



DAY TWO: Inflammation

Today's lesson is going to be a bit long, compared to the rest of the program, but don't worry about ingesting everything today. I promise tomorrow will be lighter so if you need extra time, you have it tomorrow!

What does Inflammation have to do with the gut and your brain?

There are two kinds of inflammation. One is beneficial. That's when your body responds to an injury like a cut or break or other wound and sends white blood cells, which destroy bacteria, to the site of the wound. This is a good thing; without those white blood cells jumping into action, a simple cut could kill you.

However, chronic inflammation, which keeps those white blood cells hopping, is bad for our brains. When inflammation is chronic, it stimulates production of, among other things, nitric oxide and cytokines. This is a very simplified explanation, but basically these can increase the brain's production of the amyloid plaques and neurofibrillary tangles that cause Alzheimer's, because those are the brain's defense mechanisms.



There is a dramatic correlation between midlife elevation of inflammatory markers and reduction in the size of the hippocampus, the brain's memory center, as well as other parts of the brain. That means that what happens in your system when you're young has a huge impact on your memory and your mind in the future. Inflammation is flat-out dangerous for the brain.

Many things can cause inflammation in the gut, and as you know, an unhealthy gut is a leaky gut, and if your gut is leaky, all manner of inflammation-creating substances can also get to your brain. It can also cause damage to your heart.

Symptoms of Inflammation

Common symptoms of chronic inflammation are:

- chronic pain,
- chronic fatigue,
- chronic GI issues,
- ongoing mental health issues (depression, anxiety, mood disorders),
- unintentional weight fluctuations (gain or loss) and
- frequent illness.

Hmmm.... Sounds like the same symptoms of the gut issues we talked about in Day 1, doesn't it? That's why it's so important to get inflammation under control as soon as possible.

If you're not sure if you're suffering from chronic inflammation, you can have a common test done. It's called testing for high-sensitivity C-reactive protein (hsCRP), which measures a protein produced by the liver that rises with inflammation. An hsCRP test level between 1-3 shows low-level chronic inflammation that needs to be addressed.

What triggers inflammation? There are many factors, and we'll be addressing them in the next few days, but we'll start with the most obvious: food.

What Foods Contribute to Inflammation?

There are many including processed meat, dairy products and most meat, anything with glyphosate, refined carbohydrates, and trans fats. We'll be touching on each of these over these 14 days, but we are going to start with what I and many other brain health experts consider one of the biggest contributors to inflammation, gut, and brain problems.



Sugar causes a pro-inflammatory response in the body. There is no good reason to eat sugar. Not only does it mess with your gut, it contributes to obesity, diabetes, both of which can lead to dementia, plus a whole host of other diseases.

Plus – it has no nutritional value.

Many studies have linked refined sugars, including high fructose corn syrup, to inflammation in the brain. This also goes for foods that act like sugar, such as white bread and simple, processed carbs.

That's because sugar causes and imbalances in the gut microbiome. Bacteria and fungus and mold including things like candida feed on sugar and take over the gut terrain. That has been linked to inflammation as well as mood problems, impulsivity, and other issues.

Remember when you are reading labels on processed foods, that there are at least 75 different names for sugar, including sucrose, dextrose, maltose, and more. In today's extra material, you'll see all the different names under which it is hidden.

While it's tempting to reduce your sugar intake by using artificial sweeteners, don't go that route. These sweet poisons have repeatedly been shown to change how our gut bacteria function, altering the balance and action of our microbes. We'll get into those later on.

It's Not Just About the Gut

In addition to the inflammation caused by sugar, there is a great deal of evidence that Alzheimer's Disease represents a form of diabetes that selectively afflicts the brain.

In addition to contributing diabetes, sugar also raises the risk for the erratic firing of neurons. Thus, anyone with attention deficit disorder or who are in the autism spectrum should definitely stay away.

Sugar of course also contributes to weight gain and many different researchers have found that brain size actually decreases as waist size increases.

So – to protect the health of your gut, to reduce the likelihood of developing Alzheimer's, to get to or stay at a healthier weight – the first step is to cut out the sugar.

Day Two Assignment: Cut Out the Sugar

I know that you might well be saying here, "I can't do that in one day in this course!"

Sure you can. How do you know if you don't try?

Start with one day.

Just say to yourself, "On this one day, I will not eat anything with sugar."

No soda pop (remember, don't replace it with artificially sweetened stuff... replace with cucumber or strawberry-infused water or tea) and no cookies, candy, pastry, or sweet chocolate.

Go for a walk, go dancing, have a carrot, drink some beautiful herbal tea. Drink a huge glass of water. Try any or all of those things instead of having sugar today.

Then, do it again tomorrow. Wake up and set the intention. "I will not eat any sugar today."



To do this, you have to know where sugar hides. Read labels. In the extra materials for today, you'll have a list of 75 (yes, seventy-five!) different names that are given to sugar. If something has any of those in the label – stay away. And while it's tempting to replace soda pop with fruit juice – no. When all the fiber is taken out of the fruit to make juice, all you are left with is sugar. Eat a piece of fruit instead and try for low-glycemic fruits like berries. (Organic if at all possible We'll talk about that later, too.)

If you can do this one thing every day for the rest of this course, you will feel a difference in your gut and your mind. You will have less brain fog.

A **warning** here: you may well feel the effects of a kind of detox because sugar is as addictive as cocaine. So don't be surprised if you feel "withdrawal" symptoms.

Today's Extra Material: I've included my "Cutting Sugar" guide. It has all the names for sugar – you're not going to believe it!

And Extra-extra: This recipe for a healthy fats, no refined sugar, vegan treat. There is still plenty of natural (fruit) sugar in this recipe, from the dates, but it is beautiful and delicious, and will definitely help you see that you don't need refined sugar AT ALL to have sweet treats. This recipe also has a low glycemic index, which is important if you are diabetic. [Vegan Tiramisu](#)

