

Soda

Introduction:

Soda is a drink that can be defined as a carbonated liquid beverage that does not contain alcohol. Sodas are a soft drink whereas a drink containing alcohol is a hard drink. Soda goes by numerous different names around the world ranging from pop, soda pop, fizz, cola, or coke. The vast numbers of different flavored sodas are offered in sweet versions including those flavored with sugar as well as those using artificial sweeteners, which are no calorie versions, referred to as diet soda. Due to their sweet taste many people prefer consuming non-diet soda, some in extreme amounts, which can be linked, to tooth decay, obesity, diabetes, heart disease, and numerous other health risks. I decided to choose the topic of sodas mainly due to my obsession with nutritional health. When I was a child I was a heavy soda drinker but as I grew older I ditched the habit as I became more involved in becoming fit and healthy. Although I have now recently begun to drink diet soda, I developed an interest in finding out more about soda, primarily its negative side effects. A large percent of the world's population consumes these high caloric, low nutrient drinks, causing it to be an important topic in the health of today's society.

Section One: Background and Problem Statement

Web site # 1: "Competitive Foods: Soft Drinks vs. Milk" **Score (24)**

<http://www.ers.usda.gov/publications/fanrr34/fanrr34-7/fanrr34-7.pdf>

This article looks at the issue of the sale of competitive based meals and USDA provided meals sold in schools. It also takes a direct look at the increasing purchase of soft drinks in schools instead of the much healthier alternative, milk. The article also discusses various plans to

increase the purchase of milk and USDA sponsored food through taxing or removing the unhealthy foods from schools, and increasing the promotion and improvement of the sale of milk and other healthy alternatives. I believe that this was an excellent source and provided important information, and it was also from a reliable source, The United States Department of Agriculture.

Web site # 2: “Soft Drink” Score (19)

http://en.wikipedia.org/wiki/Soft_drink

This was a basic informative article that you commonly find on Wikipedia. It included a tremendous amount of information and facts pertaining to soft drinks. They included things like, the name of soda changes around the country and even the world, and when and where the first soda was invented and produced. It discussed the different uses of soda, i.e. Soda floats, the different forms of how it is packaged and sold, and the many negative health risks related to higher consumption. One interesting fact provided in the article came from a study that concluded that some sodas contain a very small amount of alcohol. The article was an excellent source of information for anyone looking for many basic facts on soda.

Web site # 3: “Liquid Candy: How Soft drinks Are Harming America’s Health” Score (18)

<http://www.cspinet.org/liquidcandy/>

This was a very interesting article concentrating more on the enormous amounts of soda that Americans consume and the associated negative health risks. Some interesting facts provided by the article were that soda companies produce enough soda to supply everyone with over 50 gallons a year, and soda; including diet and sugared versions, account for almost up to 10% of Americans dietary calories. It also included a chart showing the change in soda production in the

United States from 1947 to 2004. This article was a great article because it exposed some of the horrors of soda and the enormous amounts that are consumed in today's society.

Web site # 4: "The Global Dump Soft Drinks Campaign" **Score (22)**

<http://www.dumpsoda.org/>

This was an article explaining an attempt to try and reduce high caloric soda consumption to try and improve health and diet in the world. It briefly listed some of the health risks associated and the steadfast efforts of popular soda companies in pushing and advertising their products. It also provided a disturbing fact that American boys drink around 800 cans of soda per year. The end of the article provided numerous links to certain Web sites involved in helping the cause of stopping large soda consumption in the world.

Section Two: Research

Web site # 1: "Effect of Soda Consumption on Urinary Stone Risk Parameters" **Score (27)**

http://www.ncbi.nlm.nih.gov/pubmed/19275488?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum

This article discusses a study done with three different types of fluids, diet soda without caffeine, and Fresca containing citrate, and their role in kidney stone formation. The subjects were given the different types and then their urine samples were tested for various compounds. The study concluded that there was an increased risk when consuming diet soda and Fresca versus consuming plain water. This was a very informative article, although it was hard to follow some of the medical terms and procedures.

Web site # 2: "Sugared soda consumption and dental caries in the United States" **Score (26)**

<http://www.ncbi.nlm.nih.gov/pubmed/11706958>

This article attempts to determine the connection between dental caries and sugary soda drinks. The survey looked at the diets and then dental records of the subjects over a six-year period. The article concluded that in subjects over the age of 25 there was a clear link between the two but in younger subjects and children under 12 there was no link found. This may be due to the fact that it only occurs as we get older with increased exposure to soda. This was another interesting study and was relatively easy to follow for someone without comprehensive medical knowledge.

Web site # 3: “Sugar-added beverages and adolescent weight change” **Score (27)**

<http://www.ncbi.nlm.nih.gov/pubmed/15166298>

This article discussed the negative weight change in young adults with high consumption of drinks added with sugar over the past decades. The study looked at the body mass index (BMI) of adolescents and the consumption of sugared sodas, milk, fruit juices, and diet soda. The results showed that as young boys and girls consumed more and more sugar drinks during the day compared with the subjects that didn't consume sugary drinks resulted in higher body mass indexes. This was another interesting article although the outcome of the study was easy to predict. The only drawback was that the results and procedures were complicated, very in-depth, and hard to follow.

Web site # 4: “Bacterial contaminants in carbonated soft drinks sold in Bangladesh markets”

Score (27)

http://www.ncbi.nlm.nih.gov/pubmed/19232446?ordinalpos=6&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum

This article looked into the possibility of bacterial contaminants in soft drinks. The research included looking at over 200 samples of soda from populated cities in Bangladesh. The study discovered that basically all of the samples did not meet the standards set by the World Health Organization. The most common contaminant found was *Pseudomonas aeruginosa* found in almost all of the samples.

Section Three: Statistics

Web site # 1: “Soft Drink Consumption and Risk of Developing Cardio metabolic Risk Factors and the Metabolic Syndrome in Middle-Aged Adults in the Community” **Score (30)**

<http://circ.ahajournals.org/cgi/content/abstract/CIRCULATIONAHA.107.689935v1>

This article was about a study that wanted to determine if drinking soda, known to cause obesity in children, was also linked to a higher metabolic risk in older and middle aged people. It included all of the factors and qualities that the study measured, which was extremely hard to follow and understand. The article concluded that consumption of soft drinks was linked to a higher risk of certain negative metabolic qualities. This was an excellent and detailed article that had a clear purpose and conclusion, with extremely detailed results, although hard to follow for someone not in the medical profession.

Web site # 2: “Banning Soft Drinks in Schools Has Small Impact” **Score (27)**

<http://www.4woman.gov/news/english/619119.htm>

This article talks about a study done to examine the link between removing soda sales in elementary schools to youth consumption. The study showed that after removing the sales of soft drinks from schools the amount consumed decreased very minimally, less than 10 percent. More needs to be done in monitoring the consumption of soda by youths outside of school and in

the home. This was a very interesting article and easy to read and comprehend for someone not wishing to get too much scientific and statistical information.

Web site # 3: “Soft Drinks Harmful to Health” Score (20)

<http://www.pureinsight.org/node/4461>

This article discusses high sugar consumption with the increased risk of diabetes. It pinpoints soda of all sugar products as being the most lethal due to the extremely large amount of sugar in such a small serving. This was a great article that was very easy to understand and follow. It also helped describe what high intakes of sugar do in the body and how they lead to obesity and diabetes through large spikes in insulin. Another interesting point it brought up was that industry research seemed to mask the negative results that independent research commonly produces.

Web site # 4: “U.S. Soft Drink Consumption Soars” Score (28)

<http://www.cbsnews.com/stories/2004/09/17/health/webmd/main644191.shtml>

This article discusses the increase in American consumption of soft drinks since the late 70s, affecting weight and causing lower levels of vitamin intake in the body. Some of the statistics discussed in the article included high fructose corn syrup being used instead of sucrose, decreased milk consumption, and an increase in soda consumption among the elderly. The calories in these drinks tripled in some cases, and young adult consumption also increased as much as 10 percent. The article provided this interesting information in a bulleted and easy format for me to follow.

Section Four: Consumer Information

Web site # 1: “What you should know about SOFT DRINKS” Score (21)

<http://www.unh.edu/dining/nutrition/pdf/soft-drinks.pdf>

This article is an excellent source of information for someone of any intelligence on the subject. It provides in a clear cut way what a can of soda contains, and then briefly discusses the various negative health risks associated with over consumption. It concludes telling the reader that minimal consumption is fine if everything else in the diet is balanced. This is an excellent choice for someone looking to begin acquiring knowledge on the subject.

Web site # 2: “The Health Hazards of Drinking Coca-Cola and other Soft Drinks” **Score (26)**

<http://www.organicconsumers.org/school/cocacola021605.cfm>

This article provided numerous statements on the risks of high consumption of soft drinks in the diet by doctors, professionals, and specialists in the field of diet and nutrition. The statements provided the reader with a good quality of knowledge that was easy to understand for those looking to learn more on the topic. Some of the articles were easy to follow, but others got a bit complicated and scientific for the average reader.

Web site # 3: “Yale Researchers Weigh the Science on Soft Drinks and Health” **Score (25)**

<http://www.bio-medicine.org/medicine-news/Yale-Researchers-Weigh-the-Science-on-Soft-Drinks-and-Health-18806-1/>

This article provides information on a study done at Yale looking at the negatives related to soft drinks and health. The article is good for someone interested in the results of the study and not much time spent discussing how the research was actually carried out. This article is great for someone looking to get right to the point and find out what the study concluded.

Web site # 4: “Soft Drinks in Wyoming Schools: *Health vs. Revenue Issues*” **Score (21)**

http://www.uwyo.edu/WINWyoming/school_policy-soda-issues.htm

This article talks about the issue of contracts with schools and soda companies to help alleviate budget problems, which in turn results in higher consumption of soft drinks that leads to obesity and many other health risks. It then goes into elaborate details on the two different issues of health and revenue. This article is a bit confusing, although I would suggest it to someone who is involved in a school system where this problem would be more pertinent and helpful to them.

Conclusion:

Section One: Background Information

Best Web site: “Competitive Foods: Soft Drinks vs. Milk”

- I chose this Web site because it was the most interesting to me. Also the information was easy to understand and follow. The United States Department of Agriculture is a great source of information dealing with a matter of strong importance to diet and nutrition.

Worst Web site: “Soft Drink”

-I chose this Web site because although it contains a vast amount of information on the topic it was not very trustworthy. Wikipedia is a Web site that anyone has access to and can add whatever they like into the article, although it provided a lot of information. If I needed up to date, accurate information on my topic I would choose another site.

Section Two: Research

New information I learned:

- I learned a great deal on my topic after searching for different sources of research. I learned that soda consumption is a serious problem in grammar schools and that high soda consumption leads to numerous health risks, such as dental caries and diabetes, not only obesity.

Section Three: Statistics

New Statistics I learned:

- I learned a vast amount of statistical information on my topic after searching for Web sites. I learned that since the 1970s the sale and consumption of soft drinks has increased about 5%, and the drinks now contain an increased amount of sweeteners as well as more harmful forms of sweeteners. Also, there was 38% decrease in the amount of calories, which a person consumed, which came from the consumption of milk.

Section Four: Consumer Information

Best Web site: “What you should know about SOFT DRINKS”

- I choose this Web site because it was an excellent source for someone to use as a starting point in his or her studies. The article was easy to follow and understand. It provided the reader with the facts on soda and what it contains, and then discussed all the negative health risks involved with excess consumption.

Worst Web site: “Soft Drinks in Wyoming Schools: *Health vs. Revenue Issues*”

- I choose this Web site because even though it provided interesting information it was not very trustworthy. The article was specifically designed for someone involved in school politics and it also did not seem to back up the information with sources and references.

Soda (Presentation Outline)

Background/Problem Statement

- My topic was on sodas, or soft drinks, and more importantly the high incidence of consumption of soft drinks. A typical can of soda contains about 150 calories, around 40 grams of sugar, and does not include essential vitamins or minerals. This is a major health issue because high consumption can lead to numerous negative health benefits such as obesity, tooth decay, caffeine dependency, weak bones, diabetes, and many more.

Research

- After searching for research articles I learned that the high consumption of soft drinks can lead to other health risks besides obesity, such as diabetes. It was also very interesting that soda sales in grammar schools are rapidly increasing, mainly from big time soda companies pushing and advertising their products, leading to obesity in children and many nutrient and vitamin deficiencies.

Statistics

- After conducting my search for Web sites I learned a few very important statistics. One statistic was that major soft drink companies produce enough soda to supply everyone with over 50 gallons of soda a year, and another statistic was that American boys drink around 800 cans of soda per year.

Consumer Information

- The most interesting information that I discovered on my topic was that ever since the 70s the amount of soda consumed is greatly increasing. This is very important because if people don't learn to control their consumption of soft drinks, health problems will continue to increase.

Back to Betty C. Jung's Web site	http://www.bettyjung.net/
Back to Web site Critique Reports Directory	http://www.bettyjung.net/Pch201wsreports.htm