

TOP PUBLISHED MYTHS ABOUT HIGH FRUCTOSE CORN SYRUP (HFCS)

Myth: HFCS is high in fructose.

Reality: Contrary to its name, HFCS is not high in fructose. In fact, the composition of HFCS is essentially "half fructose corn syrup" which is similar to sugar. Sugar is composed of 50% fructose and 50% glucose and HFCS has either 42% or 55% fructose, with the remaining sugars being primarily glucose.

Myth: HFCS, fructose and corn syrup are the same.

Reality: HFCS and corn syrup are different products with distinctly different functions. Corn syrup, which is mainly glucose, is used as a non-sweet thickener. HFCS, on the other hand, is made of almost equal portions of fructose and glucose and is used as a sweetener. Fructose is a naturally-occurring sweetener found in fruits and honey.

Myth: HFCS is to blame for obesity and causes diabetes.

Reality: There is no scientific evidence to suggest that HFCS is uniquely responsible for people becoming obese. Obesity results from an imbalance of calories consumed and calories burned.

USDA data show that per capita consumption of HFCS is actually on the decline, yet obesity and diabetes rates continue to rise. In fact, obesity rates are rising around the world, including in Mexico, Australia and Europe, even though the use of HFCS outside of the United States is limited.

The leading causes of diabetes are obesity, advancing age and heredity. All caloric sweeteners trigger an insulin response in the body. In fact, table sugar, honey and HFCS trigger about the same insulin release because they contain nearly equal amount of fructose and glucose.

Myth: HFCS is metabolized differently. It blocks the ability of the body to know when it is full.

Reality: A study published in the July 2007 issue of the American Journal of Clinical Nutrition by Pablo Monsivais, et al. at the University of Washington found that beverages sweetened with sugar, HFCS as well as 1% milk, all have similar effects on feelings of fullness.

A study published in the February 2007 issue of Nutrition by Kathleen J. Melanson, et al. at the University of Rhode Island reviewed the effects of HFCS and sucrose on circulating levels of glucose, leptin, insulin and ghrelin in a study group of lean women. The study found "no differences in the metabolic effects" of HFCS and sucrose.

Myth: HFCS is not natural.

Reality: HFCS is made from corn, a natural grain product. The process to make HFCS begins with steeping corn to soften and separate the kernel into its component parts—starch, corn hull, protein and oil. Many of the processes used to make HFCS are used in the production of other foods and ingredients that are commonly considered natural. Like table sugar, HFCS is composed of almost equal parts fructose and glucose, which are found in many other naturally-occurring foods. HFCS contains no artificial or synthetic materials or color additives.

Myth: Sugar is healthier than HFCS.

Reality: HFCS is nearly identical in composition to table sugar—both contain approximately 50% glucose and 50% fructose. Sugar and HFCS have the same caloric density as most carbohydrates; both have 4 calories per gram. Because they are nearly compositionally equivalent, the human body cannot tell the difference between HFCS and sugar.

Myth: HFCS is sweeter than sugar.

Reality: HFCS and sucrose have virtually the same sweetness. HFCS was made to provide the same sweetness as sugar so that consumers would not notice a difference in sweetness or taste.

Myth: HFCS is used in food products only because it's cheap.

Reality: Price may have prompted manufacturers to switch from sugar to HFCS twenty years ago, but it is no longer a primary factor since HFCS has specific and unique functional qualities not shared by sugar. Corn sweeteners enjoy widespread use because they benefit consumers by reducing food spoilage, retaining moisture in foods, helping canned foods taste fresher, enhancing fruit and spice flavors and prolonging product freshness. Among many other benefits, HFCS allows breakfast bars to remain moist and makes bran cereal palatable.

Myth: HFCS costs taxpayers millions of dollars in tax subsidies.

Reality: While the U.S. government does provide support to certain farmers to guarantee a stable farm economy and a reliable food supply, manufacturers of corn sweeteners do not receive these subsidies.

Myth: HFCS contains DNA from genetically modified corn.

Reality: While the corn used to produce HFCS may or may not have been produced using genetically enhanced corn, existing scientific literature and current testing results indicate that corn DNA cannot be detected in measurable amounts in HFCS.

