

Jerky from Wild Game Meats



For more information on Preserving Wild Game Meats and Fish

- Canning Game Meats and Fish
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Jerky is a lightweight, dried meat that is a handy food for backpackers, campers and outdoor sports enthusiasts. It requires no refrigeration for short term storage. Jerky can be made from almost any lean meat, including venison.

Raw meats can be contaminated with microorganisms that cause disease. These harmful bacteria can easily multiply on moist, high protein foods like meat and poultry and can cause illness if the products are not handled correctly. When wild game is used to make jerky, the meat should be treated to kill the trichinella parasite before it is sliced and marinated. This parasite causes the disease trichinosis. To treat the meat, freeze a portion that is 6 inches or less thick at 0°F or below for at least 30 days. Freezing will not eliminate bacteria from the meat.

When preparing jerky from wild game, it is important to remember that the wound location and skill of the hunter can affect the safety of the meat. If the animal is wounded in such a way that the contents of its gut come in contact with the meat or the hunter's hands while dressing the meat, fecal bacteria can contaminate the meat. It is best to avoid making jerky from this meat and use it only in ways that it will be thoroughly cooked. Deer carcasses should be rapidly chilled to avoid bacterial growth.

The risk of foodborne illness from home-dried jerky can be decreased by allowing the internal temperature of the meat to reach 160°F, but in such a way as to prevent case hardening. Two methods can be used: heating meat strips in marinade before drying or heat dried jerky strips

in an oven after the drying process is completed. Directions for both methods follow. When meat strips are heated in a marinade before drying, drying times will be reduced. Color and texture will differ from traditional jerky.

Follow these recommendations for safe handling of meat and poultry:

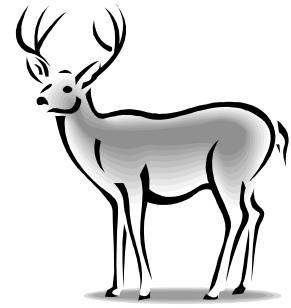
- Always wash hands thoroughly with soap and running water for at least 20 seconds before and after handling raw meats.
- Use clean equipment and utensils to handle raw and cooked meats.
- Keep meat and poultry refrigerated at 40°F or below. Use ground meat and poultry within 2 days, red meats within 3 to 5 days or freeze for later use.
- Thaw frozen meat in the refrigerator, not at room temperature.
- Marinate meat in the refrigerator. Do not save or re-use marinade.

Preparing the Meat

Partially freeze meat to make slicing easier. The thickness of the meat strips will make a difference in the safety of the methods recommended. Slice meat no thicker than 1/4 inch. Trim and discard all fat from meat because it becomes rancid quickly. If a chewy jerky is desired, slice with the grain. Slice across the grain if a more tender, brittle jerky is preferred. A tenderizer can be used according to package directions, if desired. The meat can be marinated for flavor and tenderness. Marinade recipes may include oil, salt, spices and acidic ingredients such as vinegar, lemon juice, teriyaki, or soy sauce or wine.

Jerky Marinade

- 1 1/2 - 2 pounds of lean meat (beef, pork or venison)
- 1/4 cup soy sauce
- 1 tablespoon Worcestershire sauce
- 1/4 teaspoon each of black pepper and garlic powder
- 1/2 teaspoon onion powder
- 1 teaspoon hickory smoke-flavored salt



Combine all ingredients. Place strips of meat in a shallow pan and cover with marinade. Cover and refrigerate 1-2 hours or overnight. Products marinated for several hours may be more salty than some people prefer. If you choose to heat the meat prior to drying to decrease the risk of foodborne illness, do so at the end of the marination time. To heat, bring strips and marinade to a boil and boil for 5 minutes before draining and drying. If strips are more than 1/4 inch thick, the length of time may need to be increased. To reduce risk of foodborne illness, check the temperature of several strips with a metal stem-type thermometer to determine that 160°F has been reached.

Drying the Meat

Remove meat strips from the marinade and drain on clean, absorbent disposable towels. Arrange strips on dehydrator trays or cake racks placed on baking sheets for oven drying. Place the slices close together, but not touching or overlapping. Place the racks in a dehydrator or oven preheated to 145°F. Let strips dry 10 to 14 hours. Properly dried jerky is chewy and leathery. To test for dryness remove a strip of jerky from the heat. Let cool slightly, then bend the jerky; it should crack but not break when bent. Once drying is completed, pat off any beads of oil with clean, absorbent disposable towels and cool. Remove strips from the racks. Cool.

Making Jerky from Ground Meat

Jerky can be made from ground meat using special presses to form or shape the product. Disease-causing microorganisms are more difficult to eliminate in ground meat than in whole meat strips. (If ground meat is used, follow the general tips for safe handling of meat and poultry, above.) Follow the dehydrator manufacturer's directions when heating the product at the end of drying time. Again, an internal temperature of 160°F is necessary to eliminate disease-causing bacteria such as E. coli O157:H7, if present.

Storing the Jerky

Package in glass jars with tight fitting lids or heavy plastic food storage bags. Vacuum packaging is also a good option. Pack jerky with the least possible amount of air trapped in the container. Too much air causes off-flavors and rancidity to develop. Label and date packages. Store containers in a cool, dry, dark place or the refrigerator or freezer. Properly dried jerky will keep approximately two weeks in a sealed container at room temperature. It will keep 3 to 6 months in the refrigerator and up to one year in the freezer.

Sources:

National Center for Home Food Preservation at <http://www.uga.edu/nchfp/index.html>

Kendall, P. and Sofos, J. Colorado State University Cooperative Extension. Leathers and Jerkies, No. 9.311, revised 2003.

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