

## Northwest Territories Contaminants Fact Sheets

# Berries

The North is home to a rich variety of edible berries such as rosehips, cloudberrries, raspberries, blueberries, low-bush cranberries, soapberries and gooseberries. Berries are part of the traditional diets of Aboriginal peoples in the Northwest Territories and berries are an important part of their health and culture. People in the Northwest Territories are becoming more aware of contaminants in the environment.

This fact sheet will describe what types of contaminants are in berries, how they get there, and what this means to the health of people who eat them.

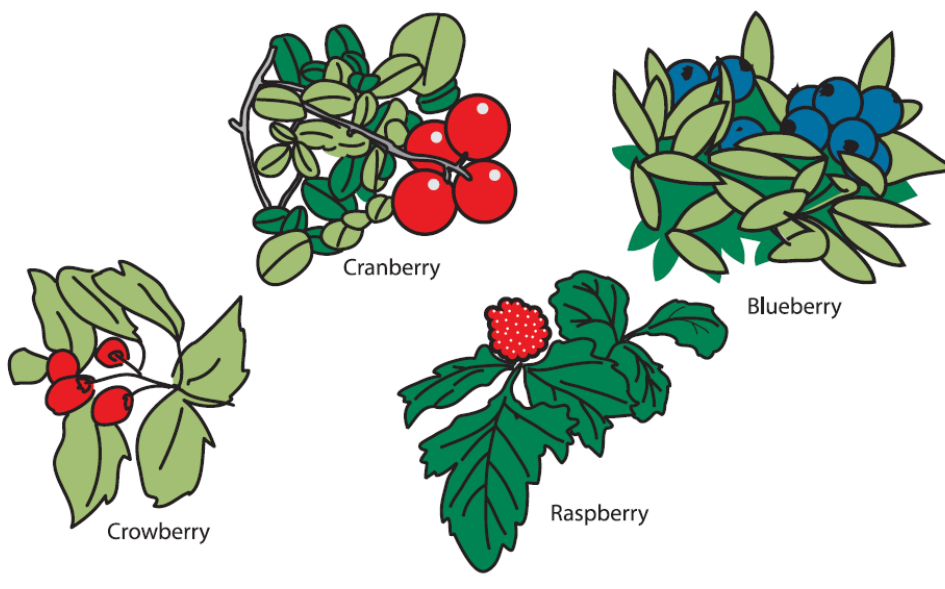
### **Berries are generally very low in contaminants.**

Plants are very low on the food chain. Contaminants become more concentrated when animals (predators) eat other animals (prey). This process is called biomagnification, and it is not evident in berries.

Many contaminants which can biomagnify, such as persistent organic pollutants (POPs) (see POPs fact sheet) build up in fat. Since plants do not have fat cells like animals do, they do not absorb these contaminants. However it is possible for berries to absorb small amounts of contaminants such as metals (see heavy metals fact sheet).

### **Berries can absorb metals from the soil in which they grow.**

A study took place in the Yellowknife area to determine levels of a metal called arsenic in traditionally eaten berries. Arsenic is naturally present in the rocks of the Northwest Territories, but it can also come from human activities such as mining. In the Yellowknife area large amounts of arsenic have been released in the gold smelting process. Small amounts of arsenic were found in berries growing at or very close to mine sites. It is believed that these berries had absorbed arsenic from the soil.





### **Berries are safe to eat!**

Since levels of contaminants in berries in the Northwest Territories are so low, unlimited amounts of berries can be eaten outside mine sites.

Levels of arsenic measured in the berries on mine sites near Yellowknife were also low, but to avoid any arsenic, it is best to pick berries away from these sites.

### **Good News...**

#### **Berries are very healthy foods!**

All living things including berries, contain some contaminants, but they are still very healthy and nutritious foods.

- Berries are an excellent source of vitamin C and fibre.
- Berries can also be a good source of carbohydrate.

Berries are delicious and affordable foods that are good for you in many ways. Eating them helps keep people connected to the land and their cultures. Picking berries helps keep people fit and healthy too.

### **Did you know...**

There are two kinds of arsenic. Inorganic arsenic is toxic, while organic arsenic is naturally occurring in some foods and not found to be toxic. The majority of the arsenic in the berries at or near mine sites was the non-toxic organic arsenic.

### **For more information please contact:**

Department of Health and Social Services  
Government of the Northwest Territories

(867)-920-8646  
Box 1320, CST- 6  
Yellowknife, NT  
X1A 2L9