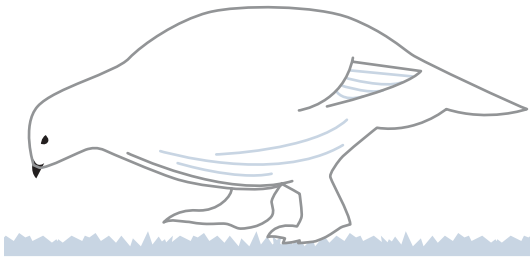




## NORTHWEST TERRITORIES CONTAMINANTS FACT SHEETS

# Ptarmigan and Grouse



Ptarmigan and grouse are included in the traditional diets of northerners. They are an important part of their health, culture and economy. People in the Northwest Territories are becoming more aware of contaminants in the environment.

This fact sheet will describe what types of contaminants can be found in ptarmigan and grouse, how they get there, and what this means to the health of the people who eat them.

### **Ptarmigan and grouse have extremely low levels of most contaminants.**

Since ptarmigan and grouse are plant and insect eaters they are low on the food chain. Contaminants become more concentrated when animals (predators) eat other animals (prey). This process is called biomagnification.

Since ptarmigan and grouse do not eat other animals, this helps them avoid building up elevated levels of contaminants.

Contaminant levels in an animal can slowly build up over time, if the animal continues to eat foods with contaminants. This is called bioaccumulation.

Contaminants are grouped into major types which build up in the fat or in the organs of animals. Contaminants such as persistent organic pollutants (POPs – see fact sheet) build up in fat mostly in marine animals. Contaminants such as heavy metals (see heavy metals fact sheet) can build up in organs of certain land animals and birds. This is because the organs act as filters for the body.

Contaminant levels have been measured in ptarmigan and grouse because they are important traditional foods. Studies have found that most contaminants are present at such low levels that they are not considered health risks to ptarmigan and grouse or to the people who eat them. The only contaminant found in slightly higher levels was a heavy metal called cadmium, which can concentrate in the kidney of ptarmigan.



● Contaminants

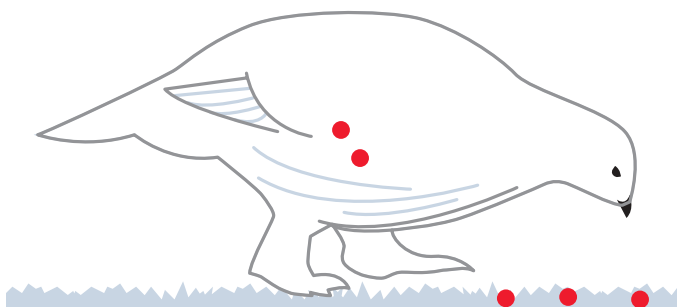


## Ptarmigan and grouse are safe to eat!

There have never been any health advisories issued in the Northwest Territories due to contaminants in these birds. Contaminant levels in ptarmigan and grouse are so low that they pose no health risks, as long as they are cleaned very carefully if killed using lead shot.

There are health risks if a piece of lead shot is accidentally swallowed when eating ptarmigan or grouse. Too much lead can affect the nervous system, kidneys and brain. To reduce exposure to lead in ptarmigan and grouse the following steps can be taken:

- Clean ptarmigan and grouse very carefully.
- Clean them soon after they are shot.
- Better yet, switch from lead shot to shot made from steel, bismuth or iron.



● Contaminants

## Good News...



### Ptarmigan and grouse are very healthy foods!

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

- Ptarmigan and grouse are excellent sources of iron, protein and B vitamins.
- Ptarmigan and grouse livers are high in vitamin A.
- They are low in unhealthy fats.

Ptarmigan and grouse are delicious and affordable foods that are good for you in many ways. Eating them helps keep people connected with the land and their cultures. Hunting for ptarmigan and grouse helps keep you fit and healthy too.

## Did you know...

Smokers are exposed to 20 to 30 times more cadmium than non-smokers! Smokers could consider quitting smoking, rather than avoid eating ptarmigan kidney, to lower their risk of cadmium exposure.

### For more information please contact:

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