



Sodium in Drinking Water Factsheet

March 2018

What is sodium?

Sodium is a naturally occurring mineral in food and water, and is a necessary element of human nutrition. Typically the consumption of sodium from food is much higher than from drinking water.

How does sodium get into the drinking water?

Sodium is a mineral that occurs naturally in raw water sources. At the Elgin Area Primary Water Supply System (EAPWSS), naturally occurring sodium in Lake Erie can contribute as much as three quarters of the sodium in the drinking water. The lake water's naturally occurring sodium levels range between 7 mg/L and 14 mg/L, with the remainder of the sodium in the treated drinking water coming from the water treatment process.

How much sodium is acceptable in drinking water?

The Guidelines for Canadian Drinking Water Quality and Ontario Drinking Water Quality Standards set an aesthetic objective for sodium in drinking water at 200 mg/L, at which point it can be detected by a salty taste by the average person. A maximum acceptable concentration for sodium in drinking water has not been specified.

The *Safe Drinking Water Act*, the Ontario Drinking Water Systems Regulation (Ontario Regulation 170/03), requires that a report be made to the local Medical Officer(s) of Health if a sodium result exceeds 20 mg/L in a sample of drinking water. When a sodium sample result in drinking water exceeds 20 mg/L, the Medical Officer of Health informs physicians and other health professionals to help people following sodium restricted diets control their sodium intake.

How much sodium is in drinking water supplied from the EAPWSS?

At times, the sodium levels in treated drinking water from the EAPWSS can exceed the 20 mg/L reporting threshold. In 2013 - 2014, several sodium test results were greater than 20 mg/L. Based on more recent test results (2015 - 2018), the EAPWSS treated drinking water has an average sodium level of 17.1 mg/L, ranging between 15.5 mg/L and 19.1 mg/L.

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How often is sodium testing conducted in the EAPWSS drinking water?

Under the Ontario Drinking Water Systems Regulation (O.Reg. 170/03), drinking water systems are required to test for sodium once every five years. Currently, the EAPWSS tests for sodium once annually. All samples are sent to an external accredited laboratory for analysis. To see the test results for sodium, please visit our water quality reports page at: <https://huronelginwater.ca/consumer-resources/water-quality/>

How will sodium levels greater than 20 mg/L affect my health?

Healthy adults (14-50 years old) should consume between 1500 and 2300 mg of sodium each day; however, for individuals on sodium restricted diets, the amount of sodium in the water may be significant. When sodium levels in drinking water are at 20 mg/L, drinking 2 litres per day would contribute 40 mg of sodium to a person's diet. For healthy adults, this level of sodium in drinking water does not pose a health risk; for people on a very strict sodium restricted diet of 500 mg per day, this would contribute about 8% of their daily sodium allowance.

The human body requires sodium to maintain blood pressure, control fluid levels and for normal nerve and muscle function. Food products, not water, are the major dietary sources of sodium. Sodium is also found in drugs such as antacids, laxatives, aspirin and cough medicines, as well as table salt. One teaspoon of table salt contains 2300 mg of sodium.

References and Additional Information

Health Canada – [The Canadian Nutrient File](#)

Dietitians of Canada – [Food Sources of Sodium](#)

Health Canada – [Nutrient Value of Some Common Foods](#)

To find out if your drinking water comes from the EAPWSS, please contact your local municipality.

For further information on sodium in drinking water, please contact the Elgin Area Primary Water Supply System at 519.930.3505 or watersupply@london.ca

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For further information on the health effects of sodium, please contact your local physician or:

Elgin St. Thomas Public Health

519.631.9900

<http://www.elginhealth.on.ca/>

Middlesex-London Health Unit

519.663.5317

Environmental Health Team, Ext. 2300

Public Health Dietitian, Ext. 2222

<https://www.healthunit.com/>

Additional information about the regional water supply system is available at <https://huronelginwater.ca/> and you can follow us on Facebook (www.facebook.com/RegionalWaterSupply)