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University of California
Agriculture and Natural Resources

UCCE Master Food Preserver Program
Sacramento County

*Sacramento County Master Food Preservers
Monthly Wednesday Night Demonstration
February 21, 2024
Herbs*



Resources:

- Please visit the National Center for Home Food Preservation at <http://nchfp.uga.edu> for detailed information about research-based methods of home food preservation.
- UC ANR Catalog (<http://anrcatalog.ucanr.edu>)

Should you need assistance or require special accommodations for any of our educational programs, please contact us at 916-875-6913.

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HERB SALT

Source:

Yield: 3/4 cup

- 4 to 5 garlic cloves, peeled
- Scant 1/2 cup kosher salt
- About 2 cups loosely-packed, pungent fresh herbs such as sage, rosemary, thyme, savory, basil, or small amounts of lavender

Hand-Chopped Method

1. Cut each garlic clove lengthwise through the center, remove the sprout (if any) in the center and discard.
2. Mound the salt and garlic on a cutting board. Use a chef's knife to mince the garlic, blending it with the salt as you work.
3. Place herbs in a mound and coarsely chop them.
4. Add the herbs to the garlic salt and chop them together to the texture of coarse sand.
5. Spread the salt on a baking sheet or in wide flat bowls and leave near an open window for a couple of days to dry. Store in clean, dry jars. *(Alternate drying method: heat oven to 200°F, turn off the oven, place salt on baking sheet in oven, close door, let sit overnight.)*

PESTO GENOVESE (Classic Basil Pesto)

Source: <https://www.washingtonpost.com/recipes/classic-basil-pesto/>

Active: 10 minutes | Total: 10 minutes

Servings: 2-8 Makes about 1 cup.

- 2 cups (2 ounces) packed fresh basil leaves and tender stems
- 1/2 cup extra-virgin olive oil
- 3 tablespoons (1 ounce) pine nuts, preferably toasted
- 2 cloves garlic, chopped
- 1/4 teaspoon fine sea or table salt, plus more as needed
- 1/2 cup plus 2 tablespoons (2 1/2 ounces) grated parmesan cheese, or a combination of Parmesan and pecorino Romano
- 2 tablespoons unsalted butter, very soft but not melted (optional)

Step 1

In the bowl of a food processor, combine the basil (blanched, if desired; see Notes), olive oil, pine nuts, garlic and salt. Process until smooth, 30 seconds to 1 minute, stopping to scrape down the bowl, if necessary.

Step 2

Transfer the basil puree to a medium bowl and stir in the cheese and softened butter, if using. Taste, and add additional salt if desired. Serve or refrigerate until needed.

Notes

To make pesto that will stay green for up to a week, blanch the basil: Fill a medium bowl with ice water. Bring a quart of water and 2 teaspoons of fine sea or table salt to a rolling boil over high heat. Gently stir in the basil, and cook for 45 seconds; it will become deep green and wilted. Using a slotted spoon, transfer the basil to the ice bath. Once it's cold, strain and use your hands to squeeze out any excess water before proceeding with the recipe.

FENNEL FROND PRESTO WITH LEMON AND ANCHOVIES RECIPE

Source: <https://www.serious-eats.com/vegetable-scrap-fennel-frond-pesto>

| | |
|---------------|-------------|
| Active | 5 mins |
| Total | 5 mins |
| Serves | 16 servings |
| Makes | 2 cups |

Ingredients

- 1 quart lightly packed fennel fronds and tender stems (from about 4 bulbs), very roughly chopped
- 5 oil-packed anchovy fillets
- 4 medium cloves garlic
- 1 tablespoon Dijon mustard
- Juice and zest of 1 lemon
- Extra-virgin olive oil
- Kosher salt

Directions

1. In a blender jar or using an immersion blender, combine fennel fronds, anchovies, garlic, mustard, and lemon juice and zest. Add enough olive oil to just barely come to the top of the solid ingredients.
2. Blend until a smooth sauce forms. Season with salt to taste. Use right away, or transfer to an airtight container and refrigerate for up to 5 days.

Special Equipment

[Blender](#) or [immersion blender](#)

Make-Ahead and Storage

The sauce can be refrigerated in an airtight container for up to 5 days. Bring to room temperature before using.

Read More

- [Zhug \(Yemenite Hot Sauce With Cilantro and Parsley\)](#)
- [Roasted-Fennel Pesto With Fennel Fronds, Toasted Almonds, and Garlic](#)
- [Arugula Pesto](#)
- [Vegan Garden Pesto With Miso and Mixed Herbs](#)
- [Fresh Mint, Feta, and Pistachio Pesto](#)
- [Cilantro Pesto](#)

FRESH HERB KOOKOO

Source: “Bottom of the Pot: Persian Recipes and Stories” by Naz Deravian

Serves 6 to 8

- 1 bunch parsley, tough stems trimmed
- 1 bunch cilantro, tough stems trimmed
- 1 bunch dill, tough stems trimmed
- 1 bunch Swiss chard or spinach, stems removed
- 1 bunch green onions
- 1 clove garlic, chopped
- 1/2 cup walnuts, roughly chopped (optional)
- 1/3 cup barberries, picked through, soaked for 10 minutes and drained (Note: can substitute with cranberries)
- 1 teaspoon dried fenugreek, or a few fresh leaves, finely chopped (optional)
- 1 teaspoon dried tarragon, or 1 sprig of fresh tarragon, leaves chopped (optional)
- 1 1/4 teaspoons kosher salt
- 1/2 teaspoon ground turmeric
- 1/4 teaspoon ground cinnamon
- 1/4 teaspoon ground saffron (optional)
- 1/4 teaspoon ground dried rose petals (Note: can substitute with 1/8 teaspoon of rose water or omitted all together)
- 1/4 teaspoon ground black pepper
- 8 large eggs
- 1/3 cup plus 2 tablespoons olive oil, divided

Working in batches, finely pulse the greens in a food processor, until finely chopped but not mushy. Alternatively, use a sharp knife and large cutting board. Set the greens in a large bowl. Finely chop the green onions. You can do this in a food processor, but take care (green onions quickly turn mushy). Add the green onions and the rest of the ingredients **except** for the eggs and the oil to the green herbs and mix well to combine. The batter should have the consistency of thick yogurt or soft-serve ice cream.

In a large (10- or 12-inch) nonstick frying pan with a lid, heat 1/3 cup of olive oil over medium heat. Add the batter and spread evenly. Cook the kookoo until the oil starts to bubble along the sides, about 3 minutes. Cover and cook until the kookoo starts to set, and the bottom is browned, 12 to 15 minutes. Cut the kookoo evenly into 4 large pieces, and using a wide spatula flip each piece over one at a time. You can also set a dish beside you, take one piece of kookoo out to make room, flip the other pieces, then place the piece back in. Drizzle 2 tablespoons of oil in between all the cuts, reduce the

heat to medium-low, and cook, uncovered, until cooked through, about 10 minutes. Cut the kookoo into desired pieces and serve warm or at room temperature

Make Ahead: Prepare up to 3 days in advance. Serve at room temperature or gently heat through in the oven.

Prep Ahead: The greens (except of the green onions) can be prepped and chopped 1 day in advance.

Plan Ahead: Freeze portions wrapped tightly in foil (for up to 3 months). Heat thoroughly in the oven.

An updated version of the recipe with oven method can be found at <https://bottomofthepot.com/fresh-herb-koo-koo-koo-koo-sabzi/>

HERB JELLY

Source: Adapted from <https://extension.illinois.edu/blogs/wow-words-wellness-lifestyle-blog/2015-07-02-how-make-herbal-jelly>

*Adapted from Ball, www.freshpreserving.com

Yield: 5 half pint jars

Ingredients:

- 1 cup dried herbs
- 1 cup water
- 1 1/2 cups unsweetened apple juice
- 1 cup white wine vinegar
- 5 1/4 cups sugar
- 1 pouch Certo Liquid Fruit Pectin

Directions:

1. Prepare water bath canner and jars according to manufacturer's instructions.
2. Prepare and measure ingredients for recipe.
3. Place herbs, apple juice, water and vinegar in a 6- or 8- quart saucepot.
4. Bring to a boil over medium heat.
5. Remove from heat, cover and let steep for 20 minutes.
6. Stir well, pressing herbs to extract flavor before draining mixture.
7. Transfer herb mixture into a strainer lined with coffee filter over a deep bowl. Let drip, undisturbed, for 30 minutes.
8. Measure 3 1/4 cups herbed juice.
9. Transfer herb juice to a clean large, deep stainless steel saucepan. Stir in sugar. Bring to full rolling boil.
10. Stir in pectin. Return to a full rolling boil and exactly 1 minute.
11. Remove from heat. Skim off and foam with metal spoon or pastry brush.
12. Ladle immediately into prepared jars, leaving **1/4 inch headspace**.
13. Wipe rim. Center lid on jar. Apply band and adjust until fit is fingertip tight.
14. Place filled jars in a boiling water canner, ensuring jars are covered by 1-2 inches of water. Place lid on canner. Bring water to gentle, steady boil.
15. Process jars for **10 minutes** (adjusting for altitude). Turn off heat, remove lid, and let jars stand for 5 minutes.

16. Remove jars and cool. Check lids for seal after 24 hours. Lid should not flex up and down when center is pressed.
17. Clean and store jars according to manufacturer's instructions.

DRYING HERBS

Source: <https://extension.psu.edu/lets-preserve-drying-herbs>

Introduction

The flavor of herbs comes from oils in the cell walls of plants. Leaves, flowers, stems, and seeds of herbs can all be dried. Heat, low humidity, and air movement are needed to dry herbs. Some methods include air-drying, seed harvesting, dehydrator drying, and microwave drying. Sun drying and oven drying have limitations.

When to Harvest Herbs

Harvest herbs just before the flowers first open. New leaves at the tip of the plant will have the most concentrated flavor. Flowering herbs tend to be somewhat bitter. Herbs will have more of their essential oils if harvested on a sunny day in mid-morning after the dew has evaporated. Use scissors to cut the stems just above a leaf or pair of leaves. Leave 4-6 inches of stem for later growth. Harvest seeds when mature.

Preparing Herbs for Drying

Start with clean countertops and utensils. Wash hands with soap and warm water. Remove any bruised, soiled, or imperfect leaves and stems. Inspect plants, especially seeds, for insects. Rinse the stems in cool water and gently shake to remove excess moisture. Then gently pat dry with a paper towel. Another option is to remove moisture using a salad spinner. Remove as much moisture as possible.

Methods of Drying Herbs

Less tender herbs such as sage, thyme, and winter savory are the easiest to dry. They can be tied into small bundles and air-dried. Tender-leaf herbs such as basil, tarragon, lemon balm, and the mints have a high moisture content and will mold if not dried quickly.

Air-Drying

For air-drying to be successful, humidity must be low and good air circulation must be available. Stems of herbs such as mint, sage, or thyme can be tied in a small cluster and hung in a dry area with good air circulation. If you use a rubber band to tie them, it will tighten as the stems dry and stems will not fall out of the cluster. Clusters of dried herbs may look attractive decorating a kitchen or fireplace, but care must be taken to avoid humidity and dust. Hang herbs away from the sink, stove, or dishwasher where there is a lot of moisture. Keep dust off herbs by covering them with a paper bag punched with holes. The holes will allow air to circulate. If drying seedy herbs, place them in the bag so that the bag can catch the falling seeds. When drying leafy herbs, place the bag over the herbs as a dust shield. Herbs with small leaves can be laid out on a fine stainless steel or food-safe plastic screen or paper towels to air-dry. When dried, just strip the leaves from the stem to store. For herbs with larger leaves, remove the leaves from the stems and lay them on screens or paper towels without allowing the leaves to touch. Up to five layers of herbs and paper towels can be dried by this method. It may be necessary to change paper towels as they absorb moisture from the herbs.

Microwave Drying

Parsley, basil, and celery leaves dry well in some microwave ovens. A microwave oven with a wattage rating of 1,000 or higher may heat too fast to use this method. Read the manufacturer's directions to see if you can do this in your oven. Arrange washed and dried herbs one layer thick between microwave-safe paper towels. The length of time will depend on the amount of herbs and the power level of the microwave oven. Microwave on high for 2 to 3 minutes per cup. Start with 1 minute, mix after every 30 seconds, and continue checking for dryness. Remove from oven; cool. Rub between paper towels to crumble or wait to crumble until ready to use. Repeat with remaining herbs.

Caution: Watch carefully! If there is not adequate volume, the paper towels can catch fire.

Seed Harvesting

The seeds of dill, caraway, mustard, and fennel can be left on the plant until mature. Cut flower stalks or pull entire plant from the ground, hang upside down, and shake seeds out when dry. Examine seeds for insects. Husks can be removed from seeds by rubbing the seeds between the hands and blowing away the chaff. Check for insects and treat dried seeds as described under "Treatment of Air-Dried Herbs and Seeds" below.

Dehydrator

Herbs can be dried in a dehydrator if the temperature can be set between 95-110°F (35-43°C). Place stems on drying trays so they do not touch. Larger leaves can be dried separately. Do not dry herbs with fruits or vegetables because the flavors may mix and the moisture contents are different.

Oven Drying and Sun Drying

Oven drying is generally not recommended because even the lowest temperature destroys much of the flavor, oils, and color of the herbs. To oven dry, set the oven at the lowest temperature (not above 180°F (82°C)) for 3 to 4 hours with the oven door open. The oven light in some ovens may provide enough heat to dry herbs.

Sun drying is not recommended in Pennsylvania because high humidity levels prevent the quick removal of moisture.

Testing for Dryness

Make sure herbs are completely dry to prevent mold growth during storage. Herbs are sufficiently dry when leaves are crispy and crumble easily between the fingers.

Treatment of Air-Dried Herbs and Seeds

Herbs that have been air-dried and seeds need to be treated to destroy any insects or insect eggs by heating the herbs or seeds at 160°F (71°C) for 30 minutes or freezing at 0°F (-17°C) or lower at least 48 hours. (The heat method will reduce the flavor and is not suitable for seeds that you want for planting.)

Storing Dried Herbs

Avoid exposing dried herbs to air, heat, and light. Airtight and vapor-proof containers will prevent herbs from absorbing moisture from the air and other foods from absorbing the fragrance of the herbs.

Store in a cool, dry, dark place such as cupboards or drawers away from stoves and sinks. Don't set them near the stove top or on a windowsill.

Storing dried herbs in the refrigerator or freezer will maintain their freshness, but it creates other problems. If you take a container from a cold area to the warm kitchen, condensation may form, causing the dried herbs to absorb enough moisture in the jar to cause spoilage. Avoid the spread of herbal odors to other foods in the refrigerator or freezer. Use freezer jars or heavy-duty aluminum foil to avoid odor transfer.

Most dried herbs keep well for up to a year. Judge their strength by their aroma. Store whole or crushed, but whole herbs are preferred because they hold their oils and retain their flavor longer.

Substituting Dried Herbs for Fresh

Use these amounts as guidelines for substituting one form of an herb for another:

- 1 Tablespoon fresh herb
- 1 teaspoon dried herb
- 1/4 teaspoon powdered herb

In some cases, dill seed may be substituted for fresh dill or dill weed; 2 to 3 teaspoons dill seed or dill weed provides the flavor of one head of fresh dill.

BOILING WATER CANNING PROCESS

1. Before you start preparing your food, fill the canner halfway with clean water. This is approximately the level needed for a canner load of pint jars. For other sizes and numbers of jars, adjust the amount of water in the canner so it will be 1 to 2 inches over the top of the filled jars.
2. Preheat water to 140°F for raw-packed foods and to 180°F for hot-packed foods. Food preparation can begin while this water is preheating. Do not have the water boiling when you add the jars.
3. Fill, fit with lids, load onto the canner rack and use the handles to lower the rack into the water; or fill the canner with the rack in the bottom, one jar at a time, using a jar lifter. When using a jar lifter, make sure it is securely positioned below the neck of the jar (below the screw band of the lid). Keep the jar upright at all times. Tilting the jar could cause food to spill into the sealing area of the lid.
4. Add boiling water, if needed, so the water level is at least 1 inch above jar tops. Pour the water around the jars, not on them. For process times over 30 minutes, the water level should be at least 2 inches above the tops of the jars.
5. Turn heat to its highest position, cover the canner with its lid, and heat until the water in the canner boils vigorously.
6. Set the timer for the total minutes required for processing the food, adjusting for altitude.
7. Keep the canner covered and maintain a boil throughout the process schedule. The heat setting may be lowered a little as long as a complete boil is maintained for the entire process time. If the water stops boiling at any time during the process, bring the water back to a vigorous boil and begin the timing of the process over, from the beginning.
8. Add more boiling water, if needed, to keep the water level above the jars.
9. When the jars have boiled for the recommended time, turn off the heat and remove the canner lid. Wait no more than 5 minutes before removing jars.
10. Using a jar lifter, remove the jars without tipping and place them on a towel, leaving at least 1-inch spaces between the jars during cooling. Let jars sit undisturbed to cool at room temperature for 12 to 24 hours.



ATMOSPHERIC STEAM CANNING PROCESS

1. Use a research tested recipe and processing time developed for a boiling water canner when using an atmospheric steam canner. An atmospheric steam canner may be used with recipes approved for half-pint, pint, or quart jars.
2. Add enough water to the base of the canner to cover the rack. (Follow manufacturer recommendations.)
3. Preheat water to 140°F for raw-packed foods and to 180°F for hot-packed foods. Food preparation can begin while this water is preheating. Do not have the water boiling when you add the jars.
4. Heat jars prior to filling with hot liquid (raw or hot pack). Do not allow the jars to cool before filling.
5. Load filled jars, fitted with lids, onto the canner rack and place the lid on the canner base.
6. Turn heat to its highest position to boil the water until a steady column of steam (6-8 inches) appears from the vent hole(s) in the canner lid. Jars must be processed in pure steam environment.
7. If using a canner with a temperature sensor, begin processing time when the temperature marker is in the green zone for your altitude. If using a canner without a temperature sensor, begin processing time when a steady stream of steam is visible from the vent hole(s).
8. Set the timer for the total minutes required for processing the food, adjusting for altitude. Processing time must be limited to 45 minutes or less, including any modification for elevation. The processing time is limited by the amount of water in the canner base. When processing food, do not open the canner to add water.
9. Monitor the temperature sensor and/or steady stream of steam throughout the entire timed process. Regulate heat so that the canner maintains a temperature of 212°F. A canner that is boiling too vigorously can boil dry within 20 minutes. If a canner boils dry, the food is considered under-processed and therefore potentially unsafe.
10. At the end of the processing time, turn off the heat and wait 2 to 3 minutes. Carefully remove the lid, lifting the lid away from you.
11. Using a jar lifter, remove the jars without tipping and place them on a towel, leaving at least 1-inch spaces between the jars during cooling. Let jars sit undisturbed to cool at room temperature for 12 to 24 hours.

