

Analyze the high fructose corn syrup essay

[Business](#), [Industries](#)



WHAT IS HIGH FRUCTOSE CORN SYRUP? * High fructose corn syrup (HFCS) is a calorie-providing sweetener used to sweeten foods and beverages, particularly processed and store-bought foods. It is made by an enzymatic process from glucose syrup that is derived from corn. A relatively new food ingredient, it was first produced in Japan in the late 1960s, then entered the American food supply system in the early 1970s.

HFCS is a desirable food ingredient for food manufacturers because it is equally as sweet as table sugar, blends well with other foods, helps foods to maintain a longer shelf life, and is less expensive (due to government subsidies on corn) than other sweeteners. It can be found in a variety of food products including soft drinks, salad dressings, ketchup, jams, sauces, ice cream and even bread. The enzyme process that changes the 100% glucose corn syrup into HFCS 42 is as follows: 1. alpha-amylase - produces shorter chains of sugars called oligosaccharides from raw cornstarch. 2.

Glucoamylase - breaks the oligosaccharides down even further to yield the simple sugar glucose. 3. Xylose isomerase (aka glucose isomerase) - converts glucose to a mixture of about 42% fructose and 50-52% glucose with some other sugars mixed in. * has the same calories from sugar, honey

There are two types of high fructose corn syrup found in foods today: * HFCS-55 (the main form used in soft drinks) contains 55% fructose and 45% glucose. * HFCS-42 (the main form used in canned fruit in syrup, ice cream, desserts, and baked goods) contains 42% fructose and 58% glucose. WHAT ARE THE BENEFITS OF HIGH FRUCTOSE CORN SYRUP? Low Calorie and Generally Recognized as Safe * HFCS's calorie content is similar to table sugar, about 4 calories per gram. It is also a food product " generally

recognized as safe" by the U. S. Food and Drug Administration. * Ubiquitous, Well-Preserved Food at Low Prices * Food manufacturers favor HFCS because it is just as sweet as cane sugar but cheaper. This means they can produce greater amounts of food at lower prices and enable the country to enjoy relatively rare food shortages. In addition, HFCS acts as a food preservative and protects food from water activity that allows microorganisms to grow.

It also helps reduce freezer burn and aids in the fermentation process for yeast-raised bread and ** WHAT ARE THE PROBLEMS WITH HIGH FRUCTOSE CORN SYRUP? ** That's why many of the lower class is more malnourished because the things they can afford are all processed and packaged and full of hfcs many other preservatives * IS THIS A CREDIBLE SOURCE OF INFORMATION? ** HowStuffWorks. com is *probably* accurate in its information, but it's not the best place to get your information because it's just doing the same thing you are--compiling bits of information from a lot of different sources, not producing new information.

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