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**Looking for a water filter? Here are some basics.  
Make sure you know product's limitations.**

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**IN STORE**

With contaminated drinking water stories again in the news this summer, consumers have been flocking to store shelves to purchase in-home filter units to protect themselves from potential illness. Many will leave with a false sense of security, having purchased products not intended, nor suitable for purifying bacterially-contaminated water.

Before you buy a water filter, make sure you know exactly what the product's capabilities and limitations are.

Recent surveys show that over 47 per cent of new home and condo owners are interested in built-in water filtration systems. Interest is also up for all other housing groups (and businesses, too).

When selecting a water filter, first ask yourself what is it you want to get rid of? That is, are sediment, bad tastes and odour, or bacteria (such as E.coli) the problem? Then make sure you get a product that addresses that concern.

In general, **small inexpensive filter units** (under \$10), that fit into a pitcher or on the end of a faucet, are usually the activated-carbon type. These are only for use with treated, known-safe, municipal water supplies. They are effective against taste and odour, and sediment (to a degree) - but not bacteria. In fact, if not replaced regularly, they can actually become a breeding ground for germs.

At the other end of the spectrum, **high-priced ozone generating units and ultraviolet-light water sterilizers** can kill off bacteria, but require a separate sediment pre-filter (cloudy water hampers the effectiveness of u-v units, since light penetration is necessary for thorough germ-killing). These purifier products usually install on the main water inlet pipe as it enters your home; professional installation is suggested.

Cost is about \$450 and up, depending on the size of home, plus labour; smaller under-sink and countertop units are also available at lower cost. The necessary sediment pre-filter will cost about \$40 plus installation; replacement filters (\$5 and up) are required two to six times per year. UV-lamps (\$80) have a lifespan of 8,000 hours (about a year).

**Distillation purifiers** continuously boil water and collect the germ-free steam, which is then condensed back into water. In proper use, this method will produce absolutely safe, germ-free, sediment-free water. Most models offer auto-shut off when the reservoir is full, but distillers do consume a fair bit of electricity. Periodic draining of sediment, de-scaling, and adding a dedicated electrical line are other considerations.

Distillers are generally connected to a separate drinking water tap at the sink; cost is about \$2,500 and up, installed. Bulky, air-cooled units must be located in a basement or utility room and act like a mini-furnace, radiating heat into the air, these models don't work well in hot environments.

**Glacier Water Treatment Systems in Newmarket (<http://www.glacierwatersystems.ca>) 1-866-382-3442) manufactures a unique, water-cooled distiller. "Ours is the only distiller approved for under-sink placement," says company general manager Geoff Shorrocks. The unit produces up to 10-gallons per day and has a 5-gallon storage tank. Water used for**

**cooling is passed down the drain and removed sediment is automatically flushed away. Annual de-scaling is recommended. Because there are no electric fans, Shorrock says his unit consumes 30 per cent less electricity than air-cooled designs.**

**Reverse-osmosis (RO)** forces water through a semi-permeable membrane to remove impurities. This process is not effective against bacterial contamination. Also, for every litre of filtered water produced by reverse-osmosis, up to 4 litres of raw water are sent down the drain. These units are about \$400 and up, plus installation, and usually incorporate a carbon/sediment filter. Maintenance includes membrane replacement every two to three years (\$75-150, depending on the model), and filter cartridges two to six times per year (\$5 each, and up).

Always read and follow the manufacturer's guidelines for any filter product - most are not recommended for untreated water supplies or known contaminated water sources.

For information on water purification, visit the Canadian Water Quality Association's Web site at <http://www.cwqa.com> or call 416-695-3068.