

## **Bottled Water: Do you really need it – and is it really worth it?**

Considering how much awareness there seems to be about the negative effects of bottled water on the environment and possibly our bodies, it is surprising to see how much is still being sold. In Canada, we consume more than two billion litres a year at a price tag of almost \$700 million.

Global bottled water consumption reached 187 billion litres in 2006, according to Zenith International Market Research, and some 2.7 million tons of plastic are used to bottle water each year.

With those numbers in mind, it's staggering to think of the impact this has on the world. National Geographic's Green Guide reports that, "Producing a 16-oz. [one-time-use] #1 PET bottle generates more than 100 times the toxic emissions to air and water than making the same size bottle out of glass".

It takes close to 17 million barrels of oil to produce the 30 billion water bottles that U.S. citizens go through every year and bottling this water produces more than 2.5 million tons of carbon dioxide. The Pacific Institute estimates that the energy used for pumping, processing, transportation, and refrigeration represents another 50 million-plus barrels of oil. The total amount of energy embedded in a plastic bottle of water is "like filling up a quarter of every bottle with oil".

In addition to that, one litre of bottled water takes an average of three litres of water to produce.

It's sad to see bottled water that has traveled across the country, and even worse, from Fiji, France, and Germany, available in our local stores.

Fiji water bottles are manufactured in China, then transported to Fiji, and from there the full bottles are shipped to North America. In this process almost seven litres of water are used to produce each bottled litre, in a country where many of the people don't have access to safe drinking water.

In a world in which over 1 billion people have no reliable source of drinking water, and 3000 children a day die from diseases caught from tainted water, our consumption of bottled water that we don't need seems ludicrous. Annual global bottled water expenditures, currently about \$100 billion, could meet the UN goal of providing safe drinking water throughout the world at least three times over. (UN Millennium Development Goals)

And that's only the production end of things. What about the waste aspect? The Earth Policy Institute claims that "the bottled water industry, in Canada alone, produces more than 1.5 million tons of plastic that is generally not reusable." And Environmental groups estimate that as little as 14 percent of the bottles end up recycled! Perhaps even worse, about 10 percent of all plastic ends up in the oceans.

One example of the devastating effects of this is located about 900 kilometers off the coast of California, where a massive, expanding island of plastic waste, 30 metres deep and the size of Quebec, has accumulated. Plastic doesn't biodegrade, but instead photodegrades into smaller and smaller pieces, which, in bodies of water, soak up toxins and are consumed by marine animals and birds and thus, every creature up the food chain. More than a million birds and marine animals die every year from eating plastic waste or from becoming entangled in plastic, reports David Suzuki.

Yet many people continue to buy bottled water without a second thought and many institutions don't consider the consequences. For example, with airports implementing a ban on liquids being carried onto planes, at Vancouver International Airport and others, huge bins of discarded water bottles accumulate at the entrances to security. Even though you can carry an empty water bottle through security, no encouragement or provision has been made to dump the

water before going through and it is a search to find a water fountain to refill it on the other side. Instead, a large percentage of people buy yet another bottle once through security, and few complain. With 17 million people passing through the Vancouver airport alone, that's a lot of bottles being discarded, adding to the already substantial carbon footprint of flying.

Another concern, which Elizabeth Royte states in her new book "Bottlemania", is that bottled water "lets our public guardians off the hook for protecting watersheds, stopping polluters, upgrading treatment and distribution infrastructure, and strengthening treatment standards." As well, there is concern that water bottlers may adversely affect ground water levels if they bottle more water than is naturally replenished.

The amazing thing is, as many organization testify, there is no assurance that bottled water is any cleaner or safer than tap water. Municipal water is more stringently tested and, unlike tap water, regulations allow bottled water to contain some contamination.

There is also the problem, as tests have shown, that unhealthy chemicals can migrate from plastic bottles into the water. This has come to the forefront recently with Health Canada's reassessment of Bisphenol A, which is found in many polycarbonate bottles.

Interestingly enough, it turns out that 25 to 40 per cent of bottled water is really just tap water. Under the Dasani brand name, Coca-Cola filters water from places like Calgary and Brampton, Ontario, labels it 'purified water', and then sells it back to us. Pepsi's Aquafina water comes mostly from Vancouver and Mississauga.

And it's not bad enough that we are bottling water for people. During the last six months, two Canadian companies (in Charlottetown and Mississauga) announced plans to sell bottled water for pets!

So what can we do instead of buying bottled water? If it's worry about the taste or purity of tap water, consider installing a water filter. During five years of offshore cruising, my family obtained water from a variety of sources and countries. We had a carbon filter installed on our sailboat and the water always tasted good and we never experienced any ill effects.

To carry water with you, fill up your own stainless steel or glass bottle from the tap, and push for more public water fountains. If you still feel it is necessary to purchase bottled water, buy water that is produced locally and sold in the large, re-useable containers.

There are changes happening. At least one water company on Salt Spring, Saltspring's Finest, is making water available in 3-gallon glass containers. The Toronto and Waterloo Region school boards have banned the sale of plastic bottles of water in their schools.

Vancouver, San Francisco, Los Angeles, Ann Arbor, Michigan, and the state of Illinois have banned the use of public funds to purchase bottled water for government functions. And the British government is phasing out bottled water in all of its departments.

Delegates to the United Church of Canada's general council voted to discourage the purchase of bottled water within its churches. The motion called on church members to advocate against the "privatization of water" and to support healthy local supplies of water.

Environmentalist David Suzuki sums it up when he says, "Canadians wanting to do something about the environment can start by drinking tap water."

Next time you go to buy bottled water, think about the cost, not only to your wallet, but to yourself and the world around you. Is it really worth it? I think not.

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