

## Core Canning Techniques Class: January 11

New year —

New goals —

New projects —

New knowledge —

Get it all through the UCCE Master Food Preservers!

On Saturday, January 11 at the Calaveras Senior Center, the Master Food Preservers will teach a free [Core Canning Techniques](#) class to introduce and compare how to can using both pressure canners and boiling water canners.

There's a basic safety reason why there are two methods of USDA approved canning – it involves the acidity level needed to ensure that botulism toxins don't grow. It's important to understand how home canners sometimes give this deadly toxin the perfect environment to grow so you don't repeat their mistakes. When you know the how and why of the safety practices for each canning process, then **follow** those safety practices, you can rest assured that your home preserved food is safe.



And then the fun begins!

It is a wonderful experience to be able to turn produce from a supermarket sale, your garden, your neighbor's garden, the farmers market, or a gleaning trip to an orchard or farm into jarred food you can enjoy all year long. Can the basic food stocks or have fun making special treats you can share with friends. (An added bonus: you can pronounce all of the ingredients!)

The class demonstrations will include hearty homemade soups and sauces. We'll also share tips and tricks of the trade to help you reduce jar cleaning, repurpose used lids, keep track of what you made, and how to use the preserved foods in your everyday cooking.



*The results of a busy day canning jellies, soups, faux-pineapple, and sauces!*

Join us for two hours of fun and food at 10:00 on Saturday morning, January 11, at the Calaveras Senior Center!

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### Got a Food Preservation Question?

**Amador/Calaveras County**  
209-223-6857  
acmfp@ucdavis.edu

**El Dorado County**  
530-621-5506  
edmfp@ucdavis.edu

**Sacramento County**  
916-875-6913

**UCCE Central Sierra MFP Website:**

<http://ucanr.org/mfpcs>



## What Can Cause a False Seal?

Monique Wilbur, UCCE Master Food Preserver of El Dorado County

A false seal can occur when jar rims are not wiped clean before processing, if there are nicks or cracks in the jar rim, if products are not processed correctly, or if a jar is not filled correctly. Jars may appear to be sealed, but may come unsealed later.

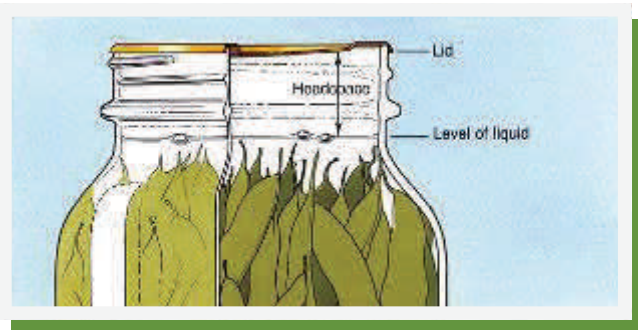
**Wipe your jar rims.** Make sure all product is wiped off the jar rims. Wipe jar rims firmly with a damp cloth or paper towel and make sure the rims are clean before applying the lids and rings. If canning a meat product, use white vinegar to wipe the jar rim to remove any oil/grease residue.

**Check the top of the jar.** Run your finger around the top of the jar to ensure it is a smooth surface. General wear and tear in the dishwasher and cupboards can sometimes cause tiny chips in the rim.

**Process your product correctly and for the correct time.** A boiling water canner not only heats the product to help ensure a safe product, it also forces as much air as possible out of a jar. If products are not processed for the full recommended time then air could be trapped in a jar. If jars are stored in a place that can get warm, the air trapped inside can expand as it heats up and that air could pop the lid off a jar.



**Make sure headspace is correct.** Fill jars as recommended in the recipe. If a jar is under-filled, it will take longer to force the air out. All the air may not be removed and a false seal can occur. The recommended headspace is directly related to the recommended processing time. Again, once the air inside the jar heats up on a hot day, the air expands and can pop the lid.



Sometimes, when the contents of a jar cools off it could seal again. This can occur and you may never know the seal was broken until you open the jar and it is moldy, or worse, you and your loved ones get sick.

Overfilling your jars can be bad, too. This can cause siphoning, which is when the product bubbles out of the jar during processing.

Siphoning sometimes occurs when your product boils in the jar while being processed or if a jar is over-filled. Sometimes it siphons in the canners, sometimes it siphons when the jar is removed from the canner. Often jars will seal, but if it seals there will be product stuck on the rim of the jar under the lid. This can cause a false seal. The product on the jar rim can mold and push the lid off which will break the seal.

(Continued on page 3)

## What Can Cause a False Seal? *(Continued from page 2)*

What should you do if your jars siphon? There are a couple of things you can do.

- You can reprocess the product, correcting any mistakes that may have been made. (If a jar does not seal at all, place it in the refrigerator and re-process it within 24 hours.)
- Check the lids for a solid seal. If you feel comfortable that the seal is tight, clean your jars thoroughly. Pay special attention to any food that may be trapped in the threads at the top of the jar and remove it. This food will mold if left in place. Check these jars routinely to make sure they stay sealed. Use this product sooner rather than later. Sometimes a jar can come unsealed months after it was canned.

In summary: use a recipe from a reputable source, such as Ball or Cooperative Extensions publications. Always follow recommended processing procedures. Check your canned products routinely to make sure they are all sealed.



Do this ...



to avoid this!

If you find an unsealed jar in your cupboard, stay safe.

Dispose of the contents of unsealed jars; **do not eat the product**. Clean the jars thoroughly as recommended at [http://nchfp.uga.edu/how/general/identify\\_handle\\_spoiled\\_canned\\_food.html](http://nchfp.uga.edu/how/general/identify_handle_spoiled_canned_food.html).

## Frozen Disaster

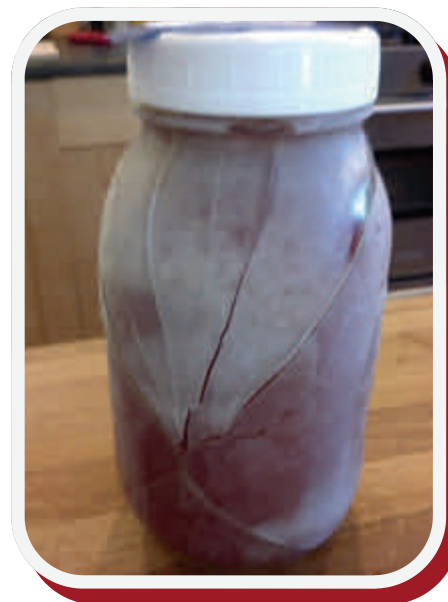
Oops! What caused this jar of frozen homemade tomato puree to break?

Insufficient headspace; the jar only had one-inch of headspace.

For liquid, pureed, or crushed fruits processed in a jar with a **wide opening**, you only need to leave one-inch headspace for quarts ( $\frac{1}{2}$ -inch for pints). But this jar had a **narrow opening** and needed  $1\frac{1}{2}$  inches of headspace ( $\frac{3}{4}$ -inch for pints). This space allows for the food to expand as it freezes.

This was a time-expensive mistake. The tomatoes were started from seed and grown in a green house. Then they were hand watered throughout the summer. Then they were harvested by hand. Then the canner spent hours running the tomatoes through the food mill, straining, boiling down, simmering, and packaging.

The home canner was smart and followed the FDA's recommendation to not reuse the food from the broken jar. Yes, it may seem like a waste to not pick off the chunks of broken glass and use the frozen core, but it's not



## Reusing Canning Lids

*Sue Mosbacher, UCCE Master Food Preserver of Central Sierra*

Reusing canning lids? I know what you're thinking—canning lids are only supposed to be used once!

That's correct—use them only once for canning.

But don't throw them away! You can use them for other things in the kitchen. The first step is to mark the lids as used; an X on the lid with a permanent marker works well. Here are a couple of ideas to reuse canning lids.



### Breakfast Jam

Do you ever look in your pantry and wonder how you'll ever eat all those jars of jam? You can only give so many away, and when you do, you often receive some back as a gift. Canners like to share their work with others who appreciate the time and passion that goes into a jar of jam.

Here's an easy idea to use your jam, save some \$, and have a delicious breakfast to go.

On Sunday I gather the following items and ingredients:

- 5 half-pint jars
- 5 used regular lids
- 5 regular rings
- A large container of fat free plain yogurt
- A bag of regular oatmeal (not quick or instant)
- A jar of my favorite jam

I put several spoonfuls of oatmeal and jam in the jars with enough yogurt to almost fill the jar; leaving enough room to stir the contents later. I put the jam on the bottom and the oatmeal on top so the oatmeal doesn't get too soggy. I put a used canning lid and ring on each jar and put them in the fridge.



During the week, I pull one out to take to work each day for a quick snack or breakfast on the go. Since my property is lined with wild blackberries, I have an obscene amount of blackberry jam. This makes blackberry my go-to flavor. However, I love the texture and flavor of fig walnut jam. Experiment with what's in your pantry and escape from the jam and toast rut.

### Mini Pie Pans

In the mood to eat an entire pie? Make individual pie servings using lids and rings as mini-pie pans!



## Share Your Canning Skills—Become a UCCE Master Food Preserver!

**Residents of El Dorado, Amador, Calaveras and Tuolumne counties:** Would you like to teach others how to safely preserve food at home?

Classes for new UCCE Master Food Preserver volunteers begin in February and March. Students will train to become agents of the University of California tasked with the Master Food Preservers' mission to teach others in our community how to can, freeze, dehydrate, preserve jams and jellies, pickles and sauerkraut and more using UC Cooperative Extension and USDA recommended methods.

- Training in El Dorado County is Feb 22 – May 10, with classes on Tuesdays or Saturdays from 10 – 2.
- Training in Amador/Calaveras Counties is mid-March through early June with classes alternating between Amador and Calaveras counties. Attend one of our orientation meetings to learn about our program and training classes. The meetings are **February 3** (4-5pm) in Jackson, and **February 10** (5-6pm) in San Andreas. RSVP for either session with Robin Cleveland at 530-621-5528.

Visit the UCCE Central Sierra's *Becoming a Master Food Preserver* webpage at [http://ucanr.edu/be\\_mfp](http://ucanr.edu/be_mfp) for more information or call the UCCE Office at 530-621-5528.



*UCCE Master Food Preservers of El Dorado County present*

## Judging Preserved Foods at County Fairs

Do you want to **be a county fair judge** for preserved foods?

Do you want to learn how county fair judges evaluate your preserved food so you can **improve the quality of your fair entries**?

Come to this all day workshop/lab and learn the guidelines for preserved food judging at fairs and other competitive events, including the rules used at our California State Fair.

Think you got it figured out after learning the rules? Try your hand at judging samples of preserved foods with our instructors nearby to guide you and answer your questions. Class size limited to 20.

**Prerequisite:** all attendees must have a basic knowledge of preserving and understand the principles of preserving high acid and low acid foods.

**Thursday, January 30, 2014 or Saturday, February 1, 2014**

9am-4pm

*Location: El Dorado County Fairgrounds, Marshall Building, 100 Placerville Drive, Placerville*

**Fee:** \$50 – no refunds. Lunch included – turkey or vegetarian sandwich.

Register at <http://ucanr.edu/survey/survey.cfm?surveynumber=12027> or call 530-621-5528 by January 26,

## Canning on a Smooth Cooktop

Curious about canning on a smooth cooktop? Find your stove's owners manual (or call/look online) and follow the official recommendations.

Some smooth cooktop manufacturers say no, others say yes, and still others put stipulations on the diameter of the canner compared to the diameter of the burner. Boiling water or pressure canners may not be available that meet the maximum diameter pot they allow.

Why is there an issue? You can damage the cooktop with the excessive heat that reflects back down on the surface, especially if your canner's diameter is larger than the burner. The damage can vary from discoloration of white tops, actual burner damage, cracking the glass tops, and even fusion of the metal to the glass top.

Many cooktops have automatic cut-offs on their burners for excessive heat. If that option is built in and the burner under a canner shuts off during the process time, the product will be underprocessed and cannot be salvaged as a canned food. The process time must be continuous at the intended temperature, or microorganisms may survive. Also, if the pressure drops quickly, most likely liquid and maybe even food will be lost from the jar. (It will spill over from the area of higher pressure inside the jar to the lower pressure now in the canner around the jar.)

If your cooktop does allow boiling water canning, your canner must have a flat bottom to maintain a full boil. Many boiling water canners have ridges on the bottom. If yours does, substitute the bottom portion of a pressure canner as a boiling water canner (leave the weight off and don't lock it closed), or fashion your own canner out of a deep, flat-bottomed stockpot with a bottom rack inserted. The pot used as a canner must also be large enough to have lots of water boiling freely around the jars, and at least 1 inch over the tops of the jars.



*Fashion your own canner rack using extra rings and tying them together with plastic twist ties*

or suggestions. Make sure they understand how large your boiling water or pressure canner is, how long it must be heated at high heat, how long the hot canner may stay on the burner until it cools after the process time, and if the canner is made from aluminum.

If in doubt, purchase a portable professional burner and use your canner on the counter or outside.



Even if your manufacturer says it's ok to use a burner/cooktop, be aware that you can scratch your cooktop if you slide the canner across the surface. This often happens with large, heavy filled aluminum pressure canners when you remove it from the heat source after processing.

Our recommendation, therefore, is to contact the manufacturer of your smooth cooktop before making your decision to can (or not) on it. They may also have up-to-date alternatives



## The Curious Canner

**Question:** What causes jars to break in a canner?

**Answer:** Breakage can occur for several reasons:

1. Using commercial food jars rather than jars manufactured for home canning.
2. Using jars that have hairline cracks.
3. Putting jars directly on the bottom of the canner instead of on a rack.
4. Putting hot food in cold jars.
5. Putting jars of raw or unheated food directly into boiling water in the canner, rather than into hot water. (The sudden change in temperature creates too wide of a margin between the temperature of the filled jars and the water in canner before processing.)



**Question:** Can I use the Classico pasta sauce containers that say Atlas-Mason jars for canning?

**Answer:** No. According to an email from Heinz: "We do not recommend re-using the Atlas-Mason jars used to package our Classico Sauces. A coating is applied at the glass plant to reduce scratching and scuffing. If scratched, the jar becomes weaker at this point and can more easily break. This would increase the risk of the jar breaking when used for canning. Also, the lighter weight of our current jar could make it unsafe for home canning."

But you can use the jars to store dehydrated and frozen foods. Since the jars have rounded shoulders, if you freeze liquids, be sure to fill the jars below the shoulder to avoid cracking off the top of the jar as the liquids expand.

**Question:** When canning tomatoes, can I substitute citric acid for lemon juice?

**Answer:** If a recipe tells you to add the acid to the **jar** and not the mixture, then yes, you can use either lemon juice or citric acid. 1 Tablespoon of bottled lemon juice is equal to 1/4 teaspoon of citric acid. The purpose of both products when canning tomatoes by themselves is strictly to increase the acidity to make the product a high acid food. You may want to write which acid you used on the label since the taste may be different with each. See which one you like best. (Depending on what you use the final product for, you may not be able to tell the difference.)

But if the recipe calls for the acid product to be added to the **mixture**, then it is used for both flavor and acid so use what the recipe calls for. If you were to replace the liquid lemon juice with powdered citric acid, you would also thicken the product.





## Upcoming Master Food Preserver Classes & Events

*In the Central Sierra, Sacramento, and San Joaquin counties  
Where listed, click on the class link to schedule an email reminder for the class.*



### Amador/Calaveras County

#### **Saturday, January 11: [Core Canning Techniques](#)**, 10am – Noon

*Location: Calaveras County Senior Center,  
956 Mountain Ranch Road, San Andreas*

New to canning, either pressure or boiling water canning? This class demonstrates the fundamentals of both processes. Our demonstrations will include hearty home made soups and sauces.

#### **Saturday, February 8: [Preserving Fish and Game](#)**, 10am – Noon

*Location: Amador County GSA Bldg.,  
12200-B Airport Road, Jackson*

Does someone in your house bring home fresh game and fish? Learn a variety of techniques for preserving this catch.



Both classes are free and no reservations are required. Call 209-223-6857 for more information.

### El Dorado County

#### **[Judging Preserved Foods at County Fairs](#)**

**Thursday, January 30**

or

**Saturday, February 1**

9am – 4pm

*Location: El Dorado County Fairgrounds, Marshall Building, 100 Placerville Dr. Placerville*

Come to this all day workshop/lab and learn the guidelines for preserved food judging at fairs and other competitive events, including the rules used at our California State Fair.



**Class size limit:** 20

**Fee:** \$50

**Register:** <http://ucanr.edu/edcmfjudgingclass> or call 530-621-5528 by **January 26.**

### Sacramento County

#### **Saturday, January 11: Freezing Tips**

10am – Noon, Free

*Location: Sacramento UCCE office at 4145 Branch Center Road, Sacramento*

Basic introduction to maximizing your freezer.

#### **Wednesday, January 15: Citrus Squeeze: Oranges, Limes, Lemons, Kumquats & Grapefruit**

6:30 – 8:30pm, Cost: \$5

*Location: Sacramento UCCE office at 4145 Branch Center Road, Sacramento*

Visit <http://ucanr.edu/mfpsac> for more information.



### San Joaquin County

For information about upcoming classes and events, call 209-525-6825.

#### **No MFP Classes Nearby?**

The National Center for Home Food Preservation has a free, self-paced, online home canning and preservation course for those who do not live near a county with the UCCE Master Food Preserver program.

Sign up for this online class at  
<http://nchfp.uga.edu>.





## Storing Rings and Lids

Canners have a variety of ways that they store their extra rings and lids. One method is to use a small clear plastic storage tub. Here's what's inside:

- Rings stored upside down to avoid rust-forming condensation
- Empty spice jars to keep the rings stacked neatly
- Sharpie to mark used lids
- New lids kept in original boxes
- Used lids stored between ring stacks
- Makeshift canning rack for when there are too many jars to fit in a canner and you need to use a regular pot

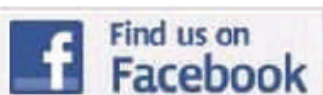
MFP Tracy Wickstrom stores her new lids and rings by placing them on empty jars, so whenever she needs a jar she knows she has a clean lid.

How do you store your rings and lids? Email a picture to [acmfp@ucdavis.edu](mailto:acmfp@ucdavis.edu).



### Master Food Preserver Services

- Free public classes
- Food preservation hotline
- Free pressure canner testing
- Speakers for custom training for your organization
- Regular articles in local newspapers



To get information about our program, visit our website at [http://cecentralsierra.ucanr.org/Master Food Preservers/](http://cecentralsierra.ucanr.org/Master_Food_Preservers/).

Preserving Times is published by the Central Sierra Master Food Preservers.

[edmp@ucdavis.edu](mailto:edmp@ucdavis.edu)

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

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

### Free Pressure Canner Testing

Test your pressure canner gauge for accuracy once a year. Amador, Calaveras, and El Dorado Master Food Preservers all offer this service. We also can test weighted gauge canners to ensure they reach a minimum internal temperature of 240°F. Contact the office nearest you to schedule a time to bring in your pressure canner for a FREE test!

UCCE Amador:  
209-223-6482

UCCE El Dorado:  
530-621-5502



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The University of California working in cooperation with County Government and the USDA.