## What Is the Right Kind of Water to Drink? No, Sugar, Please!

As the global population becomes more health-conscious, the commercial beverage industry is getting ahead by shifting the trend from sugary drinks to a wide variety of low sugar drinks under the label of healthy sports drinks, vitamin waters, energy drinks with caffeine, mineral waters, and alkaline waters; the list is getting endless.

The availability of a wide array of specialized drinks has created a significant confusion on what is useful, healthy, or even necessary. Undoubtedly, a sensible approach to keeping a lean disease-free body and save money is to stay with plain clean drinking water. The multibillion-dollar commercial drink companies certainly have their interest in selling more, and keep spending millions of dollars every year advertising and promoting hundreds of their expensive specialty drinks.

It is good to have a working knowledge of different drinks to be able to make safe and sensible choices. Undoubtedly, plain water is always a beverage of choice.

- Sugary commercial soft drinks. The sweet sodas, cola drinks, sports drinks, caffeinated sugary energy drinks use three kinds of sweeteners, none of which are suitable for health, and some are worse than others:
  - Regular sugar made from sugar cane.
  - High fructose corn syrup (HFCS) Made from chemical processing of corn starch, the HFCS is
    rich in fructose. An excess of fructose is known to cause fatty liver and insulin resistance.
    Both these conditions are at the root of most modern food and lifestyle diseases such as
    obesity, type 2 diabetes, metabolic syndrome, PCOS (Polycystic ovarian disease of young
    females), high blood pressure, and heart disease.
  - Artificial sweeteners (Diet drinks and zero-calorie drinks)--Zero-calorie diet drinks were
    introduced in the 1970s to curb the new upcoming epidemic of obesity. Unfortunately, the
    number of obesity cases instead of coming down multiplied, so zero-calories sweeteners
    failed to do the expected. The artificial sweeteners are 200-300 times sweeter than regular
    sugar and generate a sugar seeking behavior because the feeling of sweetness is addicting.
    In 2018, the American Heart Association Advisory Committee recommended further
    research to determine the safety of artificial sweeteners and their role in the causation of
    food and lifestyle diseases.

Globally, the consumption of commercial beverages has increased dramatically because of the beverage industry's massive multimillion-dollar marketing campaigns. The medical science has clearly shown a positive association between obesity, its related diseases, and commercial soft drink consumption. Currently, highly visible public health policy efforts are being made against the soft drink industry by the governments around the world. Britain, France, and a few states in the USA have banned soft drink sales in schools. The commercial beverage industry is fighting back globally using massive media campaigns. The only way to tame the problem of commercial sugary drinks is grassroots public education campaigns to bring public awareness.

2. *Fruit juices.* Contrary to common belief, 100% fresh fruit juice is not a healthy drink for an average human. It is an excellent supplementary drink for the sick individual who is unable to

eat. Fruit juice is concentrated fructose sugar with minimal or no fiber, which gets consumed swiftly in 2-3 minutes. Consuming fructose sugar in high amounts leads to fatty liver and insulin resistance, which are at the root cause of obesity and related diseases.

3. **Carbonated water/Sparkling or fizzy water.** Carbonated waters are refreshing alternatives to sugary sodas, and the flavored versions are getting popular. Carbonation process requires a small machine for infusing carbon dioxide through the water under pressure. Home versions of carbonation machine are available at a reasonable price. Carbonation is undoubtedly a healthier and very cheap alternative to commercial sugary sodas.

Carbonated water is slightly acidic. Carbon dioxide reacts with water to create a weak acid called carbonic acid. This acid stimulates the nerve endings in the mouth to produce the enjoyable tingling sensation. The weak carbonated acid by itself does not cause damage to teeth. However, if carbonation gets combined with sugar and other additives such as in cola drinks, it becomes damaging to teeth. If one is addicted to sugary cola drinks, carbonated beverages can be a better alternative.

- 4. **Alkaline water.** There is a new rage on alkaline drinking water. The machines for making alkaline water are fast getting popular, and several manufacturers are selling expensive bottled alkaline water. It is good to have a little knowledge of the pH of the drinking water to be able to understand alkaline water. The pH is a measure which tells if a substance is acidic, alkaline, or neutral.
  - Acidic water means a pH of water lower than 7.0
  - Alkaline water means a pH higher than 8.0
  - Neutral water is at a pH close to 7.0—the municipal tap water by international standards has a nearly neutral pH between 6.5 and 8.0.

Tap water logistically cannot be made acidic or alkaline because that will be corrosive to water pipes and cause damage to pipes over time.



Tap water pH of 6.5 to 8.0

The alkaline waters, which are the new rage, have a pH range from 8.0 to 9.0. The average body pH is slightly alkaline at pH 7.4. The supporters of the alkaline water make claims that alkaline

water prevents disease. However, drinking alkaline water in excess can lower stomach acidity, which is critical to digesting proteins and killing harmful bacteria in the food.

The final word on alkaline water is that there is no scientific evidence that alkaline water is superior to regular drinking water from the tap, which has a pH of 6.5-8.0. If one wishes to keep the body alkaline, the more reliable method is to eat foods which create alkaline waste in the body and avoid food which creates an acidic residue in the body.



**Acidic Versus Alkaline Foods (Body Alkaline)**