

Stress and how it affects your digestion

Stress produces many negative physiologic effects on the body but this article is primarily about how stress affects our digestion.

What is "Stress"?

The classic definition of stress is 'any real or imagined threat, and your body's response to it'.

Some stress is unavoidable and can even be helpful in some situations. But a stressor becomes a problem when your response to it is negative, your feelings and emotions are inappropriate for the circumstances, your response lasts an excessively long time or you are feeling continuously overwhelmed, overpowered or overworked.

Does Stress Really affect your digestion?

The simple answer is yes, very much so. We all know that stress is not good for you, and that it can lead to heart attacks, strokes, and cancer. What you may not realise is that stress has a hugely negative effect on your digestive system. I am not just talking about big stressful events, such as moving home, divorce, bereavement or losing your job but also the everyday stressors of life, such as a poor diet, certain medications, work-related anxiety, a lack of sleep, worrying about the bills, or general negative thoughts, just to name a few.

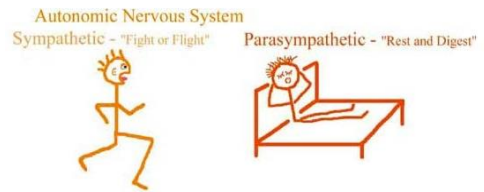
The body does not easily manage stress and the digestion of food simultaneously, and for good reason. The body's physiologic stress response, which is known as the *fight or flight response*, is your survival mechanism. When you are being attacked, digesting food is not your body's priority. Instead, it will direct all of its energy to focus on the danger at hand and directs blood to the brain and limbs for quick thinking and fighting or fleeing. Depending on the severity of the attack, this may cause your digestion to completely shut off.

This will leave your digestive system shouting out for attention through the symptoms of constipation, heartburn, gas, IBS, bloating, stomach pain or a weight gain, and much more.

How does stress negatively affect your digestion?

Stress hormones slow down the production of stomach acid. Stomach acid is needed to kill harmful pathogens that are consumed with the food you have eaten, it activates an enzyme (pepsin) needed for protein digestion, it signals the pancreas to produce further digestive juices and enzymes needed for digestion (meaning that nutrients will not be absorbed) and it initiates peristalsis, the rhythmic movement of the digestive tract to move the food along the GI tract. Stomach acid is also essential for the absorption of vitamin B12 which plays a key role in the normal functioning of the brain and nervous system, and production of blood.

Peristalsis. When you eat, you want your food to be in your digestive system for a certain length of time to allow your gut to absorb the nutrients it needs, and allow it to get rid of any waste. However, when you are stressed, digestion can literally shut down. This can lead to constipation. Conversely, stress can have the opposite effect on your digestive tract. For some, it can cause food to move too quickly through your system, not leaving enough time for the nutrients to be absorbed, which leads to nutritional deficiencies.



Heartburn. The physiologic stress response can cause the sphincter that closes off the oesophagus from the stomach to spasm. When this happens, stomach acid can make its way back up into the oesophagus, causing it to burn the oesophageal lining.

Gut Immunity. As discussed in my article on the importance of your microbiome, 90% of the cells within your body are not human but are actually bacteria living in your digestive tract. Roughly 60-80% of your body's immunity is housed in your gut. This makes your digestive system the largest immune organ in your body and if it is not functioning properly then your immune function becomes seriously challenged.

The pounds of good bacteria in your gut helps you to fight off viruses, digest food, and produce chemical reactions to help your brain and body function properly. When you are in a stress response the chemical reaction that is produced by the sympathetic nervous system wipes out a large proportion of your good gut bacteria. Over time, this can lead to a weakened immune system, and overall inflammation of the body probably resulting in chronic disease.

What you can do about it.

Take moderate exercise. Studies have shown that during exercise, tranquillising chemicals (endorphins) are released in your brain. Regular exercise actually strengthens your body improving your sleep, and boosting your circulatory and immune systems. A walk in nature can be a perfect de-stressor. Be cautious, however, as over-exercising can actually put stress on the body.

Relaxation. People who have stress-related problems with digestion often benefit from relaxation therapies such as yoga, meditation, mindfulness, hypnosis, progressive muscle relaxation, mental imaging, and even music. Book that holiday and give yourself something to look forward to. Laugh and have fun with friends and family. Get into the sun and do things that make you happy.

Food and Eating . Eating foods that are bad for your digestion can be a cause of stress. Do not deal with stress by overeating particularly on junk food. Your digestive system works best on a healthy, well-balanced diet so avoid extremes of sugar, fat, and alcohol. Avoid food preservatives and artificial sweeteners.

You can strengthen your immune system by taking a probiotic supplement; eating foods that naturally contain probiotics, such as sauerkraut, kefir, kimchi, and yogurt; and limiting foods with refined sugar. Sugar feeds the bad bacteria in your gut, which can lead to a weaker immune system, low energy, low mood, digestive disorders, weight gain, and more. The friendly bacteria love the fibre in most fruits, vegetables and salads so eat as diverse a selection of these foods as possible (eat a rainbow of plant based foods each day).

Rest and digest. Make your dining experience a pleasure; enjoy preparing your food, avoid watching the television while eating, don't eat standing up, light some candles and take your time to taste and savour your food.

Limit stressors. Resist coping with stress by smoking or using alcohol. Relying on drugs to deal with stress can also be tough on digestion. Avoid too much coffee and soft drinks that give you a jolt of caffeine and sugar.

Finally, **try to get to the root of what is causing your stress** in order to heal your symptoms.

(A certain amount of stress is unavoidable but it is important to know that stress can upset healthy digestion and make many digestive diseases worse. If you continue to have symptoms of stress that are interfering with digestion, talk to your doctor as you may have a digestive problem that needs treatment.)