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Melons

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Varieties

Melons are part of the *Cucurbitaceae* family, which includes cucumbers and squash varieties. The fruit grows on vines and requires the heat of summer to grow and ripen. People do not generally eat the outside of the melon, which is called the "rind." They eat the inside of the melon, which is called the "flesh." Muskmelons have a cavity in the center that contains seeds. These seeds are usually scooped

out and discarded before the flesh of the fruit is consumed (Cornell University, 2006; Foord & MacKenzie, 2009).

Muskmelons include:

- Honeydews: orange to green smooth skin, and usually white to green flesh
- Cantaloupes: beige to green ribbed and netted skin, orange to green flesh

Watermelons include seedless and seeded varieties with multiple shapes, from small round "icebox" fruit to large oval fruit as well as long cylindrical types. The interior flesh of the melon may be red but other varieties may have orange or yellow flesh (Saha, 2014).

Selection, Storage and Food Safety

- Avoid selecting melons of any variety that have broken skin.
- Choose muskmelons that readily break from the vine when ripe. The flower end of the melon – opposite the stem scar – should be slightly soft. If you find these types of melons at the market with pieces of the vine remain-



ing on the fruit, then they were probably harvested too early and will not be as sweet (Iowa State University, n.d.).

- Choose muskmelons with a strong muskmelon scent (Iowa State University, n.d.). Ripe melons will smell like the melon.
- Unlike when choosing muskmelons, you may choose watermelons with a bit of vine attached at the stem end. Watermelons such as these are perfectly ripe. When picking watermelons in the garden, look for the tendril closest to the fruit. If this tendril is brown and dry, the watermelon is ready to harvest. In addition, a yellow color on the "belly," or area of the melon that contacts the ground, indicates ripeness.
- Choose a watermelon that has a hard rind and feels heavy for its size. Contrary to popular belief, tapping and thumping on a watermelon does not indicate whether or not it is ripe.
- You can safely store watermelons for up to 2 weeks if kept in an area 45 °F to 50 °F.
- Wash hands before and after preparing your melon.





- Wash fruit by thoroughly rinsing with clean water or scrubbing with a vegetable brush while rinsing. This is the most important step when preparing fruit for serving. Rinsing the outside of the melon helps prevent any soil or harmful bacteria from getting into the melon when you cut it open.
- Use a clean knife that has not touched the surface of the melon before it is washed.
- Wrap melon pieces tightly in plastic wrap and store them in the refrigerator. If stored properly, they can last up to 3 days.

Yield

Melons come in many sizes and varieties and may contain different amounts of moisture. As a result, it is difficult to create a guideline for how much edible flesh will be produced per pound of fruit. Generally, a muskmelon that weighs 3 pounds will yield about 5 cups of diced melon (Ohio State University, 2009).

How to Preserve

Freezing

Michigan State University (MSU) Extension recommends enjoying melons when they are fresh, in season; however, freezing for later use is also an option. When selecting melons to freeze, make sure these fruits have particularly hard rinds and no dark spots.

When ready to freeze, wash and dry the melon as usually done in preparation. Then, slice the melon into cubes or use a melon baller to form balls, whichever you prefer. Place the pieces on a parchment-lined baking sheet and pop them in the freezer for a quick freeze. After the pieces are solidly frozen, seal and store them in airtight containers. For best freezer results, eat the melon within a year to get all the nutritional value possible. Be aware that the melon may have a slightly different texture and lack some of its original sweetness after thawing.

Canning

Melons are not well suited to canning except to be or pickled or made into preserves. This is because the fruit is low in acidity. Canning nonacidic fruits is not recommended because the traditional water bath canning process is not hot enough to reduce the possibility of bacteria growth and could result in botulism toxicity. Pressure canning could create high temperatures but would make the fruit mushy and inedible (Parnell, Suslow, & Harris, 2003).

Preserves or pickle recipes from reliable sources can be safely processed using a water bath canner because the addition of acids or acidic ingredients will lower the pH and inhibit the growth of harmful bacteria (Parnell, Suslow, & Harris, 2003).

Canning Recipes

Cantaloupe-Peach Conserve

Makes 4 to 5 half-pint (250 ml) jars 4 cups cantaloupe pieces 4 cups chopped peaches 6 cups sugar ¹/₄ cup lemon juice ¹/₂ teaspoon nutmeg ¹/₄ teaspoon salt 1 teaspoon grated orange peel ¹/₂ cup slivered, blanche almonds (optional)

Begin by washing hands, work surfaces and knives. Thoroughly wash, peel and chop cantaloupes and peaches. In stockpot, combine chopped fruit and simmer for 20 minutes, stirring constantly. There should be just enough liquid to keep fruit from sticking to the pot. Add sugar and lemon juice and boil until thickened. Add remaining ingredients and boil for 3 minutes. Ladle the hot conserves into hot, sterile jars leaving ¼ inch (6.5 mm) of headspace. Remove air bubbles using a nonmetal utensil. Wipe the jar rims and seal immediately with 2-piece selfsealing lids, following manufacturer's instructions. At altitudes up to 1000 feet, process for 5 minutes in a boiling-water bath canner.

The recipe "Cantaloupe Peach-Conserve" is adapted from *Cantaloupe: Safe Methods to Store, Preserve, and Enjoy,* Publication 8095, 2003, by T. L. Parnell, T. Suslow and L. J. Harris, the University of California, p. 4. Retrieved from http://anrcatalog.ucdavis.edu/pdf/8095.pdf

Cantaloupe Pickles

Makes about 4 pint jars

5 pounds of 1-inch cantaloupe cubes (about 2 medium	1 teaspoon ground ginger
under-ripe* cantaloupe)	4½ cups cider vinegar (5%)
1 teaspoon crushed red pepper flakes	2 cups water
2 one-inch cinnamon sticks	1 ¹ / ₂ cups white sugar
2 teaspoons ground cloves	1½ cups packed light brown sugar

* Select cantaloupe that are full size but almost fully green and firm to the touch in all areas including the stem area.

Day One:

- Wash cantaloupe and cut into halves; remove seeds. Cut into 1-inch slices and peel. Cut strips of flesh into 1-inch cubes. Weigh out 5 pounds of pieces and place in large glass bowl.
- 2. Place red pepper flakes, cinnamon sticks, cloves and ginger in a spice bag and tie the ends firmly. Combine vinegar and water in a 4-quart stockpot. Bring to a boil, then turn heat off. Add spice bag to the vinegar-water mixture, and let steep for 5 minutes, stirring occasionally.
- 3. Pour hot vinegar solution and spice bag over melon pieces in the bowl. Cover with a food-grade plastic lid or wrap and let stand overnight in the refrigerator (about 18 hours).

Day Two

4. Wash and rinse pint canning jars; keep hot until ready to use. Prepare lids according to manufacturer's directions.

- 5. Carefully pour off vinegar solution into a large 8- to 10-quart saucepan and bring to a boil. Add sugar; stir to dissolve. Add cantaloupe and bring back to a boil. Lower heat to simmer until cantaloupe pieces turn translucent, about 1 to 1¼ hours.
- 6. Remove cantaloupe pieces into a medium-sized stockpot, cover and set aside. Bring remaining liquid to a boil and boil an additional 5 minutes. Return cantaloupe to the liquid syrup, and bring back to a boil.
- 7. With a slotted spoon, fill hot cantaloupe pieces into clean, hot pint jars, leaving 1-inch headspace. Cover with boiling hot syrup, leaving ½-inch headspace. Remove air bubbles and adjust headspace if needed. Wipe rims of jars with a dampened clean paper towel; apply two-piece metal canning lids.
- 8. Process in a boiling water canner according to the recommendations in **Table 1**. Let cool, undisturbed, 12-24 hours and check for seals.

Table 1. Recommended process time for Cantaloupe Pickles in a boiling-water canner.				
		Process Time at Altitudes of		
Style of Pack	Jar Size	0 - 1,000 ft	1,001 - 6,000 ft	Above 6,000 ft
Hot	Pints	15 min	20 min	25 min
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The above recipe "Cantaloupe Pickles" was obtained from the National Center for Home Food Preservation website at http://nchfp.uga.edu/how/can_06/cantaloupe.html. According to the website, the information was "developed at The University of Georgia, Athens, for the National Center for Home Food Preservation. Released by Elizabeth L. Andress, Ph.D., Department of Foods and Nutrition, College of Family and Consumer Sciences. August 2003."

Fresh Melon Recipe

Watermelon Confetti Salsa

4 cups cubed watermelon, seeds removed

2 cups cubed jicama

1 cup cubed carrots

3 cups minced purple cabbage

1 cup minced peppers, banana or bell

¹/₄ cup minced fresh parsley

6 limes, juiced

1 dash sea salt

Mix together ingredients and enjoy with pita chips. Store extra salsa in the refrigerator for up to 4 days.

The recipe "Watermelon Confetti Salsa" was obtained from *Watermelon* by the USDA, Food and Nutrition Service, September 2012. Retrieved from www.fns.usda.gov/sites/default/files/watermelon.pdf

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This bulletin was written with the assistance of Lauren McGuire and Megan McSweyn, MSU Extension interns.

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