

By Michael Shermer

□

In 1979 I started drinking bottled water. My bottles, however, contained tap water and were nestled in small cages on the frame of my racing bicycle.

Tap water was good enough then because we did not know how much healthier and tastier bottled water is. It must be, because Americans today spend more than \$7 billion a year on it, paying 120 to 7,500 times as much per gallon for bottled water as for tap. Bottled prices range from 75 cents to \$6 a gallon, versus tap prices that vary from about 80 cents to \$6.40 per 1,000 gallons. We wouldn't invest that for nothing, would we?

Apparently we would. In March 1999 the Natural Resources Defense Council (NRDC) published the results of a four-year study in which they tested more than 1,000 samples of 103 brands of bottled water, finding that "an estimated 25 percent or more of bottled water is really just tap water in a bottle--sometimes further treated, sometimes not." If the label says "from a municipal source" or "from a community water system," it's tap water.

Even more disturbing, the NRDC found that 18 of the 103 brands tested had, in at least one sample, "more bacteria than allowed under microbiological-purity guidelines." About one fifth of the waters "contained synthetic organic chemicals--such as industrial chemicals (e.g., toluene or xylene) or chemicals used in manufacturing plastic (e.g., phthalate, adipate, or styrene)," but these were "generally at levels below state and federal standards." The International Bottled Water Association issued a response to the NRDC study in which it states, "Close scrutiny of the water quality standards for chemical contaminants reveals that [the U.S. Food and Drug Administration's] bottled water quality standards are the same as [the Environmental Protection Agency's] tap water standards." Well, that's a relief, but in paying exceptional prices one might hope for exceptional quality.

One problem is that bottled water is subject to less rigorous purity standards and less frequent tests for bacteria and chemical contaminants than those required of tap water. For example, bottled-water plants must test for coliform bacteria once a week; city tap water must be tested 100 or more times a month.

If bottled water is not safer (a 2001 World Wildlife Fund study corroborated the general findings of the NRDC), then surely it tastes better? It does ... as long as you believe in your brand. Enter the water-wars hype. Pepsi introduced Aquafina, so Coke countered with Dasani, a brand that included a "Wellness Team" (meet Susie, Jonny and Ellie, the "stress relief facilitator," "fitness trainer" and "lifestyle counselor," respectively) on its Web site. Both companies charge more for their plain water than for their sugar water.

***Some bottled water is really just tap water in a bottle.***

When the test is blind, however, the hype falls on deaf taste buds. In May 2001 ABC's *Good Morning America* found viewers' preferences to be Evian (12 percent), O-2 (19 percent), Poland Spring (24 percent) and good old New York City tap (45 percent). In July 2001 the *Cincinnati Enquirer* discovered that on a 1-to-10 scale, that city's tap water rated an 8.2, compared with Dannon's 8.3 and Evian's 7.2. In 2001 the Yorkshire, England, water company found that 60 percent of 2,800 people surveyed could not tell the difference between the local tap water and the U.K.'s bottled waters.

The most telling taste test was conducted by the Showtime television series *Penn & Teller: Bullshit!* The hosts began with a blind comparison in which 75 percent of New Yorkers preferred city tap to bottled waters. They then went to the Left Coast and set up a hidden camera at a trendy southern California restaurant that featured a water sommelier who dispensed elegant water menus to the patrons. All bottles were filled out of the same hose in the back of the restaurant; nevertheless, Angelenos were willing to plunk down nearly \$7 a bottle for L'eau Du Robinet (French for "faucet water"), Agua de Culo (Spanish for "ass water") and Amazone ("filtered through the Brazilian rain forest's natural filtration system"), declaring them all to be far superior to tap water. There's no accounting for taste.

Bottled water does have one advantage over tap: you can take it with you wherever you go. So why not buy one bottle of each desirable size and refill it with your city's finest unnaturally filtered yet salubriously delicious tap water?