



TO YOUR HEALTH



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BEWARE — HFCS !!

by Cherie Asgeirsson, Registered Dietitian

The great debate over high fructose corn syrup (HFCS) has been raging since it was first introduced into our food supply some thirty years ago. It has been blamed with making our society fatter because it is a common sweetener and preservative that is being added to numerous foods, specifically to sodas, juices drinks, beverages and processed foods. HFCS is even added to foods that one does not think of as sweet! Why does this matter and what relevance does this have for you? In the twenty years that I have practiced as a registered dietitian I have seen the increasing effects of this seemingly innocent sweetener. The effects go far beyond the expanding waistlines of Americans.

Let's first take a look at fructose. Fructose is a naturally occurring simple sugar that is found in plants. It is very sweet. When fructose and glucose, another simple sugar that is readily available in nature, are combined you get sucrose—better known as table sugar.

Corn syrup, a glucose-heavy syrup made from corn starch, normally is not very sweet and does not contain fructose. In 1957 researchers found an enzyme that could turn glucose in corn syrup into fructose. Modification of this process through the years has yielded mass-produced HFCS which is in much of our food supply. HFCS mixes better with other liquids, is sweeter than sugar, and is easier and less expensive to produce than sugar. An added benefit is that the sugars in the syrup act as a preservative, which is why HFCS is added to some meats. Improvements in the production of HFCS were welcome news to the

corn and soft drink industries. This article will not discuss the U.S. subsidies to corn farmers but suffice it to say this relationship has been influential as the U.S. has seen a shift in the consumption of sugar. In 1970, 83% of sweetener consumed in the U.S. was sucrose. By 1997, that number had dropped to 43% and in its place we were consuming 57% of sweeteners as HFCS.

Calorically speaking, HFCS is equal to table sugar gram per gram. One gram of carbohydrate yields four calories. Thus, it is no more likely than other sugars to make you gain weight. But the problem with the change in consumption is that studies show that when people consume artificial sweeteners they have an increased desire to keep on eating. Fructose does not stimulate insulin, leptin or ghrelin, hormones which tell us how much we need to eat. When we don't get the signal that we are full we just keep eating! When it comes to metabolism there is a difference. Glucose is metabolized a number of different ways but fructose is only metabolized by the liver. When the liver gets more fructose than it can handle, it turns it into fats in the form of triglycerides which can harm your heart. One can see how this contributes to increasing waistlines, but HFCS is not the only factor. Increasing fat consumption coupled with decreasing activity and exercise levels plays a role as well.

There has been another insidious change that I have seen in my clients—fructose malabsorption, a digestive disorder characterized by bloating, gas, cramps, diarrhea, constipation, indigestion and sometimes excessive belching. Fructose malabsorption is different from Hereditary



Fructose Intolerance (HFI) which will not be discussed in this article. The issue with fructose malabsorption is this — when sucrose (table sugar) or lactose (milk sugar) is eaten, the body provides sucrase and lactase enzymes to break the sugars down so they can be absorbed in the small intestine. However, we do not have an enzyme for digesting fructose because it is already in its simple form. If the absorptive capacity is exceeded we are unable to digest this sugar and symptoms mentioned above may result.

Fructose occurs naturally in fruits, vegetables and honey. Consuming a diet rich in fruits and vegetables (which contain fructose naturally) is part of a healthy lifestyle. But super-impose a diet with artificial food products that have highly concentrated fructose and one might develop a malabsorption problem because we have a limited capacity to digest it.

What is the take away message? Moderation remains important. Many beverages and processed foods are made with HFCS and other sweeteners which are high in calories and low in nutritional value. Start reading labels. You may be shocked to learn where HFCS is lurking in your food. If you are concerned about the amount of HFCS or other sweeteners in your diet consider these tips:

- Limit processed foods.
- Avoid foods that contain added sugar, HFCS, and sorbitol.
- Choose fresh fruit rather than fruit juice or fruit-flavored drinks. Even 100% fruit juice has a high concentration of sugar.
- Drink less soda.

If you have questions consult with your physician or nurse practitioner and request a consult with the registered dietitian who can help create a healthy food plan and work with you to get the nutrients you need. The bottom line is eat simple, whole foods in moderation.

ANNOUNCEMENTS

NEW PRIMARY CARE PHYSICIAN

We are happy to announce that Dr. Sunita Hanjura will be joining the Clinic medical staff in September. Dr. Hanjura is Board Certified in Internal Medicine and Board Eligible in Geriatrics. She attended the University of Pittsburgh School of Medicine and completed her Internship and Residency at Case Western Reserve University Hospitals in Cleveland, Ohio. She was a Fellow in Geriatric Medicine at Case Western Reserve and at George Washington University Hospital in Washington, D.C. While practicing in the Washington D.C. area, she was listed as one of the *Top Physicians* in Washington Magazine. Since 2004, she has been practicing at Bedford Lexington Internal Medicine as an associate of Dr. Norman Weinberg. She is affiliated with Emerson Hospital.

Please join us at a Welcoming Reception for Dr. Hanjura from 10 to 11 a.m. on Friday, September 18 in the Rotunda.

CLINICAL INTERN

We also are welcoming Laurie Wilkins, RN, BSN, a graduate NP student at Regis College, who will be at the Clinic for her clinical internship in Geriatrics on Tuesdays from September through December.

WELCOME

HEALTH EDUCATION LECTURE

On Wednesday, September 30, Cheryl Laundry, RN from Emerson Hospital, will give a presentation on "Why Pre-Diabetes is Important in Later Life," at 10:30 a.m. in Center Auditorium.