HIGH FRUCTOSE CORN SYRUP

According to the latest statistics, new cases of diabetes have increased by 90 percent in the last 10 years, and diabetes or pre-diabetes now strikes one in four Americans. Those are absolutely astounding statistics to say the least.

There's no doubt in my mind that one of the primary fuels for this epidemic is the excess consumption of high fructose corn syrup (HFCS). Several studies over the past few years have also come to this conclusion, including this latest study in *Cell Metabolism*, in which the researchers note:

"Insulin resistance is a common feature of the metabolic syndrome and type 2 diabetes mellitus (T2DM). Both have reached epidemic proportions worldwide with the global adoption of the westernized diet along with increased consumption of fructose, stemming from the wide and increasing use of high-fructose corn syrup sweeteners.

It is well established that fructose is more lipogenic than glucose, and high-fructose diets have been linked to hypertriglyceridemia, nonalcoholic fatty liver disease (NAFLD), and insulin resistance."

Unfortunately, this study does nothing to further the return to a more sane approach to health, but will likely just create even more problems as they propose their findings could lead to yet another drug treatment to hamper the harmful effects of HFCS consumption.

Absolutely in line with the drug model, and one has to seriously wonder if they weren't behind this study.

The answer is clearly not to create more drugs to combat the problem of diabetes, but rather to educate the public about healthier eating habits – which includes AVOIDING high fructose corn syrup as much as possible.

Scientists have clearly linked the rising HFCS consumption to the epidemics of obesity, diabetes and metabolic syndrome in the U.S., and medical researchers have pinpointed various health dangers associated with the consumption of HFCS compared to regular sugar.

Despite all the evidence, the industry persists in claiming these findings are untrue, arguing that HFCS is the same as sugar. Their campaign also relies on

nutritional research, but it should be noted that the funding for many of the major studies in question came from companies with a financial stake in the outcome.

Reminds me quite a bit of the tobacco lobby's consistent denial that smoking causes lung cancer until they had no choice but to admit it.

How Much High Fructose Corn Syrup is in Your Diet?

The obesity and diabetes epidemics are no surprise when you consider the fact that the number one source of calories in America is high fructose corn syrup in soda.

There are about 40 grams of HFCS *per can* – more than the American Medical Association's recommended daily maximum for ALL caloric sweeteners. And that's without adding in all the corn syrup now found in every type of processed, pre-packaged food you can think of.

In fact, the use of high fructose corn syrup in the U.S. diet increased a staggering **10,673 percent** between 1970 and 2005, according to the latest USDA Dietary Assessment of Major Trends in U.S. Food Consumption report. That too is no major surprise considering that processed foods account for more than 90 percent of the money Americans spend on their meals.

All in all, according to the USDA's report, about **one-quarter of the calories consumed by the average American is in the form of added sugars** – the majority of which comes from high fructose corn syrup.

Folks, this is an absolute prescription for disaster. Is it any wonder that we are suffering epidemics of chronic diseases that are contributing to the economic collapse, as they require expensive drug and surgical solutions that only treat the symptoms, but do nothing to address the cause of the disease?

Why High Fructose Corn Syrup IS Worse For You than Sugar

If you need to lose weight, or if you want to avoid diabetes and heart disease, fructose is one type of sugar you'll want to avoid, particularly in the form of high-fructose corn syrup.

Part of what makes HFCS such a dangerous sweetener is that it is metabolized to fat in your body far more rapidly than any other sugar.

According to Dr. Elizabeth Parks, associate professor of clinical nutrition at UT

Southwestern Medical Center and lead author of a study on fructose, published in the *Journal of Nutrition* just last year:

"Our study shows for the first time the surprising speed with which humans make body fat from fructose. Once you start the process of fat synthesis from fructose, it's hard to slow it down. The bottom line of this study is that fructose very quickly gets made into fat in your body."

This occurs because most fats are formed in your liver, and when sugar enters your liver, it decides whether to store it, burn it or turn it into fat. Fructose, however, bypasses this process and simply turns into fat.

Additionally, there's hard empirical evidence showing that refined man-made fructose like HFCS metabolizes to triglycerides and adipose tissue, not blood glucose. And one of the most thorough scientific analyses published to date on this topic found that fructose consumption leads to decreased signaling to your central nervous system from the hormones leptin and insulin.

Because insulin and leptin act as key signals in regulating how much food you eat, as well as your body weight, this suggests that dietary fructose may contribute to increased food intake and weight gain.

Decreased insulin and leptin signaling is also a main cause of diabetes and a host of other obesity-related conditions.

How HFCS Contributes to Diabetes

In addition to everything already mentioned -- including these latest findings that HFCS consumption can lead to nonalcoholic fatty liver disease, followed by hepatic insulin resistance and then type 2 diabetes -- research reported at the 2007 national meeting of the American Chemical Society, found evidence that soft drinks sweetened with HFCS may contribute to the development of diabetes because it contains high levels of reactive compounds that trigger cell and tissue damage that cause diabetes.

Chemical tests among 11 different carbonated soft drinks containing HFCS were found to have 'astonishingly high' levels of reactive carbonyls. Reactive carbonyls are undesirable and highly-reactive compounds associated with "unbound" fructose and glucose molecules, and are believed to cause tissue damage.

By contrast, reactive carbonyls are not present in table sugar because its fructose and glucose components are "bound" and chemically stable.

Reactive carbonyls are elevated in the blood of individuals with diabetes and are linked to the health complications of diabetes. It is estimated that a single can of soda contains about five times the concentration of reactive carbonyls than the concentration found in the blood of an adult person with diabetes.

How HFCS Contributes to Heart Disease

HFCS is also known to significantly raise your triglycerides and LDL (bad cholesterol). Triglycerides, the chemical form of fat found in foods and in your body, are not something you want in excess amounts.

Intense research over the past 40 years has confirmed that elevated blood levels of triglycerides, known as hypertriglyceridemia, puts you at an increased risk of heart disease.

Additional Health Dangers of High Fructose Corn Syrup

As if all of that wasn't bad enough, fructose also does not contain any enzymes, vitamins or minerals so it takes these micronutrients from your body while it assimilates itself for use.

Unbound fructose, found in large quantities in HFCS, can interfere with your heart's use of minerals such as magnesium, copper and chromium.

Please note that this does not mean you should avoid *whole fruit*, however, as it contains natural fructose together with the enzymes, vitamins and minerals needed for your body to assimilate the fructose. Eating small amounts of whole fruit also does not provide a tremendous amount of fructose, and is not likely to be a problem for most people unless diabetes or obesity is an issue.

And lastly, adding insult to injury, HFCS is almost always made from genetically modified corn, which is fraught with its own well documented side effects and health concerns.

GMO corn will radically increase your risk of developing corn allergies. The problem with corn allergies are that once you have a corn allergy from GMO corn you will have an allergy to even healthy organic corn products.

How You Can Drastically Improve Your Overall Health

If you want to drastically improve your health, the answer is quite simple. To lose weight and reduce your risk of developing metabolic syndrome, diabetes, and heart disease, STOP drinking soda and processed fruit juices. Switch to pure

water as your beverage of choice and you will be well on your way to better health.

To preserve your health you also need to focus your diet on whole foods based on your personal biochemistry, and, if you do purchase packaged foods, become an avid label reader and avoid foods that contain corn syrup as a main ingredient.