

Anything but Sweet
The Truth about High Fructose Corn Syrup

By Sarah Nino

On a sunny day, a young couple is having the snack under a tree in the park. The woman pulls out a popsicle from the cooler and offers a bite to her boyfriend. “I thought you loved me” he says. “I do, have two bites” she replies. “But it has high fructose corn syrup in it, you know what they say about it...

“What?”

“That...it’s...it...uhm...”

“That it’s made from corn, has the same calories as sugar and honey, it’s fine in moderation” she says reassuringly.

This was a scenario in one of the advertisements launched in September of this year by the Corn Refiners’ Association, that have been frequently shown on national TV promoting high-fructose corn syrup (HFCS). Are these statements true, or is this woman contributing to the decline of her boyfriend’s health?

In his book, “The Omnivore’s Dilemma”, Michael Pollan says, “since the 1980’s virtually all the soda’s and most of the fruit drinks sold in the supermarket have been sweetened with HFCS – after water, corn sweetener is their principal ingredient” (Pollan M., 2006). In 2001, Americans were getting 135% more calories from sweetened beverages than they had been 30 years prior. One of the issues is that we are consuming more in terms of quantity. A major factor behind the increase in HFCS use and consumption is financial profit. Sugar is mainly imported from outside the U.S. and is more costly (because of tariffs) than corn which is an abundant crop in North America.

This is beneficial to the U.S. economy because of the lower costs but also because it creates more jobs therefore this industry is highly supported by the government.

What's so bad about HFCS anyway? HFCS, as its name implies, has more fructose than sugar. According to the USDA, most of the HFCS used in the U.S. is 55% fructose (and 45% sucrose). The higher fructose content is often thought to be detrimental to one's health. For example, research has shown a link between HFCS and kidney damage in people who drink 2 or more soft drinks per day. What's more is that by consuming HFCS in the form of soft drinks we're more susceptible to a variety of kidney diseases such as kidney stones and gout. This suggests "a link between soda consumption, HFCS, and chronic kidney disease" (Shoham D.A., et al., 2008). Another study showed the negative impact of fructose on triglyceride levels in the blood which could lead to clogged arteries and consequently heart attacks and/or strokes.

Various studies have drawn parallels between the rise in HFCS consumption and the dramatic increase in obesity and diabetes. However, these correlations don't necessarily mean HFCS is the direct cause for the boost in these epidemics. Perhaps this wouldn't be as great of a concern if HFCS wasn't so difficult to avoid. It can be found in just about every food that makes up the average American's daily diet: soft drinks, flavored milk (chocolate, strawberry), baked goods, sauces, salad dressings, various condiments, candy, jam/jelly, canned fruit, and more.

Although many findings suggest that HFCS can be linked with the various major diseases threatening the health and lives of countless individuals further research in this area is necessary to determine whether there is a direct causal effect. With processed,

pesticide-covered, Frankenfoods on the rise it is unfortunate that we have to question and fear things as basic and seemingly innocent as corn syrup.

References

Pollan M. *The Omnivore's Dilemma – a natural history of four meals*. New York: Penguin press, 2006, p. 18

Nielsen SJ, Popkin BM. Changes in beverage intake between 1977 and 2001. *American Journal of Preventive Medicine* 2004 Oct;27(3):205-10.

Vos MB, Kimmons JE, Gillespie C, Welsh J, Blanck HM. Dietary fructose consumption among US children and adults: the Third National Health and Nutrition Examination Survey. *Medscape Journals of Medicine* 2008 Jul 9;10(7):160.

Shoham DA, Durazo-Arvizu R, Kramer H, Luke A, Vupputuri S, Kshirsagar A, Cooper RS. Sugary soda consumption and albuminuria: results from the National Health and Nutrition Examination Survey, 1999-2004. *Plos ONE* 2008;3(10):e3431. Epub 2008 Oct 17