermentative process occurs in your stomach and small intestines when you don't have enough HCl to kill the microbes present in the food you eat. So, if you experience acid burning, belching, and/or bloating that starts about one hour or more after eating, your problem is not too much stomach acid, it's dysbiosis of your digestive tract. You have too many microbes "eating your lunch" because you don't have enough HCl to inhibit their growth.

## Hiatal Hernia

People with low stomach acid often have a hiatal hernia. As we'll explain, this is the primary cause of acid reflux or heartburn.

In a healthy person, the esophagus passes through an opening in the diaphragm muscle called the hiatus. The lower esophageal sphincter, which holds acid in the stomach is below this. When a person has a hiatal hernia, a portion of the stomach protrudes up into the chest cavity through the opening for the esophagus (as pictured below). This kinks the valve at the top of the stomach, which allows acid to escape the stomach, enter the esophagus, and irritate or burn the lining of the esophagus. This is called acid reflux, gastroesophageal reflux disorder (GERD), or just heartburn.



There are several reasons why a hiatal hernia can develop, but one factor is the abdominal pressure from the gas created by intestinal dysbiosis. It puts pressure on the stomach, pressing it upwards. The lack of protein and minerals due to the low stomach acid, as well as stress and shallow breathing, weaken the diaphragm muscle and allow for the stomach to slide up through the opening.

This is one of the vicious cycles created by low stomach acid, since a hiatal hernia further inhibits stomach function, increasing the dysbiosis, bloating, and pressure. Furthermore, a hiatal hernia leads to a whole new set of health problems beyond the ones caused by low stomach acid.

## Health Problems Caused by a Hiatal Hernia

The first major problem a hiatal hernia creates is that it inhibits breathing. The pressure of the stomach prevents one from taking deep abdominal breathes which causes shallow chest breathing. Asthmatics and people with COPD often have a hiatal hernia.

Shallow breathing reduces oxygen levels, which makes the entire system more acidic. Reduced oxygenation increases pain, decreases energy, and encourages the growth of harmful microbes and cancer cells, which live in a low oxygen environment.

If a hiatal hernia protrudes upward far enough, it puts pressure on the bottom of the heart. This can cause a rapid or irregular heartbeat, which clears up when the hiatal hernia is fixed.

Since the esophagus has to be shortened because the stomach is protruding upward, this can cause a slight kink in the esophagus. This often happens in the throat area, which can cause the sensation of a lump in the throat. It can cause difficulty in swallowing food or capsules and also irritate the thyroid. The tall, thin body type often has a hiatal hernia which is irritating their thyroid, overstimulating their metabolism, and preventing them from digesting protein to build muscle.

# Lasting Solutions to Low Stomach Acid and Other Tummy Troubles

With an understanding of these three interrelated digestive issues (low stomach acid, dysbiosis, and hiatal hernia) and the negative impact they can have on your health, it's time to explore lasting solutions to correcting these problems so you can enjoy the health you desire.

For starters, we need to increase, not neutralize or block, stomach acid to restore normal digestion. There are two ways to do this. One is to supplement HCl (and possibly digestive enzymes) and the other is to use herbs and nutrients to restore HCl production. In the beginning, it's wise to do both by supplementing digestive secretions while you work to restore normal digestive function.

## Supplement with Betaine HCl

Betaine HCl is a supplement that increases hydrochloric acid levels in the stomach within minutes after taking it. If you have symptoms associated with low stomach acid, do a betaine HCl test to determine if you need HCl and if so, how much. However, do not perform this test if you have an active ulcer or a history of ulcers.

You'll need a *Betaine HCl Formula* for the test. The formula we use contains 325 mg. of betaine HCl and 20 mg. of pepsin per capsule. Adjust the following recommendations if the formula you select contains a different amount.

Start by taking one capsule of the *Betaine HCl Formula* at the beginning of a meal. If you do not experience any unusual warmth or burning sensations in your stomach after the meal, increase the dose to two capsules the next meal. You can continue to increase the dose by one capsule each meal until you reach a dose where you notice a warm or mild burning sensation in the stomach.

Once you do, you immediately reduce the dose to the number of capsules you used before you experienced the discomfort. Most people with low stomach acid find a dose of two to four capsules to be sufficient. If one or two capsules causes discomfort, you either don't have low stomach acid or you have acid reflux that is too severe to take betaine HCl until you get it under control.

Remember that the more protein you eat at a meal, the greater the need for HCl, so you can vary the dose with the size and content of your meals. Over a period of three to six months, most people with low stomach acid will start to experience a burning sensation in their stomach and will find they need to lower the dose until they are able to wean off the supplement completely.

## Also Consider Digestive Enzymes

Many people with low stomach acid also experience difficulty with carbohydrate and/or fat digestion. If you do, you may also wish to take a *Digestive Support Formula*. This formula contains a lesser amount betaine HCl and pepsin along with bile salt (which aids fat digestion and is helpful for people whose gall bladder has been removed) and pancreatin (which contains the pancreatic enzymes used to digest proteins, fats, and starches). The formula also includes other enzymes to aid digestion.

Many people find that taking one capsule of Betaine HCl Formula along with one capsule of the Digestive Support Formula, helps them digest food and absorb nutrients more effectively.

## Supplement with Nutrients for Producing HCl

Chloride, zinc, and thiamine (vitamin B1) are all needed to produce HCl. Deficiencies of these may be the cause of low stomach acid and supplementation may help restore digestive function.

If you're not making HCl due to a zinc deficiency, you're caught in a vicious cycle because you can't properly absorb zinc without HCl. Signs of low zinc levels include greying of the hair, increased susceptibility to viral infections, poor wound healing, and sexual problems in men. If you have symptoms of reduced zinc levels, take zinc with the *Betaine HCl Formula* so you can absorb it, rebuild your zinc levels, and start making stomach acid normally.

Low stomach acid and intestinal dysbiosis often create cravings for carbohydrates. A high carbohydrate diet can deplete thiamine, causing another vicious cycle of deteriorating health. Deficiencies of thiamine are associated with acid reflux (GERD), constipation, edema, difficulty swallowing, fatigue, difficulty breathing, and brain fog. If you have any of these symptoms, you should also supplement with thiamine (vitamin B1) while taking the HCl supplement. Because the B-vitamins work better in combination, it would be good to take thiamine and a vitamin B-complex.

Low chloride levels are detected on standard blood tests. Chloride (Cl) is part of table salt, sodium chloride (NaCl). Interestingly, taking a pinch of table salt (preferably a natural, unrefined salt) with a glass of water about 20-30 minutes prior to meals will also help with HCl production by increasing chloride levels.

## Take Digestive Bitters

Bitter tasting foods and herbs help to stimulate HCl production, as well as pancreatic enzymes and bile. It's the taste that does this. Bitter foods are typically highly alkaline, which signals the body to produce more acid.

So a simple way to stimulate digestive secretions is to eat a salad containing bitter greens such as dandelion, kale, Swiss chard, radicchio, beet greens, and dark, green lettuce at the start of a meal. Use olive oil and vinegar as a dressing. Raw apple cider vinegar is helpful for digestion.

Another option for stimulating digestion is to take an *Herbal Bitters Formula* with water prior to meals. There are many versions of these digestive bitter tonics. Common ingredients in them include bitter herbs such as dandelion root, gentian, Turkey rhubarb, orange peel, and burdock. These formulas also contain aromatic herbs, such as ginger, peppermint, chamomile, and cardamon, which stimulate digestion, improve intestinal motility, and ease gas and bloating. Whatever ingredients the formula contains, it must *taste* bitter to work properly.

Take the *Herbal Bitters Formula* about 15-20 minutes prior to meals along with one to two large glasses of water. This will not only stimulate HCl and other digestive secretions, it also helps to control intestinal dysbiosis, which will reduce gas and bloating. An *Herbal Bitters Formula* can also be taken with water after meals to help settle a sour stomach and relieve bloating.

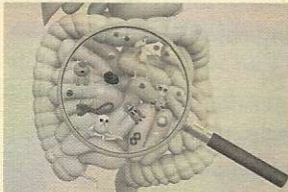


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Bitters should be avoided if you have a dry, atrophied digestive system. If you have a dry and withered (or shriveled) looking tongue, don't take bitters. Take the Chinese Earth-Increasing Formula instead. (See *Chinese Herb Formulas* for digestion.)

### Correct Intestinal Dysbiosis



There are several remedies that can help to correct the dysbiosis caused by low stomach acid and restore a normal balance of intestinal microbes. The first is cinnamon, which kills both bacteria and yeast. Taken as part of the

*Cinnamon-Nopal Blood Sugar Formula*, it will also help to reduce cravings for carbohydrates. Taking two capsules two or three times daily is recommended.

Goldenseal is another helpful remedy for dysbiosis. Mixed into an *Herbal Bitters Formula*, it will also stimulate digestion and tone up intestinal membranes. The dose is two capsules two or three times daily. You can also take berberine, one of the principle alkaloids in goldenseal. Take one capsule twice daily.

Another great remedy is enteric coated peppermint oil. Take one capsule with three meals each day for about 20 days. You can mix peppermint oil with melted coconut oil to make your own.

### Check for and Correct a Hiatal Hernia

To determine if you have a hiatal hernia, check your breathing. Put one hand on your chest and the other hand on your abdomen and take a deep breath. If your abdomen moves outward as you breathe, but there is little movement of your chest, you're breathing properly and don't have a problem with a hiatal hernia.

When you're taking a deep breath, your belly should rise as you inhale and move inward as you exhale, while your chest should only move slightly. However, if the abdomen doesn't move as you breathe in, or contracts inward while your chest expands outward, this may indicate that you have a hiatal hernia.

The hiatal hernia is largely a mechanical problem. So, try to find a chiropractor, massage therapist, or other natural health practitioner that can help you pull the stomach back down into position. There are also a variety of self-help techniques you can use to correct a hiatal hernia which can be found in the *Additional Help and Information* box below.

### Chinese Herb Formulas for Digestion

Digestion is associated with the earth element in traditional Chinese medicine (TCM). Symptoms of dysbiosis are considered an excess of the earth element and can be corrected by the use of an *Earth-Decreasing Formula*, which contains ingredients like Chinese giant hyssop, Chinese hawthorn, magnolia, and gastrodia. This formula can stimulate digestion and ease a sour stomach, foul belching, and intestinal bloating.

When digestion is weak, a person will tend to be excessively thin and have trouble with a lack of muscle tone. In this case, the person is deficient in the earth element. According to TCM they have a deficiency of spleen qi, which turns the food one eats into muscle tissue. In this case, a *Chinese Earth-Increasing Formula* can be helpful. It's also helpful for an atrophied digestive system and those with a hiatal hernia. It contains herbs like Asian ginseng, astragalus, bai-zhu atractylodes, Chinese yam, and sacred lotus seed, which improve weakened digestive function.

### Additional Help and Information

For more information about low stomach acid, intestinal dysbiosis (SIBO), and correcting a hiatal hernia contact the person who gave you this newsletter. You can also consult the following resources:

*Strategies for Health* by Steven Horne

*Correcting a Hiatal Hernia article and videos:* <https://stevenhorne.com/article/Correcting-a-Hiatal-Hernia>

*Small Intestinal Bacterial Overgrowth article:* <https://stevenhorne.com/article/Small-Intestinal-Bacterial-Overgrowth-SIBO>

*Hiatal Hernia Syndrome: Insidious Link to Major Illnesses* by Theodore A. Barrody

*Hiatus Hernia* by Joan Lay