

Bottled Water Sales Soar as Tap Water Safety Questioned

Americans are drinking more bottled water than milk, coffee or beer nowadays, new research shows.

The trend owes partly to fears over tap water and also to marketing success by companies that often peddle little more than refined tap water.

Soda still rules the U.S. beverage market, but many people have become accustomed to paying for drinking water.

The average American drank 23.8 gallons of bottled water in 2004, up from 22.1 gallons in 2003, according to the International Bottled Water Association.

The U.S. bottled water industry takes in revenue of \$10 billion annually.

You might however wonder what is in that bottle, especially when you start to pay more for certain brands. Take for example BlingH2O spring water from Tennessee; it sells for about \$240 a case wholesale.

The U.S. Environmental Protection Agency (EPA) sets safety standards for tap water, and the U.S. Food and Drug Administration (FDA) sets them for bottled water. The FDA usually follows the EPA's recommendations, although the EPA standard for lead is three times higher than the FDA's.

Safe drinking water is a global concern, and a billion people worldwide lack access to it, according to the World Health Organization. A report Tuesday from the Environmental Working Group, covering 42 nations, found 141 unregulated chemicals in tap water.

Pass the bottle, please

As with all groceries, the marketing vocabulary for bottled water can be confusing. Here is the liquid landscape as seen by the FDA:

- • Mineral water comes from an underground source that contains at least 250 parts per million total dissolved solids such as minerals and trace elements. Some people believe these minerals offer health benefits, but there is no convincing evidence according to the World Health Organization.
- • Spring water is water that flows from an underground source to the Earth's surface, unlike well water brought to the surface via a hole drilled into the ground.

No matter the source, there are a number of ways water can be treated so that bottlers can call it "purified."

For instance, distilled water is vaporized and condensed to leave behind heavy minerals, bacteria and viruses. Reverse osmosis forces water through membranes to remove minerals. And most bottlers use ozone gas, an antimicrobial agent, to disinfect water instead of chlorine, since few people enjoy the smell and taste of chlorinated water.

Most consumers prefer the taste of spring water to purified water, according to Research and Markets, a research and market data firm. More than 40 percent say there is a significant difference between brands.

Pour excuse?

At least 25 percent of bottled water starts out as tap water, according to the National Resources Defense Council (NRDC), which in the past has cautioned that bottled water "is not necessarily cleaner or safer than most tap water."

The NRDC credits successful marketing for encouraging consumers to sometimes spend 10,000 times more for bottled water than their tap water costs.

Coca-Cola and PepsiCo, which control more than 50 percent of the soda and water market according to the firm Research and Markets, mainly sell processed tap water under brands such as Dasani and Aquafina.

So what's on tap? Quality varies city by city, town by town, county by county.

Municipalities are required to issue an annual consumer confidence report on tap water, listing all the EPA-controlled contaminants, Peter Chensky, executive director of the Water Quality Association, told LiveScience.

These reports should list the testing done on local drinking water and whether contaminants showed up.

Test results can vary from day to day, so interested investigators should check reports over time with an eye for contaminants that might have cropped up in the recent past, Chensky said.

Your water may vary

Treatment of tap water varies with each municipality. Municipalities are required by federal law to constantly test drinking water for harmful substances and warn the public if there is a problem.

Many communities add fluoride to tap water to promote strong teeth and prevent tooth decay, something bottled water generally doesn't offer.

Water can be purified at home at a huge savings by the consumer with faucet and pitcher filters sold by PUR and Brita. They work over time only if you maintain or regularly change the filters.

Tap or bottled water that tastes, looks and smells good can still be unsafe, experts say. Most dangerous contaminants in drinking water cannot be seen, smelled or tasted.

Lead, radon, benzene and radium are problems in certain areas, and the presence of arsenic tends to increase as water sources move further west. "Then you get into trihalomethanes and other contaminants that are very long words, and people tend to glaze over," Chenksy said.

In any case, these contaminants can cause mutations in human DNA that contribute to disease and others are directly involved in causing cancer.

SOURCE:

By Robin Lloyd, Special to LiveScience