

The High Fructose Corn Syrup Conspiracy

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It looks like sugar, it tastes like sugar, and it has the same amount of calories as sugar. So what's wrong with using high fructose corn syrup (HFCS)?

While the makers of HFCS insist that the sweetener is a safe substitute for sugar, consumers are learning that HFCS is slightly different from table sugar and that these differences can significantly affect health.

High fructose corn syrup is developed through a process that combines fructose and glucose—the same components as table sugar, but in a slightly different percentage (55% fructose for HFCS vs 50% in sugar) and without the natural bond between the molecules. When we eat sucrose (table sugar), our bodies metabolize it and use it mostly as energy. When we ingest HFCS, however, the molecules are unbound therefore undergo a slightly different digestive breakdown compared with sucrose. In fact, some scientists believe that the fructose in HFCS goes directly to the liver for processing, where it is converted into triglycerides (a form of storage fat) instead of use for energy. In other words, HFCS promotes unnecessary fat storage.

Studies have shown that when people eat HFCS, they gain weight. One very insightful study looked at weight gain in rats when some rats were fed HFCS and others were fed sugar. The rats that ate HFCS gained more weight even though the caloric intake was the same as the rats that ate sugar. In addition, the HFCS rats gained more fat in the abdomen and had a higher level of triglycerides in their blood. How does that correlate to humans? Well, it's no coincidence that since the time food manufacturers began using HFCS in consumer products in the late 1970s, more and more Americans have larger waist circumference and have become overweight—or worse yet, obese.

Despite the concerns, the use of HFCS in food and drinks continues to increase. Because it is made here in the U.S. from genetically engineered corn, it is cheaper to produce and use than sugar, which often has to be imported with taxes and tariffs. HFCS also prolongs the shelf life of products and prevents freezer burn in frozen foods. That benefit, coupled with subsidies provided by the government to use HFCS, provides numerous financial advantages to corn growers and food manufacturers.

With so many products containing HFCS, it is extremely difficult for consumers to keep track of how much HFCS they are actually ingesting daily. Many health organizations including The American Heart Association, Mayo Clinic and USDA provides guidelines on how much sugar we should eat, but no one has provided guidelines on how much HFCS is safe to use. For added sugars, 100 to 150 calories per day is what is recommended for women and men respectively. Studies however have shown average Americans easily consume upwards of 300 calories/day of HFCS.

It's not an easy battle, but once consumers uncover the health risks of HFCS, they must look for ways to identify high fructose corn syrups and remove them from their diet. You must become an avid reader of foods and drinks labels to see if they contain HFCS, and look for brands with no added sweetener. Organic products that don't use HFCS may be more costly, but they are a healthier alternative. Consider using organics when you can, and fill in the gaps with products that use natural sugar or products like Stevia.

Some restaurants are recognizing the risks of HFCS and are making improvements in response to consumers' health concerns. For example, Jason's Deli, a national chain, has eliminated high fructose corn syrups from all of its food products and currently working on their sodas. Hopefully, more restaurants and food companies will follow suit. In the meantime, consumers must rely on their own diligence and education to make the safest choices for their health and that of their families.