

# Sodium in Drinking Water

- Sodium is naturally found in groundwater due to its ability to dissolve.
- Sodium concentrations in ground waters normally range between 6 and 130 mg/L.
- Most water supplies contain less than 20 mg of sodium per litre.
- In southwestern Ontario, levels of sodium in drinking water may be higher due to the area's underground salt deposits.
- Human activities can also contribute to sodium levels in water.
- An estimated 25% to 50% of salt used on roads for snow and ice control enters groundwater and can lead to high levels of sodium in public water supplies.
- Water softeners can produce levels over 300 mg/L.
- Other factors influencing sodium levels in water include agricultural run-off, sewage and industrial waste, sodium compounds in corrosion control and water treatment chemicals such as sodium fluoride, sodium bicarbonate and sodium hypochlorite.

## Approximate Sodium Content of Foods

| Food Item        | mg of sodium per serving | Food Item                  | mg of sodium per serving |
|------------------|--------------------------|----------------------------|--------------------------|
| Processed cheese | 406 mg                   | Stuffing mix               | 1131 mg                  |
| Canned ham       | 1114 mg                  | Green olives               | 323 mg                   |
| Corned beef      | 802 mg                   | Dill pickle                | 928 mg                   |
| Sauerkraut       | 1554 mg                  | Fast food hamburger        | 461 mg                   |
| Tomato juice     | 878 mg                   | Canned chicken noodle soup | 1107 mg                  |
| Wheaties         | 355 mg                   | Soy sauce                  | 1029 mg                  |
| Canned beef stew | 980 mg                   | Table salt                 | 1938 mg                  |



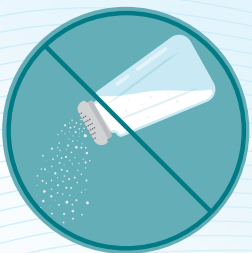
### Sodium and Your Health

- Sodium is not toxic and is naturally found in all living organisms.
- Sodium is essential to our diet as it regulates the fluid levels in our bodies.
- According to the World Health Organization, babies up to one year require 120-440 mg and most adults require 1500 mg of daily sodium intake.
- Sodium from drinking water contributes only a small amount consumed in a normal diet.
- Most sodium comes from the processed food that makes up much of the typical Canadian diet.



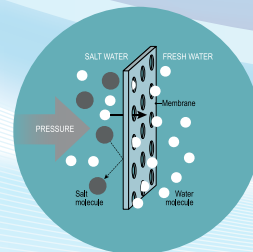
### Regulating Sodium in Our Drinking Water

- In Ontario, sodium is required to be sampled in municipally treated drinking water every five years.
- All sodium levels in excess of 20 mg/L must be reported to the Medical Officer of Health.
- The Haldimand-Norfolk Health Unit (HNHU) periodically notifies local physicians of elevated sodium levels in our municipal drinking water in order for them to advise their patients with sodium-restricted diets.
- For those on private wells, water samples can be submitted to private labs for sodium level testing for a fee. Contact the HNHU for help finding an accredited lab near you.
- Tests for sodium are also done by water conditioning companies listed in the phonebook or online.



### Sodium-Restricted Diets

- People suffering from hypertension or congestive heart failure or those on a sodium-restricted diet must take certain precautions to regulate their sodium intake.
- Consulting your doctor and/or a registered dietitian for planning of food choices is one way to regulate your sodium diet.
- Precautionary steps should also include awareness of sodium levels in drinking water.



### Treatment for Sodium in Drinking Water

- Boiling water does not remove sodium and will only increase concentrations.
- Water treatment devices may also be installed at the kitchen tap to help remove sodium (e.g. reverse osmosis units).