



# Preserve it Fresh, Preserve it Safe

Volume 1, Issue 1

January/February 2015

## 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

1. Combine and mix all ingredients except meat to create marinade. Cut meat into 1/4 inch strips.

2. Place strips of meat in a shallow pan and cover with marinade. Cover and refrigerate 1 to 2 hours or overnight for a saltier flavor.

3. Remove marinated meat from refrigerator and follow one of the following steps.

### To kill bacteria

*Method 1:* Boil meat strips and marinade for 5 minutes before draining and drying. If available, use a metal stem-type thermometer to check the temperature of several strips to ensure an internal temperature of 160°F. Dehydrate in an oven or dehydrator.

*Method 2:* After dehydrating, place strips on a baking sheet, not touching or overlapping. Heat for 10 minutes in an oven preheated to 275°F.

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## Dehydrating Foods Year Round

Welcome to the first issue of food preservation news brought to you from Kansas State University and University of Missouri Extension! We will produce six issues annually. Each issue will highlight food preservation topics relevant to the time of year.

Warm up your kitchen during cold winter months by dehydrating foods. Dehydration can be done in a food dehydrator or in the oven. Dehydrators consist of a heating element and a fan for air circulation. They are designed to dry foods quickly at the optimum temperature of 140°F. Learn more about dehydrators at <http://nchfp.uga.edu/how/dry/dehydrator.html>

Conventional or convection ovens can also be used to dehydrate food, although they take twice the time of a dehydrator. If using a conventional oven, leave the door propped open two to six inches and place a fan near the door. Use an oven thermometer to adjust the temperature to 140°F.

Fruits require a pretreatment to prevent darkening during dehydration, such as dipping in lemon juice, honey or sulfites. Thin, uniform, peeled fruit pieces dry quickest. Dehydrate until no visible moisture remains and pieces are not sticky or tacky. Small whole fruits, like berries, should rattle when shaken.

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## Dehydrating Foods Year Round Continued

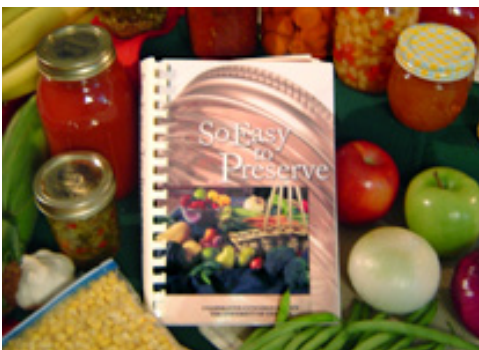
Vegetables require water or steam blanching to stop enzymes in the food from changing its color, texture and flavor. After blanching, dip the hot vegetables into ice water to stop the cooking process. Vegetables are dried until they are brittle or “crisp.”

For more information on drying fruits and vegetables, see <http://nchfp.uga.edu/how/dry.html>

Jerky must be heated to 160°F to kill disease-causing bacteria. This can be done before or after dehydrating the meat. Learn more at <http://nchfp.uga.edu/how/dry/jerky.html>

## So Easy to Preserve

The National Center for Home Food Preservation (NCHFP) has released the sixth edition of their popular book, “So Easy to Preserve.” This reference book contains research based information on all forms of food preservation and a great variety of tested recipes. The chapters in the 388-page book include Preserving Food, Canning, Pickled Products, Sweet Spreads and Syrups, Freezing and Drying.



The sixth edition features new product recipes and two revised product recommendations: an alteration to the Tomato Paste recipe to improve the acidity level and flavor and

the deletion of directions for canning nut meats due to food safety concerns. If you would like to purchase this updated reference book for \$18 by mail, please visit the NCHFP’s website at [http://setp.uga.edu/6thed\\_SETP\\_orderform\\_web.pdf](http://setp.uga.edu/6thed_SETP_orderform_web.pdf)

## Is it safe to can breads and cakes at home?

During the cold winter months, many of us like to make and enjoy homemade breads and cakes. These foods can look very beautiful when made in a glass jar, but unfortunately, these products are NOT recommended for home canning. (The products are typically baked in a jar and then closed with a canning lid.) Most breads and cakes freeze well, so that is the safer home food preservation method to use.

Many recipes for quick breads and cakes are low in acid, which potentially supports the growth of disease-causing bacteria like the deadly *Clostridium botulinum*.

A scientist at Kansas State University (Aramouni et al, 1994) found

evidence that certain microorganisms can survive baking and

multiply in breads during storage. Researchers at other universities found the same potential for dangerous bacteria to survive in common recipes.

You may see these products for sale.

However, manufacturers use preservatives, additives and other processing methods not available for home recipes. Canning jar manufacturers also don’t endorse baking in their canning jars.

Reference: The University of Georgia



## Local Contact Information:

### University of Missouri Extension

University of Missouri, Lincoln University, U.S. Department of Agriculture and Local Extension Councils Cooperating. MU Extension is an equal opportunity/ada institution.

### Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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