Traditional Foods in Alaska's Head Starts

Head Start centers may wish to serve donated traditional Alaska Native foods to address the cultural food preference of their community and students. In 2005, almost 60% of Alaska Head Start students enrolled reported their ethnicity as Alaska Native or American Indian (Figure 8a). Serving traditional Native foods in the Head Start classroom provides good nutrition and addresses the cultural and ethnic food preferences of many of the children.

SLIDE 2 MODULE EIGHT

This module will provide a brief overview of the nutritional benefits of Alaska traditional foods, how to determine if the Head Start center has the capacity to prepare traditional foods, ways to involve the community in the donation of Alaska traditional foods to the Head Start, and the Alaska Department of Conservation (DEC) Alaska Food Code regulations surrounding the use of Alaska traditional foods.

SLIDE 3 MODULE EIGHT

The Head Start Performance Standards and Other Regulations support serving cultural and ethnic foods. Performance Standard 1304.23 (b) Nutritional services (1) states:

"Grantee and delegate agencies…. nutrition program must serve a variety of foods which consider cultural and ethnic preferences and which broaden the child's food experience."

Serving traditional foods will support the cultural and ethnic food preferences of many Alaskan Head Start children.

Examples of common traditional wild game are seal, whale, venison, moose, caribou, duck, goose, salmon, halibut, and all other fish. Examples of harvested foods include blueberries, huckleberries, salmonberries, cranberries, beach asparagus, seaweed, fiddlehead ferns, young fireweed leaves, young sourdock leaves, and wild rhubarb. Many of these foods are of superior nutritional quality to similar store bought foods.

SLIDE 4 MODULE EIGHT

The Alaska DEC and the Department of Education and Early Development allow the use of traditional foods in Head Start when Alaska Food Code regulations are followed. Before serving any donated traditional foods, food service staff need to be familiar with and strictly follow the Alaska Food Code regulations. Donated traditional wild game meat, fish, sea mammals, plants and other food can be served at the Head Start.

Due to the food safety risk, Alaska Food Code regulations restrict the use of some traditional foods as explained in slide #22 of this module.

Head Starts interested in serving traditional foods will want to work with Head Start parents, food service staff, local fisherman, hunters, and gathers to achieve regular service of traditional foods. To help achieve regular food service of traditional foods, the Head Start staff and specifically the food service staff will want to enlist community support and learn the Alaska Food Code regulations.

SLIDE 5 MODULE EIGHT

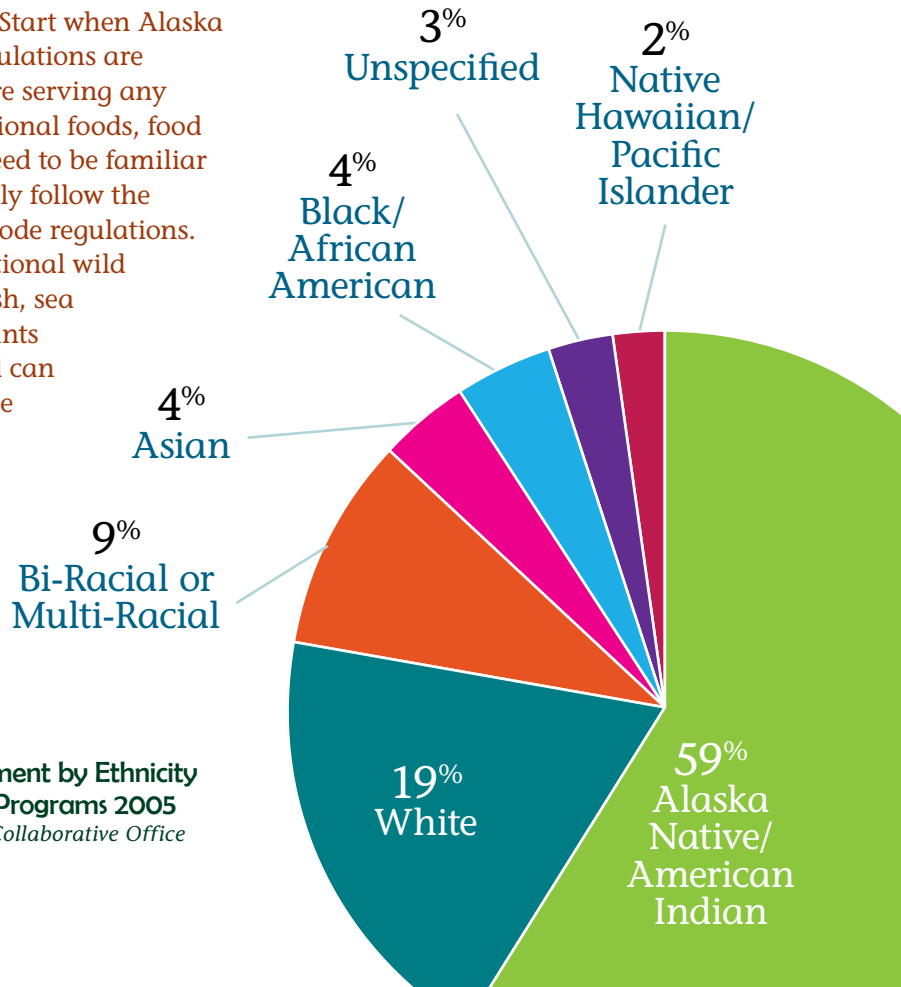

FIGURE **8a: Total Enrollment by Ethnicity in Alaska Head Start Programs 2005**
Source: Alaska Head Start Collaborative Office

The CD enclosed with this report offers slides that match the text below. Throughout the following module, you'll see numbered slide icons like this that correspond with slide numbers in the CD Power Point presentation. Activities suggested often support specific performance standards and are noted as "(PS 1305.23(c)(6))."

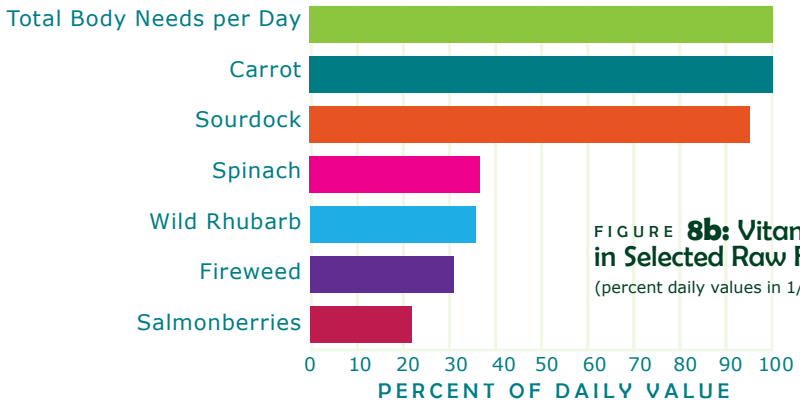

FIGURE **8b: Vitamin A in Selected Raw Food**
(percent daily values in 1/2 cup)

YOUR DAILY VALUES

OUR SOURCE FOR THIS CHART

Nutritional Benefits of Traditional Foods

SLIDE 6 MODULE EIGHT

The Alaska Native people have lived off the land by hunting and gathering for centuries. These activities provide good nutrition, exercise, affordable food, and preserve cultural heritage. Traditional foods are natural, do not contain additives or preservatives and are a good source of nutrients. Traditional foods in Native culture are believed to nourish not only the body, but the spirit and community as well. Science has clearly demonstrated that many traditional foods are nutritionally superior to store-bought foods.

SLIDE 7 MODULE EIGHT

Healthy children need protein to build muscles, calcium for strong bones and teeth, and Vitamin A to help fight infections, promote vision health, and keep healthy skin. Children benefit from Vitamin C which helps fight infection, improves the body's ability to use iron, helps heal wounds, and plays a role in cancer prevention. Dietary iron helps prevent iron deficiency anemia so that children have energy and are mentally alert for learning. Traditional Alaska foods are a rich food source of these nutrients.

SLIDE 8 MODULE EIGHT

Many traditional Native foods such as sourdock, wild rhubarb, fireweed and salmonberries are a good source of vitamin A. Vitamin A is important for night vision, to help prevent skin infections, and to keep skin healthy. As shown in Figure 8b, a half cup of sourdock provides more than 90% of the Daily Value for Vitamin A. A half cup of wild rhubarb or fireweed leaves provides more than 30% and ½ cup of salmonberries provides more than 20% of the Daily Value for Vitamin A.[1]

SLIDE 9 MODULE EIGHT

Many traditional Native foods such as lowbush salmonberries, willow leaves, sourdock, and lowbush cranberries are a good source of Vitamin C. Vitamin C helps to keep teeth and gums healthy, keep skin elastic, fight infection, and heal wounds.

Jensen PG, Nobmann ED. What's in Alaskan Foods, Chart Series, Alaska Area Native Health Service, Anchorage 1994.

Percent Daily Values are based on a 2,000 calorie diet. Daily Values may be higher or lower depending on your caloric needs .

Institutions and non-profit programs for Alaska Food Code purposes are defined as residential child care facilities licensed by the Alaska Department of Health and Social Services, school lunch programs and senior meal programs. Head Start centers are classified as residential child care facilities.

As shown in Figure 8c, a half cup of lowbush salmonberries provide 100% of the Daily Value for Vitamin C. A half cup of willow leaves provides more than 80% and ½ cup of sourdock provides more than 40% of the Daily Value for Vitamin C. Berries are also low in sugar, high in cancer preventing antioxidants and Vitamin A.[1]

Traditional Alaska fish are rich in heart healthy nutrients. Alaska fish is high in Omega-3 fatty acids, monounsaturated and polyunsaturated fat. Omega-3 fatty acids have been linked to a wide range of health benefits including improved heart health, good development of a baby during pregnancy, healthy joints, improved behavior and mood, and prevention of certain cancers.[2]

Monounsaturated and polyunsaturated fats are good for heart health. The Dietary Guidelines for Americans 2005 suggest eating fish as a food source of monounsaturated and polyunsaturated fats.[3] The American Heart Association recommends adults eat two servings of fish a week to help prevent heart disease.[4]

Fish is an important part of a healthy diet for everyone, including young children.

Many parents have heard about high mercury levels in fish and are cautious about serving it to their children. The state of Alaska will soon publish up-to-date consumption guidelines for young children and women of childbearing age.

These guidelines offer suggestions specific to each type and size of fish. Good news! All five species of Alaska wild salmon have very low mercury levels.

Parents will be able to access the new guidelines on the State of Alaska, Division of Public Health Web site or by calling 907-269-8000.

Traditional Alaska fish and meats have nutritional benefits that make them superior to many store bought foods. Fish, seal, moose and caribou are typically lower in fat and saturated fat than meat purchased from the store. Sea mammals, moose, caribou and venison are also excellent sources of protein and higher in iron than store bought beef.

Seal, ptarmigan, and moose provide more iron per 3 ounce serving than lean beef or chicken. Iron carries oxygen to muscles and body parts, helps children learn better, and provides the body with energy. Three ounces of seal provides almost 100% of the Daily Value for iron. Three ounces of moose or ptarmigan provides more than 20% the Daily Value for iron whereas the same portion of lean beef provides 15% the Daily Value and chicken less than 10% the Daily Value (Figure 8d).

Three ounces of seal meat provides more iron than three ounces of caribou, hamburger or hotdogs. To get the same amount of iron as three ounces of seal one would need to eat 6 ounces of caribou meat, 6 three-ounce hamburgers (or 18 ounces of hamburger), or 56 hot dogs. The iron content of seal meat and caribou is superior to store bought hamburger and hotdogs.

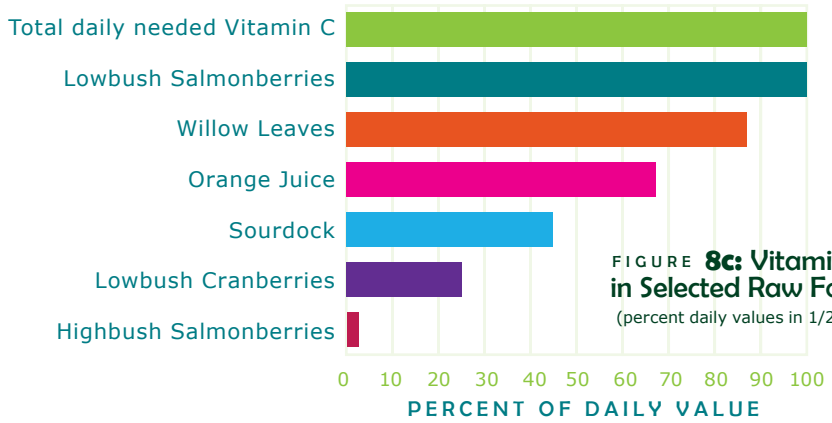

FIGURE **8c: Vitamin C in Selected Raw Foods**
(percent daily values in 1/2 cup)

OUR SOURCE FOR THIS CHART

Jensen PG, Nobmann ED. What's in Alaskan Foods, Chart Series, Alaska Area Native Health Service, Anchorage 1994.

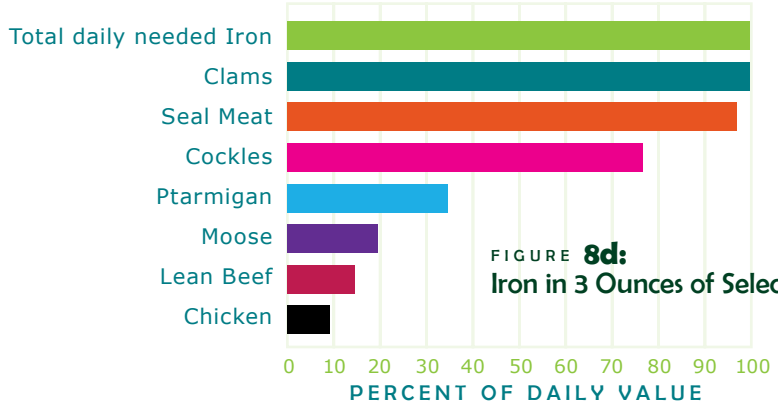

FIGURE **8d:** Iron in 3 Ounces of Selected Meat

OUR SOURCE FOR THIS CHART

SLIDE 15 MODULE EIGHT

These are just a few of the nutritional benefits of traditional Alaska foods. Clearly, traditional Alaska foods are a rich source of nutrients and Head Start children would benefit nutritionally from eating more traditional foods.

Community Involvement

SLIDE 16 MODULE EIGHT

Head Starts wanting to incorporate more traditional foods in the daily menu will want to assess the capacity of their food service staff and kitchen. Head Starts can only serve donated traditional food if the kitchen is designed for cooking from scratch versus "heat and serve." The Head Start will want to determine if the food service staff have enough time allotted to cook from scratch. Cooking from scratch takes more time than serving prepared "heat and serve" foods.

Once the Head Start determines if the kitchen and food service staff are able to prepare donated traditional foods, the Head Start should enlist community support by holding a community meeting.

SLIDE 17 MODULE EIGHT

The community meeting should provide background information on the nutritional and cultural benefits of serving traditional foods and the Alaska Food Code regulations. Guidance should be clear about the harvest of the animal including sanitation and butchering. Expectations regarding the transportation, refrigeration, and sanitation of the donation need be addressed. The goal of this meeting would be to increase interest and knowledge about donating traditional foods to Head Start.

SLIDE 18 MODULE EIGHT

Providing parents, community members, hunters, fisherman, and gathers with information about the donation of traditional foods to the Head Start center will help donations become more regular and ensure products donated meet Alaska Food Code regulations.

The following information can be used for food service staff to become more familiar with the donation of traditional foods and can also be used during the community meeting to help explain the Alaska Food Code regulations.

SLIDE 19 MODULE EIGHT

Donation of Traditional Foods

The following information regarding Alaska DEC Alaska Food Code regulations is current as of December 2006. New regulations are periodically issued. Head Starts are responsible to know and follow the most current regulations.

The Alaska Food Code regulations must be followed before serving any donated food. Head Start staff, especially food service staff, need to know which foods can and cannot be served and ensure that donations are received, prepared and processed properly.

The following information, based on the Alaska Food Code regulations, will be presented: what can be donated; what cannot be donated and why; expectation for harvest, transportation, and dressing of animal; receipt and storage; preparation and processing. This information can be used by food service staff for accepting and preparing donations and to educate community donors.

SLIDE 20 MODULE EIGHT

MORE ON THE ALASKA DEC
www.dec.state.ak.us/regulations/pdfs/31mas.pdf

HOME COOKED MEALS

GUIDANCE ON ALASKA'S EDIBLE PLANTS
www.ankn.uaf.edu/NPE/CulturalAtlases/Yupiaq/Marshall/edibleplants/
loc.gov/rr/scitech/tracer-bullets/edibleplantstb.html

The Alaska Food Code regulations only apply to regulated food service establishments. Regulations do not apply to food prepared at home for individual consumption.

Jensen PG, Nobmann ED. What's in Alaskan Foods, Chart Series, Alaska Area Native Health Service, Anchorage 1994.

The edible nontoxic berries, roots, and leaves of plants that are harvested can be accepted as donations and served to Head Start children. It is critical to properly identify plants. If there is any doubt regarding the plant name do not serve. Examples of some plants are cranberries, blueberries, fireweed, rose hip, dandelions, wild currants and salmonberries.

Most traditional wild game meat, fish, and sea mammals can be accepted as donations. For example the meat from hare, duck, goose, moose, beaver, muskrat, reindeer, caribou, fish, seal, stellar sea lions, and whale are acceptable. The meat needs to be accepted in portions no smaller than quarters or roasts; no ground meat can be accepted. Head Start can grind the meat themselves or take it to a permitted facility for grinding. Food establishments, including Head Starts, are prohibited by the Alaska Food Code regulations from serving some seafood, game meats, fermented or smoked products because of the potential for human illness.

SLIDE 21 MODULE EIGHT

The following foods cannot be served at Head Start:

- Shellfish that is not from a permitted facility. Shellfish that is not monitored is at increased risk for Paralytic Shellfish Poisoning (PSP), Vibrio parahaemolyticus, and bacteria.
- Fox meat is prohibited because of rabies.

SLIDE 22 MODULE EIGHT

- Polar bear, bear, and walrus meat, which are prohibited because meat not cooked to a proper temperature may contain Trichinellosis.
- Seal or whale oil, with or without meat (such as oil with dried meat), fermented game meat (such as beaver tail, whale flipper, seal flipper and muktuk), and fermented seafood products (such as stink eggs or stink fish) are prohibited because they may harbor Botulism.
- Home canned products or canned products from an un-permitted processor are prohibited because of the risk of Botulism.
- Vacuumed sealed, reduced-oxygen packages are prohibited because of the risk of Botulism.
- Smoked or dried seafood products are prohibited due to the risk of Botulism and Listeria.

The Alaska Food Code regulations state that the food service staff must make a reasonable determination that the animal was not diseased; the food was butchered, dressed, transported, and stored to prevent contamination, undesirable microbial growth, or deterioration; and the food will not cause a significant health hazard or potential for human illness.

SLIDE 23 MODULE EIGHT

SLIDE 24 MODULE EIGHT

Food service staff will want to ask questions about the transportation and storage of the animal before accepting the donation. A healthy animal does not exhibit obvious signs of illness. The animal should have been eviscerated within an hour of harvest and chilled as quickly as possible to 41° F or below. For raw meat or seafood donations, food should have been covered to protect it from contamination such as insects, dust, or dripping water during transport. It should have been kept separate from non-food items, and kept cold (41° F or below) during transport and storage.

The food service staff will want to inspect the food when it is received to assure that it is whole, gutted, gilled, and in quarters or roasts that have not been further processed. Communicating this requirement with donors ahead of time will help streamline the donation process. Food service staff will want to check for general cleanliness and quality, for any signs that the game animal was diseased, and for any signs of contamination, bacterial growth and/or deterioration.

SLIDE 25 MODULE EIGHT

FIGURE **8e: Label for Donated Caribou**

Keep Frozen

Donated Caribou Roast

Hunter: Trent Carson

NOT AN INSPECTED PRODUCT

Cook all parts of game meat to an internal temp of 165°F for 15 seconds

MORE ON FOOD BORNE ILLNESS
www.cdc.gov/foodborneoutbreaks/foodborne_az.htm

It is important to maintain records of the donation date, person donating, and the type of food. Donations should then be packaged to prevent contamination and kept at the proper temperature. Packaged foods should be labeled and stacked in an area designated for donated foods and not packed beyond the capacity of the freezer. Make sure raw wild game is stored on the refrigerator shelves below the ready to eat foods and commercially processed raw meats.

SLIDE 26 MODULE EIGHT

Food service staff need to assure that donated food is packaged and labeled individually. The label should clearly state the information shown by Figure 8e.

Preparing Donated Traditional Foods

SLIDE 27 MODULE EIGHT

In the Head Start kitchen, the preparation of donated foods should be kept completely separate from other food preparation by space and time. Food service staff will need to clean and sanitize all equipment and food preparation surfaces prior to and following processing and packaging of donated seafood or game meat to avoid cross-contamination.

SLIDE 28 MODULE EIGHT

The procedure to thaw donated food is the same as other frozen foods. Thaw seafood or game meat in a refrigerated unit or as part of the cooking process. Cook all parts of traditional wild game meat to an internal temperature of 165° F. The cooking temperature for seafood is 145° F. Temperatures may vary for seafood; check with DEC for temperature regulations. Hold cooked portions of game meat at an internal temperature of 140° F prior to service. Avoid cooling and reheating meats. After the traditional food is prepared or processed, surfaces and utensils need to be cleaned and sanitized.

SLIDE 29 MODULE EIGHT

Meal preparation and recipe ideas for traditional foods can come from a variety of sources. Recipes can be provided by community members, found in published Alaska Native Foods cook books, and food service staff can substitute traditional foods for store bought foods in recipes. For example, one pound of cubed moose meat can be used instead of one pound cubed beef. Food production will need to follow the Child and Adult Care Food Program (CACFP) regulations regarding amounts and components of foods served.

Wrap up

SLIDE 30 MODULE EIGHT

To help encourage Head Starts to serve traditional foods more often, this module provided a brief overview of the nutritional benefits of Alaska traditional foods. However, Head Start centers need to determine if they have the capacity to prepare traditional foods before requesting donations. Head Starts were encouraged to hold a meeting to involve parents, community members, hunters, fishermen, and gatherers in the donation of Alaska traditional foods. Lastly, this module reviewed the Department of Conservation (DEC) Food Code regulations surrounding the use of traditional foods.

Head Start centers wishing to serve traditional Alaska Native foods on a regular basis can become successful by encouraging the parents and the community to participate. Donations will become more acceptable and regular if donors and food service staff understand the Alaska DEC Food Code regulations. Serving traditional Native foods in the Head Start classroom will provide good nutrition and address the cultural and ethnic preferences of many of the children.

MODULE EIGHT REFERENCES

1 Jensen PG, Nobmann ED. What's in Alaskan Foods, Chart Series, Alaska Area Native Health Service, Anchorage 1994.

2 Ruxton CHS, Reed SC, Simpson MJA, Millington KJ. The health benefits of omega-3 polyunsaturated fatty acids: a review of the evidence. Journal of Human Nutrition & Dietetics. 2004; 17: 5 449 - 459

3 US Department of Health and Human Services and US Department of Agriculture. Dietary Guidelines for Americans 2005. healthierus.gov/dietaryguidelines. Accessed October 2006.

4 American Heart Association Statement 11/18/2002. New guidelines focus on fish, fish oil, omega-3 fatty acids. americanheart.org/presenter.jhtml?identifier=3006624. Accessed October 2006.