



THINK GREEN



EAT GREEN

What NOT to eat - for our health and for the environment

The *Think Green Eat Green* newsletter usually discusses what we should eat – and why.

This month we'll discuss a food we perhaps should not eat (or eat a lot less of) due to the detrimental effects on human health and that of our environment.

Sugar.

What is sugar? Refined table sugar is nearly pure sucrose. Sucrose is the chemical name for sugar, the simple carbohydrate we all know and love. Sugar provides calories (16 per teaspoon), carbohydrates and energy, but no other nutrients.



Most of the sugar we consume is produced in the U.S. from either sugarcane or sugar beets. Sugar crops are produced in monoculture farming, with its inherent vulnerability to pests and disease and dependence on pesticides.

Let's look at some (GMO) statistics.

Sugar imports are restricted to only 15% of the US market. Of the 85% of our sugar needs, grown in this country, 55% is produced from sugar beets and 45% from sugarcane. Moreover, 95% of sugar beet agriculture is from GMO (genetically modified) seed. So, well over half of the 8.4 million metric tons of sugar produced in the US each year is from GMO sugar beets. For more information, see the archived August 2019 *Think Green Eat Green* newsletter on GMOs [here](#). With the addition of pink pineapple, there are now eleven GMO crops, including sugar beets.



Table sugar sold in grocery stores is likely to be pure cane sugar. Beet sugar (or a mixture of beet and cane sugars) may be found on the grocery shelf, but the bulk is sold to industrial food customers, thus making its way into the commercially produced baked goods, snack foods, and fast food items we consume.

Both cane and beet sugars are produced through a process involving multiple steps, including: juice extraction, purification, crystallization, centrifugation, and, perhaps, decolorizing with animal bone char (“natural carbon”).

A well-researched [article](#) from *Green Groundswell, Home of the Unlikely Environmentalist* describes the environmental consequences of large-scale sugar beet or sugarcane agriculture.

The environmental effects of producing these crops are ongoing, ever-increasing, and detrimental to our planet. Sugar crops require much water, large amounts of pesticides, and much land!

Let's look at sugar production globally. **youmatter.world** has published a [list](#) of the 10 worst foods for our planet, and sugar tops the list. Their article cites the World Wildlife Fund (WWF) [report](#), “Sugar and the Environment,” a comprehensive look at worldwide sugar production and its effects on the environment.

Most of the world's sugar is grown in tropical areas, near the equator, where the earth's richest biodiversity is located. Land use conversion of forests



to agriculture means eliminating massive areas of diverse habitat, usually to support a form of monoculture.

Brazil has the greatest biodiversity of flora and fauna on earth; Brazil is also the world's largest producer of sugar.

As the world's appetite for sugar, as well as palm oil and animal products grown in the tropics, continues to grow, vast areas of carbon-sequestering tropical forests are being replaced with vast areas of non-sustainable farms consuming the earth's resources.

Sugarcane is grown in southern U.S. states, with Florida the major producer. Sugarcane is monoculture agriculture, a perennial grass plant with 3-5 harvests from one planting. The process of turning cane into sugar crystals must begin immediately after harvesting.

Much of Florida sugarcane is grown on land that has been appropriated from northern sections of the Everglades. Actually a slow-moving river, the Everglades is one of the world's most unique and fragile ecosystems, and home to threatened or endangered species such as American alligator, Florida panther, American crocodile, and West Indian manatee. The resultant loss of habitat, as well as runoff pollution from phosphorus and other fertilizers and pesticides used in sugarcane agriculture, have serious impacts on the watershed. One third of Florida's nearly 22 million residents depend on the Everglades watershed for drinking water.

Sugar beets are grown in many upper Midwest and western states, with Minnesota by far the largest producer. Unlike sugarcane, an entire harvest does not need to be processed immediately, and the long, cold winters in these areas facilitate storage of the root plant. From an environmental perspective, farming of this root crop uses less water and land than sugarcane, but sugar beets are known for depleting soils -- through actual loss of soil (clinging to the root plant during harvest) as well as depletion of soil nutrients (especially potassium nitrate).

Harmful Health Effects

Let's take a look at **our** health.

Probably none of us would consider sugar to be a nutritious food: From tooth decay to the obesity epidemic to rampant Type 2 diabetes rates in this country, we would be hard pressed to rationalize adding more sugar to our diet.

Sucrose (table sugar) is a combination of glucose and fructose molecules. Glucose is the most important food for our brain, and a source of energy throughout the body. However, there's no need to add glucose to your diet because your body creates glucose when it breaks down food molecules of carbohydrates, proteins, and fats.

The sugar found naturally in fruits, some vegetables, and honey is known as fructose. Fructose is actually 25% sweeter than sucrose, so it would seem that we can use less honey than table sugar for equal sweetness.

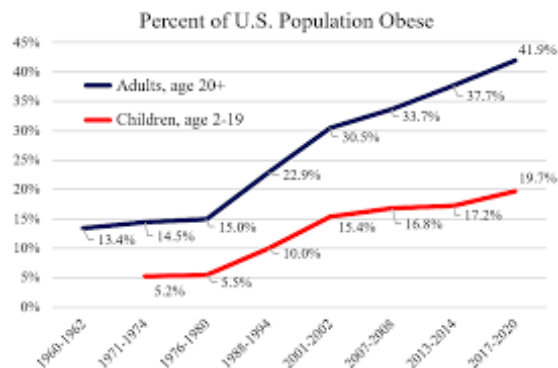


Does our body know the difference between sucrose or fructose? This [healthline.com article](#) explains the different forms of sugar and how our body metabolizes each.

Of note, our body processes fructose differently than it does other sugars. Unlike sucrose, which is converted to energy in the bloodstream with the aid of insulin, *naturally-sourced fructose* (from fruits and some vegetables) is metabolized and converted into energy in the liver. This means that your body doesn't need insulin to process fructose, and therefore fructose has a smaller effect on your blood glucose levels. This **does not mean** that fructose is without negative effects: read this WebMD [article](#) for more information on the health impacts of both sucrose and fructose.

[Important to note: This different metabolic processing does not occur with high-fructose corn syrup (HFCS) – that's a topic for a whole other discussion!

HFCS is an artificial sugar made from corn syrup, and is ubiquitous in most commercially processed foods. Many experts believe that added sugar and HFCS are key factors in today's widespread obesity and diabetes rates.]



What can we do to reduce the level of sugar in our diet? It isn't just the spoonfuls we add to our coffee or tea.

This newsletter has discussed negative aspects of the "typical American diet" (for us and our planet) in reference to cooking oils, commercially raised meats, our gut microbiome, and many other

topics.

If we are concerned about our sugar intake, a very good, *first small step* is to reduce our consumption of processed foods.

Most highly processed foods contain unhealthy fats, very little fiber, and large amounts of sugar. **The Nutrition Labeling and Education Act of 1990** mandated that all food companies include detailed, standardized Nutrition Facts panels on all products.

We need to pay attention to the "Total Sugars" section of each of these labels.

New Label

Nutrition Facts	
8 servings per container	
Serving size 2/3 cup (55g)	
Amount per serving	
Calories	230
% Daily Value*	
Total Fat 6g	10%
Saturated Fat 1g	2%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 150mg	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	
Includes 10g Added Sugars	20%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	30%
Iron 8mg	40%
Potassium 240mg	6%

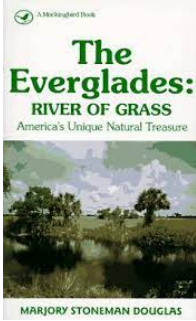
*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

- 1 The serving size now appears in larger, bold font and some serving sizes have been updated.
- 2 Calories are now displayed in larger, bolder font.
- 3 Daily Values have been updated.
- 4 Added sugars, vitamin D, and potassium are now listed. Manufacturers must declare the amount in addition to percent Daily Value for vitamins and minerals.

Better yet, let's try to eat more whole foods, as they are grown, rather than as they are "converted to food."



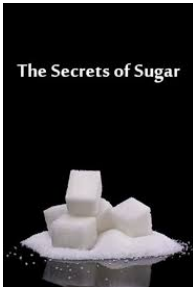
BOOK RECOMMENDATION



The Everglades: River of Grass by Marjory Stoneman Douglas (Rinehart and Company, 1947), available from Harford County Public Library's Marina system.



FILM RECOMMENDATION



The Secrets of Sugar – the Fifth Estate from Canadian Broadcasting System (CBC), available on youtube.com.

SOME GREEN THOUGHTS



"If it came from a plant, eat it; if it was made in a plant, don't."
— Michael Pollan, journalist and author of several books on food including *The Omnivore's Dilemma*

"At a time when people are very concerned with their health and its relationship to what they eat, we have handed over the responsibility for our nourishment to faceless corporations."
— Lynne Rossetto Kasper, food journalist and former host of *The Splendid Table* on NPR

"Because it's 99.9% sucrose, refined sugar is one of the highest-quality products you can find at a grocery store."
-The Sugar Association, the Scientific Voice of the Sugar Industry since 1943

Havre de Grace Green Team, Ltd. | 408 N. Union Ave., Havre De Grace, MD 21078

[Unsubscribe hdggreenteam@gmail.com](mailto:hdggreenteam@gmail.com)

[Update Profile](#) | [Constant Contact Data Notice](#)

Sent byhdggreenteam@gmail.compowered by



Try email marketing for free today!
