

# SAFETY

As with any food, it is important to keep food safety in mind when preparing and eating traditional foods.

From 2009 to 2013, 23 cases of botulism were reported to the Alaska Division of Public Health, Section of Epidemiology, of these 22 were food-borne. All of these cases were associated with eating traditional Alaska Native foods. Foods identified as sources for these outbreaks include aged fish, fish heads, beaver tail, and seal and fish oil. This does not include the most recent and one of the largest outbreaks in 2014, which occurred in Southwest AK.



## What is Botulism?

**BOTULISM** is caused by ingestion of a toxin produced by the bacteria: *C. botulinum*. The disease is characterized by both neurological and gastrointestinal symptoms. Patients often have nausea or vomiting accompanied by difficulty swallowing, double vision, dry mouth, dizziness and poor balance.

## Preventing Botulism in Seal Oil

It is important to cut all of the seal meat off of the blubber you are going to render. Pure fat is not a place where bacteria easily grow. After the fat has rendered, the oil should be boiled, poured into sterilized jars, and stored in containers that can be closed tightly. The oil should be kept in the freezer or refrigerator (Unger 2014).

Even with these precautions, food can look, smell, and taste perfectly normal, but still be contaminated.

**If you suspect botulism in your oil, throw it out.**

# QUYANNA

Special thank you to our seal hunters for continuing to teach the youth the proper protocols and ways to respect the seal after a hunt. To our elders, thank you for your continued support and guidance.

To those who helped develop this brochure:

Melissa Chlupach, NMS Regional Healthcare Dietitian  
Robin Randich, Marketing Consultant  
Seth Anderson, 2014-2015 UAA Dietetics Intern.  
Jennifer Burns, UAA Professor of Biology  
Amy Bishop, UAA Postdoctoral Researcher

This document was made possible through Cooperative Agreement NA14NMF4390163 with the National Marine Fisheries Service. Harbor Seal nutritional information reported in this publication was supported by an Institutional Development Award (IDeA) from the National Institute of General Medical Sciences of the National Institutes of Health under grant number P20GM103395.

### References:

Unger, S. (2014) Qaqamiigux Traditional Foods and Recipes from the Aleutian and Pribilof Islands. Anchorage, AK: Aleutian Pribilof Islands Association, Inc.

The Alaska Native People, DeCourtney, C., Simeon, D., & Mitchell, K. (2008). Traditional Food Guide for Alaska Native Cancer Survivors. ANTHC.

Stetson, M. (2011). Botulism...A deadly food poisoning. FNH-00268. <http://www.uaf.edu/files/ces/publications-db/catalog/hec/FNH-00268.pdf>

Health Canada. (2011). Food Safety for First Nations People of Canada: A manual for healthy practices. Retrieve From: <http://dhss.alaska.gov/dph/Epi/eph/Documents/FNIHBFoodManual.pdf>

Department of Health and Social Services Division of Public Health, Section of Epidemiology. (2014). Reportable Infectious Diseases in Alaska 2009-2013 Summary. [http://www.epi.hss.state.ak.us/id/reports/ID\\_Summary.pdf](http://www.epi.hss.state.ak.us/id/reports/ID_Summary.pdf)



## Alaska Native Harbor Seal Commission

207 E. Northern Lights Blvd, Ste. 208  
Anchorage, Alaska 99503

Phone: (907) 345-0555  
Toll Free: 1-888-424-5882  
Fax: (907) 345-0566  
[jonibryant@haborsealcommission.org](mailto:jonibryant@haborsealcommission.org)  
[www.haborsealcommission.org](http://www.haborsealcommission.org)



Be sure to check us out on Facebook!

# HEALING FOODS

## Harbor Seal Oil and Meat



TRADITION.  
NUTRITION.  
SAFETY.

## Alaska Native Harbor Seal Commission

"Ensuring that harbor seals remain an essential cultural, spiritual, and nutritional element of our traditional way of life, and to promote the health of harbor seals in order to carry forward the cultural, spiritual, and nutritional traditions of Alaska Natives"

# SEAL OIL & MEAT

Seal is a traditional staple food of the Alaska Native Peoples. It is a reliable food which can be harvested year round. All parts of the seal are utilized for different purposes.



The practices of hunting and preserving these foods continues the passage of culture from one generation to the next. These practices aid in keeping the Alaska Native Peoples fit and active.

*"Fresh out of the water...when you kill a seal  
...then you throw it in a pot on a beach...That's the  
best time to eat it." ~ Moses Dirks, Atka*

## RECIPE

### Boiled Seal with Vegetables

#### Ingredients

5 lbs. seal meat  
1 large yellow onion  
3 lbs. potatoes  
3 small turnips  
1 head cabbage  
Petruski/wild parsley  
Salt & pepper

(Recipe adopted from George Kudrin, 2008).

1. Place seal meat in a 2-3 gal. pot. Fill 3/4 of the way full and bring to a boil.
2. Chop onions, add to boiling pot.
3. Bring to a simmer.
4. In last 30 minutes: add vegetables, salt and pepper to taste.
5. Serve over rice.

# NUTRITIONAL CONTENT

## Raw Harbor Seal Meat

### Nutrition Facts

Serving size 3 oz. (85g)

Amount per serving  
**Calories 220**

% Daily Value\*

Total Fat 15g 19%  
Saturated Fat 4g 20%  
Trans Fat 0.5g

Cholesterol 50mg 17%

Sodium 40mg 2%

Total Carbohydrate 2g 1%

Dietary Fiber 0g 0%

Total Sugars 0g

Includes 0g Added Sugars 0%

**Protein 20g**

Vitamin D 25mcg 130%

Calcium 0mg 0%

Iron 14mg 80%

Potassium 210mg 4%

Vitamin A 671mcg 70%

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.

Calories per gram:  
Fat 9 • Carbohydrate 4 • Protein 4

## Dried Harbor Seal Meat

### Nutrition Facts

Serving size 3 oz. (85g)

Amount per serving  
**Calories 200**

% Daily Value\*

Total Fat 8g 10%  
Saturated Fat 2g 10%  
Trans Fat 0.5g

Cholesterol 50mg 17%

Sodium 65mg 3%

Total Carbohydrate 3g 1%

Dietary Fiber 0g 0%

Total Sugars 0g

Includes 0g Added Sugars 0%

**Protein 29g**

Vitamin D 0mcg 0%

Calcium 5mg 0%

Iron 13mg 70%

Potassium 220mg 4%

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.

Calories per gram:  
Fat 9 • Carbohydrate 4 • Protein 4

## Harbor Seal Blubber

### Nutrition Facts

Serving size 3 oz. (85g)

Amount per serving  
**Calories 620**

% Daily Value\*

Total Fat 65g 83%  
Saturated Fat 13g 65%  
Trans Fat 0g

Cholesterol 55mg 18%

Sodium 25mg 1%

Total Carbohydrate 7g 3%

Dietary Fiber 0g 0%

Total Sugars 0g

Includes 0g Added Sugars 0%

**Protein 1g**

Vitamin D 44mcg 220%

Calcium 0mg 0%

Iron 1mg 6%

Potassium 35mg 0%

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.

Calories per gram:  
Fat 9 • Carbohydrate 4 • Protein 4

## Harbor Seal Oil

### Nutrition Facts

Serving size 1 tablespoon (14g)

Amount per serving  
**Calories 120**

% Daily Value\*

Total Fat 14g 18%  
Saturated Fat 2.5g 13%  
Trans Fat 0g

Cholesterol 10mg 3%

Sodium 0mg 0%

Total Carbohydrate 0g 0%

Dietary Fiber 0g 0%

Total Sugars 0g

Includes 0g Added Sugars 0%

**Protein 0g**

Vitamin D 9mcg 45%

Calcium 0mg 0%

Iron 0mg 0%

Potassium 0mg 0%

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.

Calories per gram:  
Fat 9 • Carbohydrate 4 • Protein 4

## THE BENEFITS

Seal meat is an excellent source of iron. In fact, 3 oz of harbor seal meat has 14mg of iron, which is 80% of the Daily Value. You would have to eat 25 oz of beef pot roast, 68 chicken nuggets, or 57 oz of canned luncheon meat (pork/ham) to get the same amount of iron!

Iron carries oxygen from the lungs throughout the body. Plus it is part of several enzymes that help digest our food. Many parts of our bodies are affected if we don't consume enough.

In addition, seal meat is a good source of protein, Vitamins A and D, and minerals. Plus it is low in sodium!

Seal oil is rich in omega-3 fatty acids, which may decrease diabetes, hypertension, cardiovascular diseases, arthritis, and autoimmune diseases. An added bonus is that omega-3 fatty acids may improve mental health.

While the amount of omega-3 fatty acid is unknown for harbor seals, one tablespoon of bearded seal oil has 4000mg of omega-3 fatty acids and spotted seals have almost half as much! Butter, margarine, vegetable (corn) oil, vegetable shortening, and canola oil don't even compare to seal oil!

