



Drying Chokecherries

Review and Revision: Claudia Botzet, SDSU Extension Nutrition Field Specialist

June 2023

Original Publication: 2007 – Lorna Saboe-Wounded Head, Food Safety Extension Assistant, SDSU
Gabrielle Tiomanipi, Food Safety Project Coordinator, Sisseton Wahpeton College

Fresh chokecherries have a bitter and astringent taste; when dried the taste becomes sweeter. Native Americans preserved chokecherries for use in traditional foods such as pemmican (also known as wasna) and wojapi (chokecherry pudding).

Pemmican is ground dried meat mixed with tallow and dried, crushed chokecherries. The mixture is shaped into small patties or squares and allowed to harden. Tribes used pemmican during a move to new hunting grounds; it was light weight, easy to carry, and a good source of protein for energy.

Chokecherries have a pit in the center that contains a naturally occurring hydrocyanic acid (also called prussic acid, a weak acid smelling of almonds). The process of either boiling or drying will neutralize the acid to make the food safe to eat. Traditionally, chokecherries are preserved by sun-drying. When drying chokecherries, the whole fruit (pulp, skin and pit) is ground together. Patties are formed and set in the sun to dry; this process is dependent upon consecutive days of hot, windy weather.

Selecting chokecherries for drying

- Harvest chokecherries when dark purple-black with no hint of red.
- Gather fruit in a clean container that has only been used for food. Wash container with hot soapy water and rinse thoroughly before use.
- Wash hands with hot water and soap before harvesting the fruit.
- Do not pick fruit off the ground.

Grinding chokecherries

- Prepare the chokecherries for grinding by washing with water the same temperature as the fruit.
- Remove any stems or leaves.
- Use either an electric or a hand meat grinder, crushing the entire fruit with pits. Run the fruit through the grinder until it is a fine consistency, two or three times.
- Always place fruit in a clean bowl.
- To avoid cross-contamination, wear disposable gloves while handling the chokecherries. Gloves should be used for only one task; dispose of the gloves after use.

Forming chokecherry patties

- Wear clean, disposable gloves to shape the patties for drying.
- Use about ¼ cup ground chokecherries, shape into a round, thin patty similar to a hamburger patty.

Drying with a food dehydrator

- Lay the patties on a dehydrator tray that has been washed with hot, soapy water and dried.
- Leave about ½ inch space between each patty, shrinkage will occur throughout the drying process.
- Chokecherry patties will take 12-16 hours to dry. To be considered dry, there will be no visible moisture, they will not be sticky, and they will have lost approximately 80% moisture.
- Do not interrupt the drying process by turning off the dehydrator.
- Every 2-3 hours, flip patties to allow for even drying.

Sun-drying chokecherries

- Prepare chokecherries as described above.

Equipment needed

- Use two large screens of equal size, a piece of cheesecloth, a piece of sheer fabric a little larger than the screens, and rocks or other heavy objects to secure the screens.
- Screens should be of a material that is safe for contact with food: stainless steel, such as Teflon-coated fiberglass or plastic.
- Before use, wash screens with hot, soapy water, thoroughly rinse, and air dry.
- Lay cheesecloth on the bottom screen, set chokecherry patties on the cheesecloth, cover with the sheer fabric and the second screen. Place rocks on the frame around the screen.

Drying process

- Favorable weather conditions would be wind (at least a slight breeze), temperatures of 80-90°F, and lots of sunshine. These conditions would ensure the chokecherry patties will be dry in 4 to 5 days. If conditions are not ideal, the drying process can still be completed but may take longer.
- In the evening, put the chokecherries in an air-tight container and store in the refrigerator to prevent spoilage until the next drying day.

Resources:

Crowder, W., Geyer, W., Broyles, P. (n.d.) Chokecherry, Plant Guide. USDA. National Resources Conservation Service.

Northern Plains Indian Food Practices, Customs and Holidays, American Dietetic Association.

Pemmican/Wasna

Ingredients:

- 4 ounces dried beef or buffalo, not seasoned
- 1 cup dried chokecherries (other dried fruits can be substituted)
- 3 tablespoons melted butter

Directions:

1. In a food processor, process jerky until it is in small pieces.
2. Add dried chokecherries to food processor. Process until fruit is cut into smaller pieces and is mixed well with the jerky.
3. Melt 3 tablespoons butter on high in a small microwavable dish for about 20 seconds.
4. Add melted butter to meat and fruit mixture in the food processor. Process several short pulses until well mixed.
5. Lightly grease a 9x13 inch pan with 1 tablespoon of butter.
6. Using a rubber spatula, press pemmican into a thin layer in the pan. Cover with aluminum foil and refrigerate.
7. When chilled, cut into small pieces.

Yield: 16 pieces

Serving size: 2 pieces

Servings per recipe: 8

Nutrient content per serving:

Calories: 180; Fat: 8g; Cholesterol: 20mg; Sodium: 320mg; Carbohydrates: 24g; Fiber: 1g; Protein: 6g

Research for this publication was conducted jointly by Sisseton Wahpeton College and South Dakota State University Cooperative Extension Service through funds provided by the USDS CSREES National Integrated Food Safety Initiative 2003-51110-01714.



**SOUTH DAKOTA STATE
UNIVERSITY EXTENSION**

**SOUTH DAKOTA STATE UNIVERSITY®
SCHOOL OF HEALTH AND CONSUMER SCIENCES**

SDSU Extension is an equal opportunity provider and employer in accordance with the nondiscrimination policies of South Dakota State University, the South Dakota Board of Regents and the United States Department of Agriculture.

Learn more at extension.sdstate.edu.

© 2023, South Dakota Board of Regents