

## Get off the bottled water kick.

Who would have thought that we would ever pay more for a gallon of bottled water than we pay for a gallon of gas?

The sheer impact of bottled water on the environment is unbelievable. Think with me for a minute. The bottled water industry takes water either from the city tap or a spring and they treat it and then bottle it. Then of course it has to be loaded onto trucks and delivered to the stores for us to buy it. Have you ever followed behind one of those big old water trucks billowing exhaust fumes into the air. Some cities have even banned bottled water in their government offices. So much has been published about bottled water being not much better than tap water that I won't go into it.

The real impact is in our landfills. Plastic lasts a long time in the dump. There are billions of bottles dumped in our landfills in the U.S. every year.

Not to mention the BPA in the plastics.

## BPA

The finding confirms concerns expressed by consumer groups and public health experts, that polycarbonate plastic bottles are an important source of the BPA that finds its way into the human body. BPA has been shown to interfere with reproductive development in animals, and has been linked to cardiovascular disease and diabetes in humans, among other things.

The study was the work of senior investigator Karin B Michels, associate professor of epidemiology at Harvard School of Public Health (HSPH) and colleagues, and was published online in the May 12 issue of *Environmental Health Perspectives*.

Michels and colleagues found that participants who drank for a week from from polycarbonate bottles showed a two-thirds increase of BPA in their urine.

Other studies have shown that BPA can leach from the container into the liquid, but this is the first to show a corresponding increase of BPA in urine in humans.

Hard plastic polycarbonate bottles are often used as refillable containers by students, campers and others (for instance people in gyms refill them from the water fountains). They are also used as baby bottles, although two months ago [6 manufacturers in the US](#) said they would stop selling hard plastic baby bottles made with BPA.

If a hard plastic bottle carries the recycling symbol showing the number 7, then it is most likely made of polycarbonate, since 7 is the category for "all other plastics", which includes polycarbonate (according to the [SPI resin identification coding system](#)).

BPA is also found in dentistry composites and sealants and in the lining of aluminum food and beverage cans.

Several studies have shown that BPA disrupts hormones in animals, leading to early sexual maturity, changes in development and organization of tissue in mammary glands and reduction in sperm in the affected organism's offspring. The early stages of fetal development are thought to be the most vulnerable to harm from BPA, said the authors in a prepared statement.

Michels said that:

"We found that drinking cold liquids from polycarbonate bottles for just one week increased urinary BPA levels by more than two-thirds."

"If you heat those bottles, as is the case with baby bottles, we would expect the levels to be considerably higher," she added, explaining that is worrying because "infants may be particularly susceptible to BPA's endocrine-disrupting potential".