

Issue: HIGH FRUCTOSE CORN SYRUP

Use: Messaging demonstrating that the high fructose corn syrup that is an ingredient in sugar-sweetened beverages is no different than any sugar sweetener.

Last Update: Jan. 9, 2025

Background: Several studies have stated that high fructose corn syrup (HFCS) is harmful to health in ways that other sweeteners are not. However, HFCS is metabolized by the body in the same way as all sugars. It is comprised of natural sugars and is practically indistinguishable from the granular sugar we stir into our coffee.

The studies that suggest HFCS causes harm are usually observational studies that cannot prove causation.

CORE MESSAGE:

High-fructose corn syrup is safe. It is metabolized by the body the same way as cane sugar and table sugar and it has the same amount of calories. Food safety and medical authorities agree there is no scientific evidence for the theory that HFCS by itself increases one's risk of obesity.

TALKING POINTS:

Message: High fructose corn syrup is made from corn kernels. It is nearly identical to table sugar and it is as safe as any other sugar.

- According to the [U.S. Food and Drug Administration](#), there is no evidence in any study that shows a difference in safety between high fructose corn syrup and equal amounts of other sweeteners, such as honey.
- FDA affirmed the safety of HFCS in 1996. It does not rely on Generally Recognized As Safe (GRAS) self-determination.
- There is no ban on HFCS in any country. In fact, the EU amended the production quota in 2011 to allow for more production of HFCS to meet demand.

Message: Despite its name, high fructose corn syrup is not high in fructose.

- High fructose corn syrup is a combination of two simple sugars – glucose and fructose – with fructose making up the larger or “high” share.
 - Glucose is one of the simplest forms of sugar, found in vegetables and plants of all kinds. Corn syrup is pure glucose.
 - Fructose is also called “fruit sugar” because it occurs naturally in fruits and berries.

- [Two varieties](#) of corn-based sweetener are used in beverages:
 - HFCS 55 is 55% fructose and 45% glucose, HFCS 42 is 42% fructose and 58% glucose.
 - By comparison, cane sugar and table sugar is 50% fructose and 50% glucose. Agave nectar, often touted as the “healthier” sugar, is 60-80% fructose.
- Table sugar and high fructose corn syrup have almost the same level of sweetness (HFCS 42 is actually less sweet than table sugar).

Message: The body treats table sugar and high fructose corn syrup in the exact same way.

- There's no fundamental difference between the ways our bodies break down table sugar and high fructose corn syrup, [according to biology](#).
- A 2022 [study](#) in the NIH National Center for Biotechnology Information found “no significant changes” between table sugar and high fructose corn syrup in the way they are metabolized by the body.
- Another [study](#) published at the center site states “there are no significant metabolic or endocrine response differences or differences in health-related effects between HFCS and sucrose (table sugar).”

Message: There is no scientific evidence that high fructose corn syrup is a unique contributor to obesity or diabetes.

- Both the [American Medical Association](#) and the [Academy of Nutrition and Dietetics](#) have concluded that high fructose corn syrup is not a unique cause of obesity.
 - High fructose corn syrup contains four calories per gram, the same as any other sweetener with calories.
- A [study](#) in the NIH National Center for Biotechnology Information stated, “... there is no unique relationship between HFCS and obesity.”