# SUGAR CONSUMPTION

FUELS CHRONIC HEALTH CONDITIONS GLOBALLY



"Sugar will rot your teeth." "Sugar will make you fat." "You're addicted to sugar!" Unfortunately, these quotes you've probably heard 100 times aren't exaggerations. The really scary part is it's just the beginning of a long list of problems excessive sugar can cause. The damaging effects sugar has on your brain, liver and pancreas can turn into major health concerns long-term. In fact, it's reached a problem on a global scale.

Over the last decade, global sugar consumption has grown from 130,000,000 million grams to 178,000,000 million grams.<sup>5</sup> The number of overweight and obese people has reached epidemic proportions, with excessive sugar consumption being a major factor in contributing to non-communicable diseases (NCD).

The World Health Organization (WHO) issued a sugar guideline in March 2015 advising adults and children to restrict their sugar intake to less than 10 percent of total caloric intake per day.<sup>5</sup> That equates to about 12.5 teaspoons of sugar daily for adults. The populations in countries such as South Africa, Canada, Brazil, the UK and the U.S.A. all exceed the current WHO sugar guideline.

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### **COUNTRIES TAKING BACK CONTROL**

The statistics can be disheartening, but some countries are trying to resolve the excessive sugar problem by implementing policies and procedures like soda taxes, awareness campaigns and outright bans. To reduce the availability of sugar in schools, Australia launched a "Smart Choices Healthy Food and Drink Supply" strategy. France banned vending machines in schools as part of their Public Health Law. The Netherlands instigated a pilot program in one Dutch school that provided free fruit and vegetables to

students. It was transitioned into the EU School Fruit Program in 2013 after expanding nationally to all schools.

### NATURAL VS. ADDED SUGAR

It may seem as though the whole world has declared war on sugar. However, it's really about reducing the wrong types of sugar and people making better food choices as a whole. First of all, sugar, in all forms, is a simple carbohydrate that the body converts into glucose and uses for energy. However, the effect it has on your body and your overall health depends on the type of sugar you're eating.

Natural sugar is found in good-for-you foods like fruits, vegetables and some whole grains, along with dairy products like milk and cheese. Foods with natural sugar have an important role in the diet because they provide essential nutrients



that keep the body healthy and help prevent disease.

Added sugar and syrups are found in processed foods and drinks during preparation such as cakes, cookies, soda and cereals. Look for the ingredient "high-fructose corn syrup" on the food manufacturer label, and avoid this artificial ingredient whenever possible. Also, don't be fooled by foods labeled "low-fat." They are among the worst offenders in adding sugar to foods to boost flavor.

## YOUR BRAIN, PANCREAS AND LIVER ON ADDED SUGAR

Added sugar can be as addictive as alcohol, drugs and tobacco because it affects the same regions of the brain. Eating or drinking foods with added sugars triggers the release of dopamine, a neurotransmitter that helps control the brain's reward and pleasure centers. Dopamine makes you want to eat more, even when you're not hungry.



The pancreas controls the blood sugar (insulin) that powers your muscles and organs. An excessive amount of added sugar in the body can overload and damage your organs. A lack of insulin can cause muscle and nerve damage.

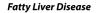
Your liver works hard, but it can only withstand so much. When you consume an abundance of added sugar it accumulates as fat, and your liver starts storing this fat in the cells. Fat storage is harmful to the mechanics of liver cells because it eventually

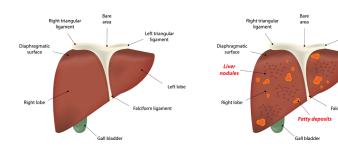


leads to fatty liver disease. The liver begins producing connective tissue, which overtakes the organ and is called cirrhosis or fibrosis. The venous system becomes obstructed, there is no blood flow to the liver cells and the liver can ultimately shut down.

One of the adverse conditions leading to fatty liver is an overgrowth in the small intestine of unfriendly microbes and increased intestinal permeability. Harmful gut microbes produce ethanol and

**Healthy Liver** 





lipopolysaccharides, causing severe oxidative stress and increased inflammation, leading to the fatty liver disease process.<sup>1</sup>

Nonalcoholic fatty liver disease is the most common liver disorder in the world. If liver damage continues the fatty liver can turn into hepatitis, cirrhosis and severe mutations in the liver tissue. It is very important to take good care of your liver, because no treatment has been established for nonalcoholic fatty liver disease except lifestyle modifications.

#### HEALTHIER ALTERNATIVES TO ADDED SUGARS

Addictive behavior can be altered and a sugar addiction is no different. The trick is finding healthier alternatives to your favorite sugary foods and drinks. Instead of starting your day off with sugary cereal, opt for a protein-rich meal that will



give you energy instead of a mid-morning sugar crash. Avoid the office vending machine by bringing healthy snacks to work such as yogurt, almonds and apple slices with peanut butter. Finally, if you need to squelch a sugar craving, and nothing will do but the real thing, keep your treat portion sized to the equivalent of two Hershey's® kisses or a single piece of candy. It's all about modifying your daily behaviors.

Because of the connection between the liver and the gut, studies have shown that taking probiotics and prebiotics helps improve liver characteristics such as reduction in inflammation and markers of liver damage.<sup>1</sup>

### TAKE DIGESTIVE\*\*\*

Taking DIGESTIVE\*\*\* helps to assure you are colonizing your gut with beneficial microbes. The prebiotic formula also encourages other types of beneficial bacteria. Not only are you supporting complete digestion, you're aiding the lining of the GI tract and organs associated with digestion such as the liver.



inflammation of the bowels and digestive tract. It also supports regular elimination by acting as a mild laxative.

Some consumers take a DIGESTIVE\*\*\* tablet with every meal to assure complete support to the digestive tract. It helps thoroughly digest the meal and colonizes the intestinal tract supporting metabolism, weight management and a healthy liver.

One of the three "pluses" in DIGESTIVE\*\*\* is flasseed oil. Flasseed oil has been found to help those with conditions such as

LEARN MORE ABOUT THE BENEFITS OF DIGESTIVE\*\*\*

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

### REFERENCES

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