The Obesity Crisis and High Fructose Corn Syrup By Debbie Richardson, MA, RD / Optimal Nutrition **www.optimalnutrition4U.com**

Is high fructose corn syrup (HFCS) to blame for the obesity crisis or just a contributing factor? This is the magic question that has spawned a great deal of controversy among medical professionals and scientists. HFCS has been used in abundance since the 1970's but only recently have consumers become aware of its prevalence in numerous products on grocery store shelves.

HFCS was discovered by Japanese researchers. Many people assume it is made from fructose (a naturally occurring sugar in fruits) but this is not so. It is made from corn using various chemical processes producing a mixture of approximately 55% fructose and 45% glucose. Regular table sugar is 50% fructose and 50% glucose. All sugar-sweetened soft drinks in the US use HFCS. Many other foods such as breads, baked goods, cereals, jam, ketchup and some dairy products contain HFCS. It is used as a primary sweetener because it is less expensive to use because of government subsidies on the corn from which it is processed. Extending product shelf life and preventing freezer burn are two other reasons manufacturers prefer HFCS over cane or beet sugar.

There has been a significant rise in the use of HFCS over the past 30 years. Between 1970 and 1990 alone, we increased our intake of HFCS by more than 1000%. Coincidently, the obesity rate in the US rose dramatically over this time period and continues to rise. American's soda and processed food intake rose significantly (both types of foods use HFCS as the main sweetener). Here is a startling breakdown of how much sugar the average American consumes per year and other related statistics:

In 1970, the average intake of soda was 28 gallons. Today it is 56 gallons!

The average 12 ounce can of soda contains 13 teaspoons of sugar. When reading the label, 4g of sugar equals 1 teaspoon.

This equates to 162 cups of sugar each year just from soda. Remember, this doesn't count the processed foods and other sugar-added drinks like Gatorade, PowerAde, Capri Sun, Sunny D, etc.

In the last 20 years, the number of times children ate at restaurants and fast food chains increased by approximately 300%. Because much of the food you get at these establishments is processed, HFCS is quite prevalent. (This doesn't even factor in the high fat content of these foods. That's another article!!)

Obesity rates for children have increased 114% over the last 30 years. Children age 6-11 increased from 7% to 15% and adolescents (age 12-19) increased from 5% to 15%.

The way our body processes HFCS differs from the way it processes naturally occurring sugars like cane or beet. Certain hormones that help us to feel full, decrease appetite and control body

weight are altered. Not only does HFCS decrease our feeling of fullness but it also increases our appetite due to the altering of the hormones. HFCS is more readily converted to fat than natural sugars resulting in higher levels of triglycerides in our blood stream. For people who have high triglyceride levels, it is helpful to decrease their consumption of processed and refined carbohydrates.

So, is HFCS to blame for the obesity crisis? Not solely, but most experts believe it is a contributing factor. We know activity levels for adults and children have also decreased dramatically over the last 30 years and portion sizes have gotten ridiculously large, especially when eating out. When approximately 50% of our food dollar is spent on take-out or dine-in food, it is apparent this is a contributing factor as well.

As we begin 2007, read the list of ingredients on food labels and be aware of the amount of HFCS and processed foods you and your family are consuming. Let's try and get back to the basic whole foods that God so readily provides us in our world like fresh fruits and vegetables, whole grains and just plain water to drink. Your health will thank you! I wish you a happy, healthy and nutritious new year.