

## Acknowledgement:

This Fact Sheet is one of a series developed by an Interagency Committee with representatives from Saskatchewan Health, Regional Health Authorities, Saskatchewan Watershed Authority, Saskatchewan Agriculture, Agriculture and Agri-Food Canada – PFRA and Saskatchewan Environment.

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Government of  
Saskatchewan

# Sodium

(For Private Water and Health Regulated Public Water Supplies)

## What Is Sodium?

Sodium in its elemental form is a reactive metal, in food and water sodium is an essential nutrient present in a dissolved form or in combination with other elements as a salt, the most common being commercial table salt. Dissolved sodium is colourless and odourless.

## How Does Sodium Get Into Water?

Sodium is introduced into water naturally by erosion of minerals from rocks and soil, with surface waters generally having lower sodium levels than ground waters. Levels of sodium in water in Saskatchewan are relatively high compared with most other regions of Canada due to the local geological formations in the province. Water softening systems usually increase the sodium concentration in water by approximately an additional 100 to 200 mg/L.

## How Does Sodium Affect My Health?

There are several scientific interpretations of the health effects produced by dietary sodium. One widely held opinion is that high salt concentrations and therefore high sodium levels lead to increased blood pressure and therefore a higher risk for heart attacks and strokes. It is generally recommended that the total daily intake for sodium from all sources be less than 2400 mg. Individuals who are on a salt-restricted diet are as particularly susceptible to the effects of sodium and should consult a physician as some are limited to as low as 500 mg per day. The contribution of sodium from water to dietary intake is usually considered a minor component.

## How Can I Remove Sodium From My Drinking Water?

Sodium can be removed from water by distillation, by a reverse osmosis (RO) unit or by a suitable ion exchange system. Boiling will not remove sodium.

## What Is The Standard For Sodium In Drinking Water?

The Saskatchewan's Drinking Water Quality Standards and Objectives has established an aesthetic objectives (AO) of 300 mg/L. Since sodium originates principally from dissolved salts, sodium levels approaching these higher levels may have an affect on the taste of the water.

## How Can I Find Out If There Is Sodium In My Water?

Most water quality testing laboratories can determine how much sodium is present in a water supply. For information on sampling instructions and containers, you should contact an accredited laboratory. If using the Saskatchewan Disease Control Laboratory, sample containers are available from the laboratory, local Health Regions, or rural municipalities.

## Need More Information?

### Health Regulated Public Water Supply

For more information on this fact sheet and/or other water quality issues relating to health regulated public water supplies contact your local health region public health inspector.

### Private Water Supply

For more information on how sodium impacts on human health contact your local health region office. For information on how sodium impacts agricultural operations contact Saskatchewan Ministry of Agriculture through your Agricultural Business Centre or the Agricultural Knowledge Centre at 1-866-457-2377 or on the internet (<http://www.agriculture.gov.sk.ca/AKC>).

<p><b>Government of Saskatchewan</b> Water Information website <a href="http://www.SaskH2O.ca">www.SaskH2O.ca</a></p>	<p><b>Water Inquiry Line</b> Questions about water? Call 1-866-SASK H2O (1-866-727-5420) to be referred to proper agency.</p>
<p><b>Saskatchewan Ministry of Health</b> <a href="http://www.health.gov.sk.ca/environmental-health">http://www.health.gov.sk.ca/environmental-health</a> <b>Regional Health Offices</b> Saskatoon: Saskatoon (306) 655-4605 Sunrise: Yorkton (306) 786-0600 Kelsey Trail: Melfort (306) 752-6310 Five Hills: Moose Jaw (306) 691-1500 Sun Country: Weyburn (306) 842-8618 Heartland: Rosetown (306) 882-6413 Prairie North: North Battleford (306) 446-6400 Prince Albert Parkland: Prince Albert (306) 765-6600 Cypress: Swift Current (306) 778-5280 Regina Qu'Appelle: Regina (306) 766-7755 Mamawetan Churchill River: La Ronge (306) 425-8512 Keewatin Yatthe: Buffalo Narrows (306) 235-5811</p>	<p><b>Saskatchewan Watershed Authority,</b> Head Office, Moose Jaw (306) 694-3900 Website: <a href="http://www.swa.ca">www.swa.ca</a> <i>Regional Offices:</i> <a href="http://www.swa.ca/AboutUs/Contact.asp?type=Offices">http://www.swa.ca/AboutUs/Contact.asp?type=Offices</a></p> <p><b>Sask Water Corporation</b> Head Office, Moose Jaw Customer Service 1-888-230-1111 Website: <a href="http://www.saskwater.com">http://www.saskwater.com</a></p> <p><b>Prairie Farm Rehabilitation Administration (PFRA)</b> - Agriculture and Agri-Food Canada Website <a href="http://www.agr.gc.ca/pfra/water/intro_e.htm">http://www.agr.gc.ca/pfra/water/intro_e.htm</a> <i>Regional Offices:</i> <a href="http://www.agr.gc.ca/pfra/sask_e.htm">http://www.agr.gc.ca/pfra/sask_e.htm</a></p>
<p><b>Saskatchewan Ministry of Health</b> <b>Saskatchewan Disease Control Laboratory, Regina</b> General Inquiry 1-866-450-0000 Phone: (306) 798-2125 // Fax (306) 798-0071 Website: <a href="http://www.health.gov.sk.ca/lab">http://www.health.gov.sk.ca/lab</a></p>	<p><b>Saskatchewan Ministry of Agriculture</b> General Inquiry 1-866-457-2377 Agricultural Operations Regina (306) 787-4680 Irrigation Development Outlook (306) 867-5500 Website: <a href="http://www.agriculture.gov.sk.ca">www.agriculture.gov.sk.ca</a></p>
<p><b>Health Canada</b> First Nation and Inuit Health Branch, Regina (306) 780-5434 Website: <a href="http://www.hc-sc.gc.ca">http://www.hc-sc.gc.ca</a></p>	<p><b>Saskatchewan Ministry of Environment</b> Toll-Free 1-800-567-4224 Spill Emergency Toll-Free 1-800-667-7525 Website: <a href="http://www.environment.gov.sk.ca">http://www.environment.gov.sk.ca</a></p>