

Day Six: Nurturing a healthy Digestive System

Digestion is the process of converting food into chemical substances (nutrients) that can

be absorbed into the blood and utilized by the body tissue. For example, carbohydrates are broken down into simple sugars, proteins into amino acids, and fats as glycerol that all can be utilized by the body.

For this process to be healthy and your body and brain to get the nutrients they need, an important chain of events has to take place. If it doesn't, you can have issues throughout your body.

Digestion 101

The entire trip takes place in what is known as the alimentary canal, which is the tube from the mouth to the anus.

We think of digestion as taking place from the stomach down, but it actually starts in the brain!

Phase One

Digestion starts with sight, smell, and even just the thought of food.

These sensations enter the brain and that triggers not just appetite but gets the digestive process started by sending a neurological signal from the brain through the vagus nerve.

The vagus nerve runs behind the esophagus from the back of the brain all the way down the spine. It branches off to all of the organs and is considered the information superhighway in our body.

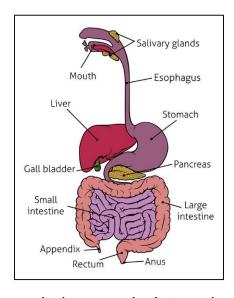


It is a delicate dance of signals that can only be sent accurately if you are in the parasympathetic, rest and digest state. That means if you are stressed, eating on the run, at your desk, or watching a violent movie, your digestive system is not going to do its job well.

It also depends on your brain being relatively healthy and able to stimulate the vagus nerve. if you have diminished brain function from injury or lack of fuel (oxygen and glucose), then the brain will not send the messages and the whole process is at risk.

Right from the moment you put that first bite of food in your mouth, your system is communicating what needs to happen.

This is one of the reasons it is necessary to take your time and chew your food properly so that all of the signals end up going where they need to go, so that by the time the food enters your stomach, everything along the path is ready for it. I call this mindful eating, and besides making your meals more enjoyable, it also means your gut will be healthier.



What else needs to operate?

The vagus nerve tells the stomach, pancreas, gall bladder and the intestine that the food is on its way.

That sends signals to the gut to prime the digestive process: the stomach to produce acid, the pancreas to create enzymes, and the gall bladder to release bile.

That signal gets lost if you are eating while in the sympathetic – fight or flight – state. All of the functions of digestion are compromised.

To be healthy, the stomach should produce about 2 liters of acid per day. This is normal and essential. You need it to keep you healthy and alive. If you are not

producing enough, that can lead to SIBO – small intestine bacterial overgrowth, which can cause inflammation. It also opens you up to other parasites and infections because that acid acts as sterilization to kill any bad bugs that get into the digestive tract from your mouth.

This production of stomach acid also stimulates the pancreas to release the enzymes that are needed to break down proteins, fats, and carbohydrates. If you don't have enough stomach acid, then the pancreas won't be stimulated to release enough enzymes, which leads to malabsorption which leads to nutrient deficiency which can lead to all kinds of problems with the brain.

Stomach acid also stimulates the gall bladder to release bile. If the bile doesn't get into the GI tract, you are not able to absorb, emulsify and break down fat. Bile also helps you to detox hormones as it binds to them and helps you eliminate them.

This process is one of the reasons that taking acid-reducing drugs is so bad not just for the gut but also for the brain. If the digestive process breaks down and you are unable to absorb essential nutrients including calcium, magnesium, iron, and Vitamin B12, then your brain suffers.

I'm explaining all of this so that you understand WHY it is so essential to be conscious and mindful when you are eating, to prepare your own food as often as possible, and to be calm when you eat.

Digestion starts and ends with your brain.

Today's Assignment: To help you get into the habit and practice of mindfully eating, and being calm, we're going to do a mindful eating exercise. It is demonstrated in the video.

Eat at least one meal today with no distractions. No television, radio, no cell phones or computers. Before you even eat your meal, sit and look at it, smell it, anticipate how it is going to taste. Take one bite, and really chew and taste it. Take your time eating.

Write down what you ate in that meal, how it tasted, how you felt afterward.

Today's Extra Material: The Vagus Nerve – what it is and how to stimulate it

I can help guide you personally through a gut repair program designed specifically to help improve your brain function. As a vegan nutritionist, certified Brain Health Professional and licensed Amen Brain Trainer, I have a proven, unique, brain-centered approach to gut health.

I am also the author of a holistic guide to preventing dementia and improving brain health, <u>"Don't Let the Memories Fade".</u>

If you are serious about improving your brain and reducing symptoms of depression, anxiety, brain fog, memory loss or early cognitive decline, I will be happy to navigate you through the process.