

# How to Avoid Getting "Burned" by Stomach Acid (Without Neutralizing or Blocking It)

Before we can understand how to fix a problem, we need to clearly identify the nature of the problem. On page one, we established that not only is the stomach supposed to produce acid, but that this acid production is essential to good health. If this is the case, then why do we experience heartburn and acid indigestion? To answer this, we need to understand a little bit about the structure and function of the stomach.

When the stomach is functioning normally, it is a highly acidic environment, reaching a pH of about 2.2 to 2.6. You can't get much more acid than this, so the idea that the stomach is over-secreting acid is really quite ridiculous. The stomach is a highly acidic environment, and in order to keep this acid from digesting the stomach itself, the stomach produces a thick, protective layer of mucus.

If the stomach has an area where there is insufficient mucus to protect it, an ulcer can develop. If the acid has a hard time penetrating the food or there is insufficient acid to properly break down the food, then the mixture may sit too long on the stomach. A dull burning pain that we call acid indigestion is the result.

Heartburn, which was renamed acid reflux and then GERD (probably to make it sound like a more serious condition in order to increase the sales of acid-blocking drugs), occurs when stomach acid enters the esophagus. Normally, a valve at the top of the stomach known as the lower esophageal sphincter (LES) prevents this from happening. If the LES opens or relaxes when food and acid are present in the stomach, acid is allowed into the esophagus. Because the esophagus doesn't have the protective layer of mucus that the stomach does, the acid will burn the esophagus, causing inflammation.

If this happens once in a while, it's not a serious problem, but when it happens regularly, it can damage the tissues of the esophagus causing ulcerations and severe pain. It can also increase the risk of cancer of the esophagus. This chronic release of acid into the esophagus (chronic heartburn) is what the terms GERD or acid reflux are referring to.

## What Causes Acid Indigestion And Acid Reflux?

Many of the problems that cause heartburn are simply mechanical. In order for the valve at the top of the stomach to work properly, the stomach has to be in the proper position. Pregnancy, excess weight, chronic stress and intestinal gas and bloating can put pressure on the stomach, pushing it upward towards the diaphragm. This can cause the LES to sort of "kink," making it difficult for the valve to stay closed.

Overeating can do the same thing. When there is too much food in the stomach, it puts pressure on the LES. A simple belch (the release of air or gas from the stomach, will cause the LES to open momentarily and the pressure of the stomach contents may push some of the stomach acid up into the esophagus. This pressure is even greater when one is lying down with a full stomach, which is why acid reflux can often occur at night.

Another cause of acid indigestion is overcooked animal proteins and greasy fried foods. Normally, HCl is absorbed into the cells in the food, causing them to swell and burst. When food is heavily coated with fat, HCl can't penetrate the food properly, so instead of being properly absorbed, the acid simply floats around in the stomach. A similar problem occurs when one overcooks animal proteins—well-done "shoe-leather" meat doesn't absorb the acid as well as slightly rare or even raw proteins do.

The reason this creates a problem is that the valve at the bottom of the stomach is designed to stay shut until the food has absorbed the acid. Then, it opens, allowing the food to move into the small intestines where the remaining acid is neutralized by bile and pancreatic secretions. When the food doesn't absorb the acid properly, this valve may "lock up" forcing the food to remain in the stomach for a long period of time. This results in a heavy feeling in the stomach hours after eating which may involve dull burning pains or acid indigestion. So, a meal of greasy, fried, "fast" foods is much more likely to cause acid indigestion and acid reflux than a more traditional meal of properly cooked meat and vegetables.

Oddly enough, one of the causes of acid indigestion, and ultimately acid reflux, is actually a deficiency of hydrochloric acid production. HCl production declines with age and most people over 50 are actually deficient in acid production. This lack of acid secretion causes indigestion, which simply means that food isn't digesting properly. Again, because the food isn't digesting properly in the stomach, the valve at the bottom of the stomach doesn't open, causing food to sit on the stomach for hours. This increases pressure on the valve at the top of the stomach and weakens it.

One reason that antacids work is that by absorbing acid in the stomach, they trick the valve at the bottom of the stomach into thinking the first stage of the digestive process had been completed. When the valve opens, it releases the pressure on the stomach and you feel better. But, the improperly digested food causes intestinal irritation, gas and bloating, perpetuating the problem.

## Simple, But Effective Solutions

Sometimes the simplest solutions are the best. So, before looking at other solutions to these "acid" problems, let's recognize that ordinary cases of acid indigestion and acid reflux are indications that we're doing things to stress and disrupt healthy digestion. The best thing we can do is to pay attention to these warning signs and make some simple changes to take the stress off our body.

### Eat Smaller, More Frequent Meals

First of all, don't overeat. It's much better for your health to eat 5-6 small meals during the day than to eat one or two large ones. Doing this will take a huge amount of stress off your digestive tract. Eating small frequent meals is especially important if you are overweight or pregnant, as it decreases pressure in the stomach. It also helps you maintain a more stable blood sugar and lose weight if you are overweight.

