

Tap or bottle?

A look at the health, environmental and economic implications of our water

By AMM Staff



The contamination of municipal water supply has been on Canadians' minds since the tragedies of Walkerton, ON and North Battleford, SK hit the national media. These incidents tarnished the reputation of municipal water supplies nation-wide. However, before permanently switching to bottled water, consider them through the larger lens of high quality municipal water treatment.

Health Canada says, "The responsibility for making sure drinking water supplies are safe is shared between all governments. The day-to-day responsibility of providing safe drinking water to the public generally rests with the provinces and territories, while municipalities usually oversee the day to day operation of the treatment facilities."

Tap water is monitored through Manitoba's *Drinking Water Quality Act*. Bottled water is monitored through the Canadian Food Inspection Agency. They are regulated separately, therefore the quality standards are different, but both sets of standards are intended to protect the health of consumers. However, bottled water standards are less stringent and currently there are no real consequences if a bottler fails to meet the standards. It is also noteworthy that approximately 25% of bottled water is actually tap water that has been bottled.

It is important to recognize that bottled water is contributing to the environment in a negative way through the waste generated and energy expended in production and shipping. Plastic is the most common packaging material used in the bottled water industry and it adds up to about 1.5 million metric tonnes per year. Bottles are generally made from PVC plastic or PET plastic, which is made from fractions of natural gas or crude oil changed chemically into solid form. The manufacturing process releases a number

of known carcinogens, transportation of the bottles increases greenhouse gas emissions, and plastics are a significant component of waste streams making up about 6% of all litter. The industry has a large impact on air and water pollution.

Currently, many restaurants are declining to sell bottled water, opting for tap water instead. The driving force is environmental appeal. An increasingly environmentally educated public is incorporating sustainability into their behaviour, and toting a plastic bottle destined to clog a landfill for a thousand years is not going to show your affinity for the environment.

Cost is another major factor in opting for tap water. Let's face it – bottled water is expensive. Many people are complaining about the price of gasoline, yet on a volume basis, they are willing to pay more for bottled water. In 2005 alone, Canadians spent about \$653 million on bottled water with sales increasing by 20% in 2006. Bottled water, in fact, retails for up to 10,000 times as much as tap water, even when it is just tap water in a bottle. For a simple comparison, a litre of tap water in Canada costs an average of less than \$0.001 while a litre of bottled water sells for around \$2.50. Bottled water companies are convincing consumers (through expensive advertising campaigns) that bottled water is better tasting and purer than tap water.

Upon recognition that a water supply is potentially unsafe, bottled water is a good alternative. However, we must ensure that we are not ignoring the larger problem of accessing a quality water supply. Manitoba municipalities have a longstanding record of producing high quality drinking water for residents. Tap water is and should remain a public service in order to ensure everyone has access to high quality drinking water.

Bottled water defined:

Common terms used on labels to describe bottled water.

Spring Water: Bottled water derived from an underground formation from which water flows naturally to the surface of the earth containing less than 500 parts per million (ppm) of total dissolved solids.

Mineral Water: Bottled water that meets the definition of spring water except it contains more than 500 ppm of total dissolved solids.

Well Water: Bottled water which would meet the definition of spring water except it does not flow naturally to the surface of the earth. Instead it is tapped from a hole bored, drilled or otherwise constructed.

Artesian Water: Bottled water that would meet the definition of well water except it taps a confined aquifer in which the water level starts above the top of the aquifer.

Purified Water: Bottled water that has been produced by distillation, deionization or reverse osmosis. The source can be from a spring, well or a municipal water supply. Other suitable names for bottled water produced by one of the above processes include "Distilled Water", "Deionized Water" and "Reverse Osmosis Water".

Carbonated Bottled Water: Bottled water that contains natural or added carbonation.

Sources:

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