

Liquid Candy and Its Health Effects

What do we mean by “liquid candy”?

As the table below shows, there is so much sugar in soda and fruit drinks that they are as high in calories and bad for your health as candy.

Beverage	Sugar (teaspoons)	Calories	Compare this to
12 ounces of cola	10 tsp	145	8 mints (10 tsp of sugar, 150 calories)
12 ounces of orange juice	8 tsp	165	9 butterscotch candies (8 tsp of sugar, 180 calories)
12 ounces of apple juice	10 tsp	165	50 jelly beans (10 tsp of sugar, 204 calories)
12 ounces of grape juice	15 tsp	240	71 grams of caramels (12 tsp of sugar, 271 calories)
12 ounces of chocolate milk	10 tsp	312	4 suckers (10 tsp of sugar, 240 calories)
12 ounces of sweetened iced tea	8 tsp	105	6 Maple Flavoured Drops (8 tsp of sugar, 147 calories)
20 ounces of sports drink	7 tsp	122	22 pieces of candy corn (7 tsp of sugar, 140 calories)
20 ounces of slush	12 tsp	320	12 licorice twists (12 tsp of sugar, 360 calories)
12 ounces of fruit flavoured beverage	9 tsp	165	1 (28.0g) bag of cotton candy (7 tsp of sugar, 180 calories)

Remember to judge a drink or food by the nutrients it offers rather than simply the sugar content.

An interesting fact to think about is that a pound of body fat equates to approximately 3500 calories. Therefore, if a person was to choose water instead of cola 24 times then they would have approximately one less pound of body fat than they would have if they had chosen cola.

What about the artificial colour in soda and fruit and sports drinks?

In February 2007, *The Brazilian Journal of Biology* published their findings on tartrazine (yellow dye). It is a nitrous derivative and is known to cause allergic reactions such as asthma and hives. Tartrazine belongs to the "azo class" of food dyes meaning it can be carcinogenic (cancer causing). Azo class dyes are derived from petroleum distillates.

The UK Food Standards Agency commissioned two studies in 2003. Both in-depth studies concluded that food dyes adversely affect children. Some increased behaviours include lack of concentration, lack of focusing, interrupting conversations, talking too much and fiddling with objects or their own body (these are also many of the common signs/symptoms of attention deficit hyperactivity disorder).

These 2003 studies coincided with results from an informal study conducted with 8 and 9 year old students at a school near Toronto, Canada in 2008. For one week, students were asked what they ate for breakfast, their snack and lunch foods were recorded and their behaviour was monitored throughout the day. Those students who ingested three or more food dyes demonstrated increased levels of lack of concentration, restlessness and fiddling with their shoes or their own body.

Diet soda does not contain sugar, so I can drink that, right?

No, diet soda can be dangerous because it contains aspartame. Aspartame may affect people with PKU (phenylketonuria). PKU is a rare, inherited disease that prevents the essential amino acid phenylalanine, one of the components of aspartame, from being properly handled by the body. Aspartame accounts for over 75 percent of the adverse reactions to food additives reported to the FDA. Many of these reactions are very serious and include seizures and death. A report by the Department of Health and Human Services in the United States documents 90 different symptoms caused by aspartame, these include: headaches/migraines, dizziness, seizures, nausea, numbness, muscle spasms, weight gain, rashes, depression, fatigue, irritability, tachycardia, insomnia, vision problems, hearing loss, heart palpitations, breathing difficulties, anxiety attacks, slurred speech, loss of taste, tinnitus, vertigo, memory loss, and joint pain.

What should we drink?

Safe drinking water is the best option. In some areas it may be necessary to install a household Reverse Osmosis system in order to make your tap water safer. Other smart options include milk (there are a little over four teaspoons of sugar in 12 ounces of milk) and, in small amounts (ex: a four ounce glass), 100% pure no sugar added juice.

The Safe Drinking Water Foundation has educational programs that can supplement the information found in this fact sheet. Operation Water Drop looks at the chemical contaminants that are found in water; it is designed for a science class. Operation Water Flow looks at how water is used, where it comes from and how much it costs; it has lessons that are designed for Social Studies, Math, Biology, Chemistry and Science classes. Operation Water Spirit presents a First Nations perspective of water and the surrounding issues; it is designed for Native Studies or Social Studies classes. Operation Water Health looks at common health issues surrounding drinking water in Canada and around the world and is designed for a Health, Science and Social Studies collaboration. Operation Water Pollution focuses on how water pollution occurs and how it is cleaned up and has been designed for a Science and Social Studies collaboration. To access more information on these and other educational activities, as well as additional fact sheets, visit the Safe Drinking Water Foundation website at www.safewater.org.

Resources:

About.com. 2008. Food Colouring and Health.

<http://homecooking.about.com/od/foodhealthinformation/a/foodcolorhealth.htm>

Alternative Medicine Angel. Top 20 Food Additives to Avoid.

<http://altmedangel.com/additive.htm>

Calorie Count: There's strength in numbers. <http://caloriecount.about.com/foods>

CaloriesperHour.com. What It Takes to Lose a Pound.

http://www.caloriesperhour.com/tutorial_pound.php

Capital Health. November 2007. Sugar Shocker.

<http://www.capitalhealth.ca/NR/rdonlyres/e6nstownulqpkbvzot7as7dhtyv6storxwnl57sbz4ql6o2im2rgwio4tthag2r5vaq2aoqodp7fst6zyagrafdccb/Sugar+shocker.pdf>

Hookedonjuice.com. October 2, 2006. Hooked on Juice. <http://www.hookedonjuice.com/>

Mercola.com. Aspartame: What You Don't Know Can Hurt You.

<http://www.mercola.com/article/aspartame/dangers.htm>

The NutraSweet Company. What is phenylketonuria (PKU), and why is there a statement regarding PKU on products sweetened with aspartame?

<http://www.nutrasweet.com/articles/article.asp?Id=56>

Suite101.com. November 11, 2008. Food Coloring: Synthetic Food Dye is Hazardous to Your Health. http://healthfieldmedicare.suite101.com/article.cfm/food_coloring