

Does Soda Have Health Benefits?

The Effects of Soda on your Body

The effects soda has on the body are numerous. A good place to begin exploring this numerousness is with the amount of sugar found in a single twelve ounce can of soda.

Ten teaspoons of sugar is the recommended daily allotment (RDA) the United States Department of Agriculture (USDA) has suggested for a 2,000 calorie diet. Yet soda manufacturers frequently meet or exceed this allotment by adding ten to twelve teaspoons of sugar to each of their non diet cans of drink. This means that each time a consumer drinks one lousy non diet soft drink that consumer takes in at least and possibly more than the RDA for single day's worth of sugar.

Although sugar information listed on soda cans is provided in the form of grams, consumers can easily determine how much sugar they're consuming from canned soft drinks by dividing the number of grams on the can by four. Four grams of sugar is the same as one teaspoon of sugar. Therefore if a can contains forty grams of sugar – forty divided by four equals ten – the can contains ten teaspoons of sugar. When considering the number of teaspoons of sugar consumers digest on a daily basis that are added to other food sources they eat or drink it's easy to see how one can exceed the RDA sugar recommendation without even realizing it.

Large amounts of sugar found in sodas are only the beginning of the sugary dilemma. Another side of the sugary predicament has to do with what kind of sugar we're talking about. Prior to the 1980's refined cane sugar or pure corn syrup were primary ingredients manufactures used to sweeten sodas. This

was great because these sugar forms provided glucose to sodas; and glucose is useful to the body as an immediate energy source that's stored in the liver and released as insulin when we need it.

Today's manufacturers have put glucose aside and inserted fructose in its place as the preferred non diet soda sweetener. But we're not simply talking fructose – we're talking high fructose corn syrup (HFCS) – and manufacturers use it because it is more cost efficient – for them – than cane sugar and pure corn syrup. The big dilemma is that HFCS has been criticized for promoting hypertension, diabetes, and hyperactivity along with a slew of other health conditions.

HFCS come to be when corn syrups are put through enzymatic processes to raise the levels of fructose in a sweetener. Once the high fructose levels are attained, the modified sweetener is added to pure corn syrup (100 % glucose) in varying degrees, to reach its completed state. These high levels of fructose have been hypothesized to cause insulin resistance, obesity (in particular, central obesity which happens to be the worse type of obesity), elevated triglyceride and cholesterol levels, and associated with metabolic syndrome. In addition, blood minerals are found to be chelated by fructose. Chelating blood minerals could lead to mineral deficiency diseases, immune system dysfunction, and insulin resistance – which is associated with type II diabetes.

Furthermore, whereas all cells in the human body are capable of metabolizing glucose, fructose can only be metabolized in the liver. In experiments analyzing the effects of fructose on rats, the rat livers, after exposure to high amounts of fructose, looked like livers that belonged to alcoholics.

A 2004 study (that actually took place over a period of eight years) involving 50,000 nurses revealed a correlation that

implied consuming one or more sugar-sweetened beverages, like soda, a day increases a woman's risk of developing diabetes by 80% . The finding unveiled a connection between consuming high amounts of sweetened beverages and (1) women's weight gain and (2) added risks of acquiring type 2 diabetes.

Another problem with adverse effects soda has on the body involves teeth. When drinking soda, high concentration levels of simple carbohydrates such as fructose, sucrose, and glucose, land on the teeth. Oral bacteria proceed to ferment these carbs producing an acid that dissolves tooth enamel. As a result, sugary ingredients added to sodas may increase the consumer's risk of dental caries.

In addition to the over abundance of sugar found in sodas, the problem of fortification, or lack thereof, may also have an effect on your body. The fact is that most sodas are not fortified. Manufacturers do not concern themselves with adding nutrients your body needs to soft drinks they produce. For this reason, sodas contain little if any vitamins, minerals, protein, fiber or other essential elements. What manufacturers do add to many sodas, however, are additives like artificial flavoring, emulsifiers, preservatives, and food coloring – ingredients many of today's consumers would prefer to do without. And if that isn't enough, manufactures also add caffeine. Many adversaries insist the addition of caffeine to soft drinks should disqualify the drinks from consideration as valid sources of dietary fluids. This is because the diuretic properties found in caffeine actually remove bodily fluids through urination.

Some claim that phosphoric acid in sodas, particularly colas, rids the bones of calcium, thus causing bones to become less dense and leading to weakened bones and osteoporosis. These proponents claim that because a soda's pH is about one point five and a person's normal pH is between seven point two and seven point four suggests it would take thirty two glasses of water at a pH of nine to neutralize one twelve ounce can of

soda's acid level once the soda is consumed. Since people don't tend to drink thirty two glasses of water in a single day, it is believed that the body, deprived of water, resorts to removing calcium from its bones in order to bring the body's pH level back to normal.

Moving on to the immediate effects soda has on a person's body at time of consumption: During the time it takes to consume a soda, and even as the soda is being consumed, sugar enters the bloodstream and raises the body's insulin level. Then the liver begins to turn excess sugar into fat. If the soda is caffeinated, one's pupils will dilate, and a rise in blood pressure will occur. As a result, the liver sends sugar back into the bloodstream. Within minutes, dopamine production stimulates the brain's pleasure centers. After all of this, within a short period of time, the excitement brought on from drinking the soda wears off, often leaving the consumer with a feeling of fatigue.

Due to the high degree of fructose (and possibly caffeine) in a soft drink, another effect soda can have on the body is preventing it from falling to sleep when it wants to rest, and forcing it to rest (due to its previous lack of sleep) when it wants to be awake.