

Water: The Unfiltered Facts

By Emily McPhee, RHN

Water straight from the tap is no longer the beverage of choice for many people. Concerns are mounting about the chlorine content and the possibility of contamination with pharmaceutical drugs and lead. According to the Canadian Water Network, tests have confirmed that “lakes, streams and even drinking water contain trace amounts of medications that pass through our own personal plumbing and into the sewer system” (1). Included in the list are antibiotics, antidepressants, beta-blockers, epilepsy drugs and sex hormones. Our water treatment plants are not set up to remove these drug residues from our water supply. Lead contamination is another concern, particularly for those living in older homes. Lead can leach from old pipes into the water and is toxic to the brain—especially in children (2). Some bottled waters are not any better than tap water that has been put through a good filtration system. The quality of bottled water varies: some use pure glacial water with all the minerals intact, while others simply use filtered municipal water. The only way to know for sure where your bottled water comes from and how it is processed is to contact the company directly.

There are many different filtration systems available, the most common being an activated carbon filter


(eg. Brita or Aquaselect) which removes much of the chlorine, odor and taste, but is not quite as effective as an activated aluminum oxide filter at removing heavy metals (3). Water dispensers found in grocery stores often use Reverse Osmosis, a process in which water is forced through membranes, removing all minerals. Some dispensers also use an ultraviolet system (eg Culligan or Glacier) which kills bacteria and microbes.

Distilled water also removes the minerals by turning water into vapor, leaving the minerals

behind. If you drink these types of water you may want to add trace minerals to your water in order to help balance electrolytes in the body. Trace mineral drops are found in Choices Markets' Healthcare Department.

There is rising concern about water that is stored in plastic. Recently, reusable water bottles made of #7 plastic have been pulled from store shelves because some #7 plastics contain the harmful chemical Bisphenol A (BPA). BPA can be leached from plastic into water and has been known to mimic estrogen, disrupting the reproductive system as well as being “linked to prostate cancer, miscarriages, and birth defects” (4). It is said to be especially harmful to infants and children. Thankfully there are some healthier, eco-friendly alternatives for storing water. Choices Markets carries a variety of options such as stainless steel Kleen Kanteens, coated aluminum Sigg bottles and Born Free™ baby-safe bottles, nipples and sippy cups.

There are a lot of factors involved in choosing the best type of drinking water for your family. Bottled water takes the largest toll on the environment, causing pollution from production and transportation and contributing large amounts of plastic to our landfills. If you chose to buy bottled water, store it in a cool, dark place, do not store it for extended periods of time and recycle rather than reusing the bottles. These measures will reduce the likelihood of chemicals leaching from the bottle into your water. The most eco-friendly choice is to drink tap water that has been filtered through a high quality system and stored in containers free of BPA, or to purchase reverse osmosis water from a water machine. If you are concerned about chemicals leaching from plastic containers, you can use glass container such as 4L apple cider jugs. Looking to the future, several studies are being conducted to determine the long term effects of trace amounts of pharmaceuticals in our tap water. As awareness and public pressure increases hopefully the resources will be put in place to remove these undesirable substances from our water supply.

Emily McPhee is a Nutritional Consultants for Choices Market. She is a Registered Holistic Nutritionist and a Chartered Herbalist. Emily is available to answer your nutrition questions on Saturdays at our W. 57th Ave. location, and can be contacted at: emcphee@choicesmarket.com, (604)263-4600. 

Sources:

1. http://www.nce.gc.ca/annualreport2004_2005/Eng/3_0/3_12.asp
2. www.cbc.ca/consumers/market/files/health/leadwater/index.html
3. www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/devices-dispositifs_e.html
4. Kinnon, Stephanie R. “Plastic Pros and Cons”, Alive Magazine. Issue 305. Pg 66.

