



# 4-H FOODS PRESERVATION FACT SHEET

## Meat Jerky

Jerky can be made in a dehydrator but the meat must be cooked first by baking or simmering before being placed in the dehydrator. Just using the dehydrator will inactivate microorganisms, but not kill them. The right conditions of heat and moisture may cause the microorganisms to become active without the consumer even being aware of a potentially dangerous situation.

February 1997 statement from the USDA's Meat and Poultry Hotline, 1-800-535-4555

An internal temperature of 160° F must be reached for beef products, fish and game meats. Poultry must reach an internal temperature of 180° F.

### *Baking in an Oven*

Place the jerky on cake racks placed on baking sheets and bake in a 325° F oven. Check the internal temperature using a meat thermometer\*. Proceed with the directions for drying jerky in a dehydrator (adjustments in the listed length of time to dry will be required) or dry in the oven using the following guidelines. The temperature of the oven should be 170° F or higher and the door needs to be propped open 2 to 6 inches. Circulation can be improved by placing a fan outside the oven near the door.

**CAUTION:** This is not a safe practice for a home with small children.

Dry until a test piece cracks but does not break when its bent (5 to 6 hours). Pat off any beads of oil with absorbent toweling and cool. Remove strips from the racks. Cool. Package and store in a cool, dry place.

### *Simmering in a Marinade*

The meat is marinated for both flavor and tenderness. Ingredients for marinades include oil, salt and an acid product such as vinegar, lemon juice, teriyaki, soy sauce or wine. Follow the directions for the marinade of your choosing.

After the meat has marinated for 1-2 hours or overnight, place the meat and marinade in a saucepan and simmer until the internal temperature of 160° F is reached using a meat thermometer (use the liquid to measure the temperature). Drain.

Continue to dry the jerky either in a dehydrator or using the oven.

---

*Prepared by*  
**USDA Meat and Poultry Hotline**

*Reviewed by*  
**Dianne Holcomb**, Extension Assistant, Hall County  
**Marilyn Fox**, Extension Educator, Hall County  
**Julie Albrecht, Ph.D.**, Extension Foods Specialist



The 4-H Youth Development program abides with the non-discrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.



**Following is the statement from USDA's Meat and Poultry Hotline:  
JERKY PRECAUTION!!!**

**February 1997 Statement from the USDA's Meat and Poultry Hotline  
1-800-535-4555**

Jerky can be made in a dehydrator but the meat must be cooked first by baking or simmering before being placed in the dehydrator. Just using the dehydrator will inactivate microorganisms but not kill them. The right conditions of heat and moisture may cause the microorganisms to become active without the consumer even being aware of a potentially dangerous situation.

An internal temperature of 160 F must be reached for beef products, fish and game meats.

An internal temperature of 180 F must be reached for poultry products.

**Baking in an Oven**

Place the jerky on cake racks placed on baking sheets and bake in a 325 F oven. Check the internal temperature using a meat thermometer. Once meat temperatures reach 160 degrees F for beef, fish or game; or 180 degrees F for poultry, proceed with drying in a dehydrator. Proceed with the directions for drying jerky in a dehydrator (adjustments in the listed length of time to dry will be required) or dry in the oven using the following guidelines. The temperature of the oven should be 170 F or higher and the door needs to be propped open 2 to 6 inches. Circulation can be improved by placing a fan outside the oven near the door.

Dry until a test piece cracks but does not break when it is bent (5 to 6 hours). Pat off any beads of oil with absorbent toweling and cool. Remove strips from the racks. Cool. Package and store in a cool, dry place.

**Simmering in a Marinade**

Follow the directions for the marinade of your choosing.

After the meat has marinated for 1-2 hours or overnight, place the meat and marinade in a saucepan and simmer until the internal temperature of 160 F for beef, fish and game meats or 180 F for poultry is reached using a meat thermometer (use the liquid to measure the temperature). Drain.

Continue to dry the jerky either in a dehydrator or using the oven.

Julie A. Albrecht, Ph.D.  
Extension Food Specialist  
e-mail: hnfm063@unlvm.unl.edu  
202 Ruth Leverton Hall  
University of Nebraska  
Lincoln, NE 68583-0808  
Phone: (402) 472-8884  
Fax: (402) 472-1587