



The 2011 series of Master Food Preserver classes are finished but that doesn't mean food preservation activities stop until next year. Preserving food involves more than storing fresh fruits and vegetables from your summer garden.

Throughout the winter and spring we'll share seasonal information to help keep your food safe as short-term leftovers, long-term treasures, or gifts of your time and talent for friends and family.

Enjoy!

Healthy Chips for Smart Snacking

It's all about the crunch. Yes, everyone enjoys snacking, and the crunch of chips satisfies much better than, say, a plate of steamed vegetables. Yet we all agree that most crunchy



snacks come loaded with unhealthy oils, sugars and other additives. During the holidays, it's so easy to munch on unhealthy snacks. It's time to break out the dehydrator and take charge of snack-time with healthy, crunchy alternatives to bagged chips.

Almost any fruit or vegetable dries easily to provide a great snack. The keys to successful dehydrating lie in proper preparation, correct drying time and temperature and air control. You can dry food in a dehydrator or in an oven. The best dehydrators have a thermostat to control heat and a fan to provide for proper air flow. Some dehydrators have the heating element at the bottom of a stack of trays. If you use this type, be sure to rotate the trays during drying to avoid having the food on the trays closest to the heat source dry faster than the rest of the batch.

If you're drying food in an electric or gas oven, the CSU Cooperative Extension recommends "... preheat oven at lowest setting (140 to 150°F), then adjust the thermostat and prop the oven door open to achieve a consistent oven temperature of 140°F and to allow moist air to escape. ... To ensure maintenance of 140 to 150°F, monitor oven temperature using a calibrated oven thermometer. ...and check it every two hours throughout drying." Leave 2½ inches between trays and rotate these every half hour for oven drying.

You need to blanch some fruits and many vegetables before dehydrating to get a quality product. However, one favorite, zucchini chips, requires no blanching. Simply slice clean zucchini into rounds and place them on the dehydrating trays. Add various spices and salts to produce a great chip. Be careful not to slice the zucchini too thin, because dehydrating removes the moisture from the vegetable and you may end up with zucchini "paper" instead of chips! The Excalibur Dehydrator dehydration guide recommends slicing zucchini into ¼ or ⅝ inch slices before dehydrating for 7-11 hours at 125°F.



For potato chips, the Excalibur guide advises steaming washed and peeled new potatoes for 4-6 minutes before cutting French style or slicing into ¼ or 1/8 inch slices. If you prefer, grate the potatoes. The drying time for potatoes to become brittle or leathery will be 6-14 hours at 125°. For a savory twist, try sweet potato chips!

Inside this issue:

<i>Healthy Chips for Smart Snacking</i>	1
<i>Holiday Parties</i>	2
<i>Freezing Tips</i>	3
<i>Preserving Pumpkin/ Winter Squash</i>	3
<i>Eggnog Lifts Spirits: But be Careful of Raw Eggs</i>	4
<i>Podcast: Cooking Other Holiday Meats</i>	5
<i>The Curious Canner</i>	5
<i>Fruit of the Month</i>	6
<i>Broiled Meat</i>	8
<i>MFP Services</i>	8
<i>Master Gardener Classes</i>	8

Got a Food Preservation Question?

Phone:
530-621-5506

Email:
edmp@ucdavis.edu

Website:
ucanr.org/edmp

El Dorado County Master
Food Preservers
311 Fair Lane
Placerville, CA 95665

Holiday Parties: Spread Cheer, Not Foodborne Illness

Diane Van, Manager, USDA Meat and Poultry Hotline

It's that time of year when the parties never seem to end. They're great occasions for exchanging good will and gifts – but not the dangerous bacteria that cause foodborne illness.

Here are some of the unwanted guests who may try to crash your party:

Staphylococcus aureus: This bacteria is commonly found on our skin and in our noses and throats. If it gets into food, it multiplies rapidly at room temperature to produce a toxin that causes illness within 1-6 hours. Thorough cooking kills the bacteria but doesn't get rid of the toxin. *Staph* can be lurking in party foods that are made by hand and require no additional cooking, such as meat or potato salads, cream pies, and sandwich fillings.

Clostridium perfringens: It's nicknamed the "cafeteria germ" because it tends to hang out in foods served in quantity and left out at room temperature. Meats, meat products, and gravy are the foods most often associated with illness caused by this bacteria.



Listeria monocytogenes: *Listeria* is unlike many other germs because it can grow even in the cold temperature of the refrigerator. That's why it may be found in those cold foods often served at buffets, such as deli meats and smoked salmon. *Listeria* is especially harmful to pregnant women: they are 20 times more likely than other healthy adults to get the infection, and the consequences can be deadly for the unborn baby.

Here's what you can do to prevent these and other foodborne bacteria from taking the cheer out of your holidays:

Be NICE	Don't be NAUGHTY
Wash your hands before and after handling food.	Don't let bacteria from your hands contaminate your party food.
Serve food on clean plates.	Never let juices from raw meat, poultry, and seafood come into contact with cooked food.
Replace serving plates often.	Avoid putting fresh food on serving plates that have been sitting out at room temperature.
Use a food thermometer and the Minimum Cooking Temperatures chart to make sure that food is cooked safely.	Don't guess – you can't tell for sure whether food is safe by looking at it. Use a food thermometer to be sure.
Keep hot foods hot (140°F or above) by using slow cookers, chafing dishes, or warming trays OR use small serving containers and replace them often.	Never let hot foods sit at room temperature for more than two hours.
Keep cold foods by nesting cold (40°F or below) in dishes in bowls of ice OR use small serving trays and replace them often.	Never let cold foods sit at room temperature for more than two hours.
Store foods in shallow containers to refrigerate or freeze them.	Avoid storing foods in large containers that don't promote rapid, even cooling of food.

Freezing Tips

The University of Missouri Extension Service has great recommendations for storing frozen food. Here are some tips from their website, <http://extension.missouri.edu>.

Thaw frozen fish, poultry or meat in the refrigerator so the surface does not reach dangerously high bacteria levels before the product thaws in the center. Another benefit of slower thawing is less moisture loss or drip. Meat, fish and poultry can be cooked without thawing. Be sure to allow about one-third to one-half more cooking time.



Most partially thawed foods refreeze safely if they still contain ice crystals and are firm in the center. Many refrozen foods, particularly ice cream, will not be top quality. Meat, fish and poultry purposely thawed in the refrigerator and kept no more than one day may be refrozen. Do not refreeze thawed meat or poultry pies or casseroles, cream pies or vegetables.



Food completely thawed, intentionally or by accident, and warmed to room temperature (72°F) should be thoroughly cooked immediately or discarded. Fruit and juice concentrates can be refrozen; they ferment when spoiled, so toss them if their flavor is off.

Preserving Pumpkin and Winter Squash



If you have a supply of fresh pumpkins or winter squash and don't want them to turn into rotten decorations, consider preserving them. You can preserve pureed by freezing or canning. Use the purée within 24 hours or freeze it.

Freezing Pumpkin: Pack cooled purée in freezer containers, leaving ½" headspace. Freeze at 0°F. Purée that is in contact with the air may turn dark, which does not affect the quality or flavor of the purée. Mixing lemon juice with the purée may control its tendency to darken.

Canning Purée Pumpkin or Winter Squash:

Home canning is not recommended for pumpkin butter or any mashed or puréed pumpkin or winter squash.



Because of the variation of the thickness of pumpkin/winter squash purée, tests have not found a heat processing method that guarantees an even temperature distribution. Pumpkin and winter squash are also low-acid foods capable of supporting the growth of *Clostridium botulinum* bacteria which can cause the very serious illness, *botulism*, under the right storage conditions. If the bacteria are present and survive processing and the product has a high enough water activity, they can thrive and produce toxin in the product. **Freeze pumpkin butters or mashed squash.**

Canning Cubed Pumpkin or Winter Squash

Only pressure canning methods are recommended for canning cubed pumpkin.



It takes an average of 16 pounds per canner load of 7 quarts; and an average of 10 pounds per canner load of 9 pints – an average of 2¼ pounds per quart. Pumpkins and squash should have a hard rind, and stringless, mature pulp for cooking fresh. Small size pumpkins (sugar or pie varieties) make better products. Wash; remove seeds, cut into 1" wide slices, and peel. Cut flesh into 1" cubes. Boil 2 minutes in water. Fill jars with cubes and cover with cooking liquid, leaving 1" headspace. Process pints for 55 minutes, quarts for 90 minutes. Use the chart below to adjust for altitude:

Altitude	0-1000 ft	1000-2000 ft	2000-4000 ft	4000-6000 ft	6000-8000 ft
Weight (psi)	10	15	15	15	15
Dial Gage (psi)	11	11	12	13	14

Eggnog Lifts Spirits for Holidays: But be Careful of Raw Eggs

Richard and Anna Kate Hartel, Department of Food Science, UW-Madison

There are as many stories about the origins of eggnog as there are recipes to make it, from nonalcoholic versions for the whole family to those that pack a powerful alcoholic punch. Even though eggnog sometimes contains raw eggs, with proper preparation it can be a safe and tasty drink for the holidays.

Eggnog is most likely derived from an English drink called posset, or spiced milk, with wine or ale added. Posset was used as a cold medicine in medieval times. The eggnog we know today is often made with eggs, milk (and/or cream), sugar and spices, and if desired, your favorite alcoholic beverage.

In colonial North America, rum was added to eggnog to provide the kick. Rum is still the preferred spirit in eggnog in many parts of the country, although it can be made with bourbon, whiskey, brandy, sherry or nearly any other type of spirit.

Regardless of what spirit if any is added, it's still called eggnog. Some say the name eggnog comes from colonial America, where rum was called grog, so that egg and grog got shortened to eggnog.

A hot toddy, eggnog in this case, can be just what the doctor orders this time of year.

Others suggest that the term nog comes from noggin, which can mean either ale or a small wooden mug. A drink made with egg and spirits, served in a small wooden mug, might then have been called eggnog.

Eggnog, no matter where the name comes from, has become an American tradition enjoyed by millions each holiday season.

According to a recipe supplied by the American Egg Board, eggnog is made by mixing six eggs, a quarter cup of sugar, some salt, one quart of milk, vanilla and seasonings to taste. The eggs are beaten with the sugar and salt, half the milk is added, and the mixture is heated slowly to 160 degrees. When the mixture is thick enough to coat a spoon, it's removed from the heat, and the remaining milk is added along with the flavorings. The eggnog is cooled in the refrigerator before serving.

In traditional eggnog recipes, raw eggs are whipped with sugar and milk into a thick foam before cream, spices and the spirit of choice are added. However, raw eggs are no longer considered a safe food and should be cooked during processing to ensure safety from contamination. Commercial eggnog is always pasteurized to protect against food poisoning.

For many years, the interior of eggs was considered to be almost sterile, and eating foods made with raw eggs (Hollandaise sauce, eggnog, etc.) was acceptable. Even though mom might have slapped your hand for stealing raw cookie dough, it was unlikely to cause food poisoning.

However, we now know that approximately one egg in 20,000 may contain salmonella enteritidis, introduced either by transfer through the shell or from within the hen before the shell is even made. The bottom line is that even an egg with a clean, intact shell still may be contaminated.

In healthy individuals, Salmonella poisoning results in stomach cramps and diarrhea, symptoms that are often misinterpreted as the flu. In people with compromised immune systems, however, salmonella poisoning can be deadly.

In the recipe above, heating the egg mixture slowly to 160 degrees is sufficient to destroy the salmonella and ensure a beverage safe from contamination. Alternatively, pasteurized eggs, available at the grocery store, can be used, and the heating step can be skipped entirely. Or, some people might accept the risk, about five one-thousandths of 1 percent, of contracting food poisoning by eating raw eggs.



[Continued, Page 7](#)

Podcast: Cooking Other Holiday Meats

The USDA's Food Safety and Inspection Service offers food safety podcasts to the public.

This month, [click here](#) to check out the great information on "Cooking Other Holiday Meats." Get tips on cooking alternatives to turkey: rib roast, crown roast of lamb, goose, duck, and pheasant. Learn how to cook the meat to keep it tender and minimize shrinkage, and learn what cooking temperature is the minimum to keep the meat out of the danger zone.

And if you're a hunter, the podcast gives an overview of how to dress and process wild game.



The Curious Canner

Question: If I live at a high altitude, is it true that I need to modify processing times for canning?

Answer: Yes, recommended processing times are based on the boiling water temperature at sea level (212°F). The barometric pressure is reduced at higher altitudes which affects the temperature at which water boils. To assure the safety of food that is canned at higher altitudes, the home canning process must be altered. In a boiling water canner, additional processing time is required. When using a pressure canner, an increase of pounds pressure is needed. The charts below indicate the correct times and pressures:

Boiling Water Canner Altitude Adjustments	
Altitude in Feet	Increase Processing Time
1,000 – 3,000	5 minutes
3,001 – 6,000	10 minutes
6,001 – 8,000	15 minutes
8,001 – 10,000	20 minutes

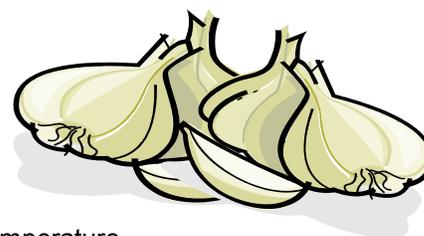


Pressure Canner Altitude Adjustments		
Altitude In Feet	Dial Gauge Pressure Canner (psi)	Weighted Gauge Pressure Canner (psi)
0 - 1,000	11	10
1,001 - 2,000	11	15
2,001 - 4,000	12	15
4,001 - 6,000	13	15
6,000 – 8,000	14	15
8,001 to 10,000	15	15

Question: Is it safe to freeze garlic?

Answer: Garlic may safely be frozen in the following ways:

- 1) Grind or chop garlic, wrap tightly and freeze. To use, grate or break off the amount needed.
- 2) Freeze garlic unpeeled and remove cloves as needed.
- 3) Peel garlic cloves and puree them with oil in a blender or food processor; use two parts oil to one part garlic. This puree will stay soft enough in the freezer to remove portions as needed. DO NOT store this mixture at room temperature.



Happy canning and preserving to all!

CDC's Fruit of the Month: Exotic Fruits

December is filled with delights. Try some of these exotic fruits from the CDC website at <http://www.fruitsandveggiesmatter.gov>: Kumquats, Sapote, Ugli fruits, Pepino melon, Cherimoya

Here is an excerpt from the site:



Kumquat



Selection, Storage, and Preparation

Kumquats can appear in markets from October (at the earliest) through June, and during some unpredictable off-season times as well. Considered a winter fruit, their golden color is a welcome sight. Select fruits that are firm, not soft. Because of their skin, they tend to spoil more easily than thicker skinned fruits such as oranges. Kumquats will last a few days at room temperature or for up to two weeks in the refrigerator. The entire kumquat is consumed in a bite or two. Because of their size and color, they are also great as drink garnishes or as an addition to salads. Wash kumquats before serving.

Sapote



Sapote is quite rare in the United States. Only a few acres in Florida and California are planted with this fruit. Sapote has a orange flesh that is unusually soft, juicy, creamy and has a sweet, mild flavor that hints at flavors such as coconut, vanilla, and lemon. Sapotes are the size of a grapefruit or orange and are bright green or brown in color. This fruit is a native of the highlands of Mexico, but has grown in California since the early 1800s. Varieties such as the mamey, black skinned, green skinned, yellow skinned and about half a dozen more uncommon varieties pop up in grocery stores and farmer's markets from time to time.

Selection, Storage, and Preparation

Sapotes are generally on the market in fall and winter, but seasonality can vary from year to year. Select hard fruits and store at room temperature. However, they last only about 3 days. Chill briefly before serving. This fruit can be frozen as well; wrap the whole fruit and tuck into the freezer. To serve, half thaw in the refrigerator, and then scoop the rest out like sherbet.

Pepino Melon



Pepino melon is native to Peru, but is now also grown in California and New Zealand. It is also known as treemelon, bush melon and mellowfruit. Pepino's are teardrop shaped and have a smooth skin that is striped with yellow and dark purple. The flesh of this fruit is fragrant and combines the tastes of cantaloupe and honeydew.

Selection, Storage, and Preparation

Pepinos are available late fall to mid-spring. Fruits with a light yellow or green skin are not ripe, while fruits with dark purple stripes are ripe. Ripen at room temperature until as firm as a slightly ripe plum, then refrigerate ripe fruit for up to 3 days.

Cherimoya



This fruit is also known as the custard apple or sherbet fruit, and there are more than 50 varieties. It is large and pinecone like in appearance with a green exterior. Cherimoyas are juicy with a creamy white flesh and large, black seeds and tastes like a combination of pineapple, mango, papaya and vanilla.

Selection, Storage, and Preparation

Cherimoyas are available November through May. Choose fruits that are yellow-green, firm and without blemishes. Dark spots and splotches should be avoided. Cherimoyas will ripen at room temperature for a few days until softened. They can then be tightly wrapped and refrigerated for up to 4 days.

[Continued, Page 7](#)

EggNog Lifts Spirits, *Continued from Page 4*

Fortunately, the alcohol in fortified eggnog helps protect against salmonella poisoning. Recent laboratory studies show that alcohol kills salmonella, a fact that has been corroborated in studies where the severity of a food poisoning outbreak was inversely correlated with alcohol intake. For people who ate the same contaminated foods, those who drank the most alcohol with the meal were least likely to come down with food poisoning.



Although it's not recommended to drink eggnog made with raw eggs, eggnog fortified with strong spirits can at least reduce the risk of food poisoning.

CDC Fruit of the Month, *Continued from Page 6*

Ugli Fruit



Ugli fruits are named after their appearance which is generally discolored, pot-marked and odd-shaped. However, it gets a bad rap; it really has a very sweet, citrus taste, is peeled easily and is seedless, making it a great snack or addition to salads. The outside is a greenish-yellow color and has a shape that is between an orange and a pear. Ugli fruits are native to Jamaica and have been propagated in the United States since the 1930s. They are said to combine the best qualities of tangerines, grapefruit and Seville oranges. Children love the taste and their intriguing name.

Storage, Selection and Preparation

Choose fruits that are heavy and have no sign of drying at the ends. The fruit should give with slight pressure much like grapefruit. Color is not important when choosing, and pot-marks and small dents are normal. Uglis can be kept at room temperature for about 5 days, or in the refrigerator for up to 2 weeks. Uglis should not be cooked or it will lose flavor.

Recipe: Exotic Fruit Salad

Makes 6 servings; Each serving equals 1½ cups fruit or vegetables

Ingredients

- 1 head romaine lettuce
- 1 head Belgian endive
- 1 cup fresh mint leaves
- 2 large oranges
- 2 ugli fruit
- ½ cup pineapple juice
- 3 Tbsp freshly squeezed lemon juice
- 3 Tbsp sugar
- ⅛ tsp salt
- ½ tsp ground cinnamon
- 3 Tbsp walnut oil
- ½ cup golden raisins
- ⅓ cup walnuts or macadamia nuts, chopped and toasted
- ⅓ cup slivered almonds, toasted



Directions

1. Clean all working surfaces and your hands.
2. Wash and dry lettuce, endive, and mint; set aside in a large bowl.
3. Peel oranges and ugli fruit, removing all the pith. Divide into segments and place in a bowl.
4. In a small bowl, combine the pineapple juice, lemon juice, sugar, salt, cinnamon, and walnut oil to make the dressing. Mix well; set aside.
5. Toss the chilled greens with the dressing to taste. Place greens on a large platter and top with orange and ugli fruit segments, raisins, and nuts.

Nutritional analysis per serving: Calories 282, Protein 5g, Fat 14g, Calories From Fat 44%, Cholesterol 0mg, Carbohydrates 37g, Fiber 7g, Sodium 83mg.

“Broiled” Meat May Not Be Fully Cooked

“Broiled” chicken livers have contributed to a recent outbreak of a strain of Salmonella. According to the CDC, “Epidemiologic and laboratory investigations conducted by officials in local, state, and federal public health, agriculture, and regulatory agencies linked this outbreak to eating “kosher broiled chicken livers” from Schreiber Processing Corporation (doing business as Alle Processing Corporation/MealMart Company), and chopped chicken liver prepared from this product.

These “kosher broiled chicken livers” are sold at retail stores and may be used as an ingredient in other prepared foods. These products appear to be ready-to-eat, but are in fact partially cooked, and therefore need to be fully cooked before eating. Consumers may have incorrectly thought the use of the word “broiled” in the label meant the chicken liver was ready-to-eat; however, these chicken livers must be fully cooked before eating. “

Many cooks take advantage of pre-cooked foods to speed up the holiday cooking. Be sure that you carefully **read the label on any food** to avoid improper handling or cooking. No one wants food poisoning for Christmas!



Master Food Preserver Winter Services:

We will resume our free public classes in July 2012. To get information throughout the year, visit our website at: http://cecentralsierra.ucanr.org/Master_Food_Preservers/.

During the winter, Master Food Preservers provide the following service for our community:

- Food preservation hotline
- Free pressure canner testing
- Speakers for custom training for your organization
- Weekly articles in the Mt. Democrat newspaper

Preserving Times is published by the El Dorado County Master Food Preservers.

Editor: Ora Emmerich, edmfpc@ucdavis.edu

Know someone who would like to receive our newsletters and notifications on classes and events?

Sign up online at <http://ucanr.org/mfpnews>.

Master Gardener Classes

Join our fellow educators at a Master Gardener class. For full class descriptions, go to http://ucanr.org/sites/EDC_Master_Gardeners.



December

- 3: Selection and Planting of Fruit Trees
Location: Gov Center Hearing Room, Building C
- 10: African Violets
Location: Bethell-Delfino Agriculture Building

January

- 7: Pruning and Remedial Pruning of Deciduous Fruit Trees
Location: Veterans Memorial Building
- 14: Rose Pruning
Location: Veterans Memorial Building
- 21: Living with Oaks
Location: Veterans Memorial Building
- 28: Beekeeping
Location: Gov Center Hearing Room, Building C



The University of California Division of Agriculture & Natural Resources (ANR) prohibits discrimination against or harassment of any person participating in any of ANR’s programs or activities on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (which includes pregnancy, childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), genetic information (including family medical history), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services (as defined by the Uniformed Services Employment and Reemployment Rights Act of 1994: *service in the uniformed services* includes membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services) or any person in any of its programs or activities. University policy also prohibits retaliation against any employee or person participating in any of ANR’s programs or activities for bringing a complaint of discrimination or harassment pursuant to this policy. This policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University’s equal employment opportunity policies may be directed to Linda Marie Manton, Affirmative Action Contact, University of California, Davis, Agriculture and Natural Resources, One Shields Avenue, Davis, CA 95616, (530) 752-0495.



UNIVERSITY OF CALIFORNIA, UNITED STATES DEPT OF AGRICULTURE
AND CENTRAL SIERRA COUNTIES COOPERATING