The Safety of Bottled Water

The Issue

There has been an increase in the Canadian consumption of bottled water in recent years. Illness caused by bottled water is very rare in Canada, because the water is treated, disinfected, and monitored to make sure it does not contain harmful microorganisms or chemicals. However, to maintain the safety of bottled water, you must also handle and store it properly.

Background

Bottled water is water sold to consumers in sealed glass or plastic containers. In Canada, bottled water is considered to be a food and is regulated under the Food and Drugs Act. Under the Act and its regulations, all bottled water offered for sale in Canada must be safe for people to drink. In addition, the companies that bottle water must comply with quality standards, good manufacturing practices, and labelling requirements.

Bottled water labelled as “mineral” or “spring” water, is potable water (fit for human consumption) that comes from an underground source. It cannot come from a public water supply. Other types of bottled water may be manufactured from public sources, including tap water and well water. No matter what source it comes from, all bottled water sold in Canada is inspected and treated during the manufacturing process to ensure that it meets Canada’s requirements for safety and quality.

Benefits of Bottled Water

The benefits associated with bottled water depend on your personal preferences. Some people choose bottled water because it is handy; they can just grab it and go. It is also a convenient way to store large amounts of water for emergency purposes. (Public Safety Canada recommends storing enough water to supply your family for at least 72 hours as part of your basic emergency kit. This means 2 litres of water per person per day for drinking, plus water for pets. You can also store an additional 2 litres of water per person per day, for cooking and cleaning.)

Others may choose bottled water because they prefer the taste when compared with water from other sources (e.g., tap water, well water). Some people think that bottled water is safer than tap water, but there is no evidence
to support this. The quality standards for bottled and municipal waters in Canada are similar. All bottled and municipal waters that meet or exceed the required health and safety standards are considered to be safe.

Risks associated with Bottled Water

Bottled water sold in Canada has generally been found to be of good quality and is not considered to pose any health hazard. To date, there have been no reports of outbreaks of illness related to bottled water in Canada.

Health Canada is aware of reports appearing on the Internet expressing concern that harmful chemicals may leach into the water if plastic water bottles are left in vehicles exposed to summer heat. However, there is no scientific evidence to support such concerns. Studies conducted on plastic water bottles, even under extreme temperatures, have failed to find that chemicals are produced at levels that would pose a health risk to anyone who drinks the water in question.

Some consumers have also expressed concern about the small white particles that often appear in bottled water that has been frozen and then thawed. These particles are minerals that separated from the water when it went through the extreme temperature change. They are not harmful to human health.

However, the safety of bottled water may be adversely affected by improper handling and storage. For example, it is possible for bottled water to become contaminated with bacteria when the mouths and hands of consumers come into contact with the bottle opening. These bacteria could then multiply rapidly, especially if the bottle is not refrigerated. The steps outlined below can help minimize risks related to buying, handling, and storing bottled water.

Minimizing Your Risk

When buying bottled water
• Examine the inside and outside of the bottle before you buy it. Avoid bottles that have a broken seal, and report any tampering to the store manager and health officials. Also, make sure the water is clear and has no material floating in it.
• Check the label for the “best-before” date. Most Canadian manufacturers of bottled water indicate that the product has a shelf-life of one to two years.

Handling / using bottled water
• Do not share bottles (i.e., do not have more than one person drink directly from the bottle), as this may introduce bacteria into the water. Pour the water into clean cups or glasses, if more than one person is using the bottle.
• Refrigerate the bottle after you open it (or right after you buy it, if possible). Like other foods, bottled water contains low numbers of harmless bacteria. However, these bacteria can multiply rapidly at room temperature. Refrigerating the bottle helps to maintain low levels of bacteria.
• Always practice good hygiene. Wash your hands frequently with soap and warm water, especially after bathroom breaks or after handling animals. This will help prevent the contamination of foods, including bottled water.
• Keep in mind that the plastic containers holding single-serve bottled water were designed to be used only once. Avoid refilling them. Where possible, recycle these bottles.

Storing bottled water (unopened)
• It is best to refrigerate bottled water, but if this is not possible, store it in a cool, clean, dark place, such as the basement. Keep it away from heat and sunlight. Also, keep it away from any household solvents (e.g., paint-thinners, cleaners, etc.) Over time, solvents can get into the air and then leach through the plastic bottle into the water.
• When storing large amounts of water for emergency purposes, be sure to rotate or replace the inventory to ensure that no bottle is stored beyond its “best-before” date.

The Government's Role

Health Canada sets policies and standards governing the safety and quality of all food sold in Canada. As part of this role, Health Canada works with other government agencies and the Canadian Bottled Water Association to ensure that bottled water sold to Canadian consumers is safe to drink and of high quality. Health Canada also reviews the safety of materials used in food packaging, including the plastic used as containers for bottled water sold in Canada.

The Canadian Food Inspection Agency (CFIA) enforces the policies and standards set by Health Canada.
and ensures that necessary warnings are released quickly to the Canadian public.

**Need More Info?**

See the following:


In addition to giving safety tips, this article defines different types of bottled waters and explains the purpose of different treatments systems for bottled water. It also goes into detail about the safety of water coolers.


Canadian Bottled Water Association, at www.cbwa.ca/

For information about the safety of drinking water (i.e., tap water), go to Health Canada’s Water Quality Web section, at: www.hc-sc.gc.ca/ewh-semt/water-eau/index_e.html

For additional articles on health and safety issues go to the It’s Your Health Web section, at: www.healthcanada.gc.ca/iyh

You can also call toll free at 1-866-225-0709 or TTY at 1-800-267-1245*