

A few solutions to chlorinated water

White Rock's former, privately owned water utility, Epcor, had its first and only contamination issue a few years ago.

Fortunately, no one became ill. However, that experience and the city's recent purchase of its water utility now places its water supply under bureaucratic regulations.

White Rock city council decided last month against purifying the water supply with chloramine – ammonia and chlorine. They chose to use chlorine alone, a 'slightly' lesser evil, according to many.

For those not comfortable ingesting chlorine, here are tips that may help ease the worry.

If you have the budget, look into installing a whole-house water filtration system. Costs can run up to \$1,500 or more, not including replacement filters that last up to six months.

Counter-top or under-counter water filter systems for single taps average from \$150 to \$500, but the filters need changing more often.

Ultraviolet light (UV) is also effective to remove chlorine. Whole-house UV light sterilizers start at about \$500.

Another option is self-standing water coolers. There are many systems and price ranges.

Tests show chlorine will dissipate from water over a day or two, when left uncovered. At the same time, exposure to sunlight will speed dissipation.

Add lemon slices to your water pitcher – or drops of pure lemon juice – to help neutralize the chlorine.

Research also finds charcoal can filter 95 to 100 per cent of chlorine from water. Charcoal-filter pitchers are less costly than whole-house systems. Bottled water is another option, but it's 'buyer beware'.

According to Health Canada, federal regulations allow the use of the words "spring" or "mineral" water on the label only if the water originates from

an underground source. It may not be modified from its original composition, though it may be treated by the addition of carbon dioxide, ozone or fluoride. The label must reveal if these methods were used.

Bottled water not labeled "spring" or "mineral" may be from any source and can be treated to make it fit for human consumption. Again, the label must indicate how it was treated.

Will boiling tap water help dissipate chlorine? Most sources say yes, although they differ on how long to boil – anywhere from 10 to 30 minutes.



Many sources suggest several nutrients in food (especially vitamin C) – perhaps even properties in tea and coffee – help dissipate chlorine.

To water small plants, use tap water that's been sitting at least a day or two in large, open-top watering cans.

As for watering outdoors with a hose, studies indicate chlorine binds to particles on the soil's surface. The organisms in the topmost surface may be affected but little chlorine remains as the water seeps downward.

In one test, researchers found organisms deeper than one-half inch were thriving, and the organisms in the top layer quickly replenished (partly due to dissipation).

What about bathwater? Chlorine is absorbed via the skin – more so than through the digestive system, as the liver, kidneys and other mechanisms filter the chemicals you eat and drink.

There are vitamin C bath salts and tablets designed for bathing, or use plain vitamin C powder. Consider using calcium ascorbate, or sodium ascorbate powder, instead of the more acidic ascorbic-acid version. If they are difficult to find, ask your health store to stock them.

Only ¼ tsp (about 1,000 mg vitamin C) will neutralize chlorine in up to 100 gallons of water. Avoid using more; it's not necessary.

For those who prefer to shower, consider a shower head filter, with charcoal and/or vitamin C within the showerhead. Shop around for the many chlorine-eliminating and water storage products available.

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