Sugar association

entropy misunderstandings about SUGAR

MYTH

Sugar is hidden in food.

FACT

For the past three decades sugar has been found on the ingredient list of many foods and beverages. And for good reason. Unless you cook a lot from scratch, you may not be familiar with all of the functional roles that sugar plays in so many products. Sugar is so much more than the sweet taste we know so well.

Sugar has many functional properties that range from balancing acidity (like in salad dressing and sauces) to preventing spoilage (like in breads, canned vegetables and prepared foods). While sugar may be added to foods for reasons you may not expect, sugar isn't hidden in foods. The food labels on the back (or side) of the pack always show the list of ingredients (in descending order of weight) and, since 2021, all products also include both the total sugars and added sugars content on the Nutrition Facts Panel.



MYTH

"Reduced sugar" always means reduced calories.

FACT

When sugar is removed from a food, there are new ingredients (usually more than one) that need to take its place to replace both the flavor and functionality of sugar. These ingredients often bring the same or even more calories to a product than sugar does. So, before you think less sugar means fewer calories, compare product labels to see what the entire nutrient package of a product is.

Because of the many functional roles sugar can play in a product, reducing sugar in a food product often isn't as simple as just cutting the sugar in the recipe. For example, sugar may be added to a cereal to mask the bitter taste of fiber or added vitamins, increase bulk and lengthen the shelf life. Several ingredients will need to be added to replace all of those functions if you take the sugar out.



MYTH

Making sugar is a complicated process.

FACT

You can actually extract sugar at home. Sugar is simply removed from the plant, washed, crystallized and dried. The same sugar found naturally in the plant is what ends up in your pantry.

Whether sugar comes from sugar beets or sugar cane, the purification process is similar for each plant and the result is the same pure sucrose. In both cases, sugar juice is separated from the plant material, crystallized and dried to produce the sugar we find in our pantries. Just a few simple steps from plant to final product!

MYTH

"Raw" sugar is healthier than table sugar.

FACT

Your body handles sugar the same regardless of what color it comes in. Raw sugars, brown sugars and any white sugars are all processed the same in the body. Darker colors are due to varying but small amounts of molasses left on the sugar crystals. The nutrients that are contained in this amount of molasses are so small that they offer no real nutritional value.



Sugar has only (15) calories per teaspoo

MYTH

Low Glycemic Index: ≤ 55

Table Sugar: 65

High Glycemic Index: ≥70

FACT

Sugar is a high glycemic food.

Sugar has a moderate impact on blood glucose, lower than a baked potato.

Glycemic index (GI) is a measure of how quickly the starches and sugars in a food or beverage are broken down to glucose and released into the blood stream after a food or beverage is consumed. The GI of sugar is 65, falling in the moderate GI range of 56-69. High glycemic foods have a GI of 70 or more. Simply put, sugar ranks somewhere in the middle of carbohydrate foods when it comes to raising blood glucose.¹

MYTH

Americans consume more added sugars now than ever.

FACT

USDA data show that added sugars intake decreased by more than 30% from 2000 to 2018.

While added sugars consumption increased sharply in the 1990s, consumption has been on a significant decline for the past 20 years. In 2017-2018, added sugars consumption was reports to be 12.9% of total calories, or around 270 calories per day. It is still slightly above the 2020-2025 Dietary Guidelines for Americans recommendation of 10% of calories from added sugars per day.

ADDED SUGARS INTAKE DOWN MORE THAN

30%



MYTH

Sugar causes chronic diseases such as obesity, diabetes and heart disease.

FACT

Excess calories from all food and beverages, including sugars, can lead to weight gain, increasing the risk of obesity and other chronic diseases but research does not show a direct link between sugar and any of these conditions.

Scientific evidence consistently shows that a healthy lifestyle based on moderation, a variety of food choices and physical activity tends to lead to the best outcomes when compared to simply focusing on cutting out or adding on ingredient or another; it does not support adverse outcomes of sugar intake when sugar is consumed in moderation and as part of a diet where calories are not eaten in excess.^{6,7,8,9,10}

MYTH

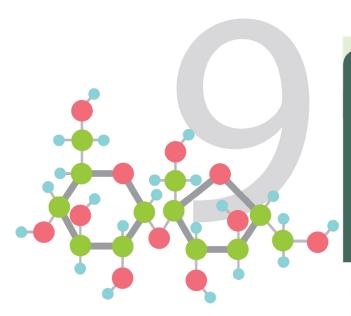
FACT

Sugar is addictive.

All that science tells us is that sugar tastes good and people like eating food that tastes good. Eating something you enjoy increases dopamine in the same way all pleasurable experiences do but addiction and pleasure are not the same thing.

Scientific evidence does not support the idea that sugar (or any other foodstuff) can be addictive. 11-14 There are many factors involved in choosing to eat-with psychological and behavioral components not to be overlooked. Certain foods and drinks of course can be pleasurable to consume, but it's important not to confuse this with clinical addiction.





FACT

MYTH

Sugar is toxic.

Sugar is an abundant carbohydrate produced by plants and made up of units of glucose and fructose. Glucose is found in all plant foods and fructose is most abundantly found in fruits. There is no mystery to what sugar is. We do know that it is a sweet energy source that is safe, especially when enjoyed in moderation.

While too much of anything can be bad, sugar (sucrose), whether intact in fruits and vegetables or in the popular extracted and crystallized form, has been safely incorporated in the diets of humans throughout all of time. The essential role of carbohydrates, including sugar, as an important source of fuel for the body is nothing new. In fact, glucose (a product of carbohydrate digestion) is essential to the function of the central nervous system.

Visit **sugar.org** to learn more about sugar

- 1 Atkinson FS, Foster-Powell K, Brand-Miller JC. International tables of glycemic index and glycemic load values: 2008. Diabetes Care. 2008;31(12):2281-2283.
- 2 U.S. Department of Agriculture Economic Research Service. Food Availability (Per Capita) Data System: loss-adjusted food availability documentation. Available at: https://www.ers.usda.gov/data-products/food-availabilityper-capita-data-system/loss-adjusted-food-availability-documentation/. Updated November 30, 2022. Accessed December 5, 2022.
- 3 U.S. Department of Agriculture Agricultural Research Service, Beltsville Human Nutrition Research Center, Food Surveys Research Group. Food Patterns Equivalents Databases and Datasets. Available at: http://www.ars.usda.gov/Services/docs.htm?docid=23869. Updated January 6, 2021.
- 4 U.S. Department of Agriculture Agricultural Research Service, Beltsville Human Nutrition Research Center, Food Surveys Research Group. WWEIA data tables. Available at: https:// www.ars.usda.gov/northeast-area/beltsville-md-bhnrc/beltsville-human-nutrition-research-center/food-surveys-research-group/docs/wweia-data-tables/. Updated January 29, 2021.
- 5 U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Available at DietaryGuidelines.gov. Accessed January 14, 2021.
- 6 Anderson JJ, Celis-Morales CA, Mackay DF, et al. Adiposity among 132 479 UK Biobank participants; contribution of sugar intake vs other macronutrients. Int J Epidemiol. 2017;46(2):492–501 7 Khan TA, Sievenpiper JL. Controversies about sugars: results from systematic reviews and meta-analyses on obesity, cardiometabolic disease and diabetes. Eur J Nutr. 2016;55(Suppl 2):S25–S43.
- $8\ Jebb\ SA.\ Carbohydrates\ and\ obesity: from\ evidence\ to\ policy\ in\ the\ UK.\ Proc\ Nutr\ Soc.\ 2015; 74(3): 215-220.$
- 9 Marriott BP, Olsho L, Hadden L, Connor P. Intake of added sugars and selected nutrients in the United States, National Health and Nutrition Examination Survey (NHANES) 2003–2006. Crit Rev Food Sci Nutr 2010:50(3):228-258
- 10 Sacks FM, Bray GA, Carey VJ, et al. Comparison of weight-loss diets with dierent compositions of fat, protein, and carbohydrates. N Engl J Med. 2009;360(9):859–873
- 11 Westwater ML, Fletcher PC, Ziauddeen H. Sugar addiction: the state of the science. Eur J Nutr. 2016;55(Suppl 2):55–69.
- 12 Benton D, Young HA, A meta-analysis of the relationship between brain dopamine receptors and obesity; a matter of changes in behavior rather than food addiction? Int | Obes (Lond), 2016;40(Suppl 1):S12-S21.
- 13 Rogers Pl. Food and drug addictions; similarities and dierences, Pharmacol Biochem Behav, 2017;153:182-190.
- 14 Hauck C, Cook B, Ellrott T. Food addiction, eating addiction and eating disorders. Proc Nutr Soc. 2020;79(1):103-112.