



## Cool drinks and its health Hazardous

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### INTROOUCTION

A soft drink is a drink that typically contains carbonated water, a sweetener and a natural or artificial flavoring. The sweetener may be sugar, high-fructose corn syrup, fruit juice, sugar substitutes (in the case of diet drinks) or some combination of these. Soft drinks may also contain caffeine, colorings, preservatives and other ingredients.

Soft drinks are called 'soft' In contrast to hard drinks (alcoholic beverages). Small amounts of alcohol may be present in a soft drink, but the alcohol content must be less than 0.5% of the total volume if the drink is to be considered non-alcoholic. Fruit juice, tea and other such non-alcoholic beverages are technically soft drinks by this definition but are not generally referred to as such.

Soft drinks may be served chilled, over ice cubes or at room temperature. In rare cases, some soft drinks, such as Dr Pepper, can be served warm. Soft drinks are available in many formats, including cans, glass bottles and plastic bottles (the latter in a variety of sizes ranging from small bottles to large 2-liter containers). Soft drinks are also widely available at fast food restaurants, movie theaters, convenience stores, casual dining restaurants, and bars from soda fountain machines. Soda fountain drinks are typically served in paper or plastic disposable cups in the first three venues. In casual dining restaurants and bars, soft drinks are often served in glasses.

Soft drinks may be drunk with straws or sipped directly from the cups

Soft drinks are mixed with other ingredients in several contexts. In Western countries, in bars and other places where alcohol is served (e.g., airplanes, restaurants and nightclubs) many mixed drinks are made by blending a soft drink with hard liquor and serving the drink over ice. One well-known example is the rum and coke, which may also contain lime juice. Some homemade fruit punch recipes, which may or may not contain alcohol, contain a mixture of various fruit juices and soda pop (e.g., ginger ale). At ice cream parlours and 1950s-themed diners, ice cream floats are often sold. Two popular ice cream floats are the coke float and the root beer float, which consist of a scoop of ice cream placed in a tall glass of the respectively named soft drinks.

### HISTORY:

The origins of soft drinks lies in the development of fruit-flavoured drinks. In Tudor England water imperial was widely drunk; it was a sweetened drink with lemon flavour and containing cream of tartar. Manays Cryste was a sweetened cordial flavoured with rosewater, violets or cinnamon. Another early type of soft drink was lemonade, made of water and lemon juice sweetened with honey, but without carbonated water. The compagnie des Lirnonadiers of Paris was granted a monopoly for the sale of



lemonade soft drinks in 1676. Vendors carried tanks of lemonade on their backs and dispensed cups of the soft drink to Parisians.

#### **Tooth Decay:**

All soft drinks are acidic which corrodes the teeth by eroding its enamel, The high amount of sugar consumed through soft drinks lead to the development of bacteria that attack the teeth thus aggravating dental problems. People who drink three or more glasses of aerated drinks (gaseous drinks) daily have much higher chances of dental decay, fillings and teeth loss, Therefore, soft drinks contain acid and sugar that corrode and destroy the teeth in one shot.

#### **Obesity:**

Soft drinks are mainly composed of filtered H<sub>2</sub>O, artificial additives and refined sugar. Thus, they lack nutritional value and only add up calories through their refined sugar; therefore, they make you gain weight. But is shifting to Diet Soft Drinks the solution? The fact is that diet soft drinks contain aspartame (an artificial low-calorie sweetener). Although aspartame does not add up the calories it makes you feel hungrier and crave for food. The Food and Drug Administration (FDA) no longer allows foods containing aspartame to be labeled as weight reduction product. Now it insists to label these products simply as Diet Drink or Diet Food. Research also shows that aspartame causes migraines, dizziness and more over it reduces your memory.

#### **Malnutrition:**

Some people who are addicted to soft drinks deprive themselves from food until they become victims of malnutrition. Since gastrointestinal disturbance of

these drinks lead to poor appetite thus surviving on soft drinks and little amount of food will cause malnutrition, retarded growth and other physiological problems. Effect on Gastrointestinal System: When you open the bottle of a soft drink, bubbles and fizz are immediately emitted out This is due to phosphoric acid and carbon dioxide (CO<sub>2</sub>) content, which make these drinks highly acidic. The pH of soft drink ranges from 2.5-3.4 which generates a highly acidic environment in the stomach. Throughout the digestive system, that starts from the mouth and ends up at the anus (liver, gallbladder and pancreas play the role of accessory organs) only the stomach can resist an acidic environment up to pH 2.0. But before the acidity of soft drink reaches the stomach it passes through all the other organs involved in the digestive system thus causing an abnormal acidic environment, Hence the linings of the mouth, pharynx and esophagus are highly sensitive to acids. Also there is a very common practice of taking soft drinks when a person suffers from acidity or after having a heavy meal, However, this is wrong. The phosphoric acid present in soft drink competes with the hydrochloric acid of the stomach and affects its functions. When the stomach becomes ineffective, food remains undigested causing indigestion, gassiness or bloating (swelling of stomach). Thus people who are suffering from acidity should not be drinking soft drinks because actually it increases acidity

#### **Effect on Kidneys:**

Kidneys are less able to excrete phosphoric acid when it is in excess, Thus, there is extra work for kidney. Soft drinks remove Calcium from the body, causing an excess amount of Calcium that tend to be deposited in kidney,



resulting in nephrolithiasis (kidney stones).

**Effect on Skin:**

Acidic blood affects the action of glutathione, which is an antioxidant enzyme. In addition, these drinks lack vitamins and minerals. By taking these drinks, people cut their intake of fresh juices, milk and even water and deprive themselves from essential vitamins and minerals that are mandatory for skin. Thus, the skin becomes more prone to wrinkles and aging. **Effect on Bones:** Phosphoric acid, present in carbonated drinks is silently poisonous, it deoxidizes blood. In detergent manufacturing industries, phosphoric acid is used to produce water softener. Water softener removes Ca<sup>+</sup> and Mg<sup>2+</sup> ion from hard water. In human body, the function remains the same by removing Ca<sup>2+</sup> from bones causing osteoporosis (porous bones). **Effect of Caffeine:** In most of carbonated beverages, caffeine is deliberately added to make it addictive. Caffeine in carbonated drink is more readily absorbed than any other drink (like coffee, chocolate etc). Caffeine disturbs sleep by stimulating nervous system. It also makes premenstrual syndrome worse, causes dehydration and induces stomach to produce acids, aggravating hyperacidity. Since caffeine disturbs sleep, the body is more likely to produce C-reactive protein, which plays an important role in heart disease,

**Prevention:** Use straw to reduce direct contact with teeth. Rinse your mouth with water after drinking aerated drink, Or simply do not drink soft drinks, Remember that diseases do not develop overnight but do develop over the years with improper dietary habits. Also each individual has different tolerance level. So think of all long term effects on your

body. The multitude side effects depend on your genetics and an individual's physical strength. Chronic illnesses are not a direct cause but they are triggered or worsened by bad food habits, Soft drinks have subversive and destructive physiological consequences that contribute to early aging. In the 1500's, the Spanish colonists noted how the Indians of South America were able to allay fatigue by chewing the leaves of the coca shrub. However, that observation lay dormant for three centuries, as the science of organic chemistry developed. By 1860, in Germany, the first pure crystals of cocaine were extracted from coca. In small quantities, it was then used as a stimulant in beverages. By the 1880's, in Paris, a druggist named Angelo Mariani created an immense! popular cocaine-laced wine (viii Mariani). It contained about 30 mg. of cocaine in five ounces. Pope Leo XIII gave a gold medal to Mariani for being a benefactor of humanity. Thomas Edison praised the beverage. In the late 1880's, in Atlanta, a new non-alcoholic drink was born to quench thirsts and provide pep during steamy summers. Coca Cola contained cocaine from the coca plant and lots of caffeine from the kola bean. Other ingredients were lots of sugar, caramel coloring, lime juice, citric acid, phosphoric acid, nutmeg, coriander, neroli (orange flavoring), and cinnamon. The new beverage was sold as a syrup that would be mixed with cold soda water at local drugstores (with a scoop of vanilla ice cream—after refrigerators).

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