

Food Preservation: Canning Soup

HYG-5340

Family and Consumer Sciences

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There is nothing more satisfying than a warm bowl of homemade soup. Many of us are used to "opening a can" and heating up soup for a quick meal. Every family has their favorite recipes, but are they all able to be home canned safely? The answer depends on the ingredients.

- Soup containing "forbidden" ingredients (see below) cannot be safely home canned.
- A family soup recipe can be altered to follow the USDA guidelines before being canned. "Forbidden" ingredients can be added to the canned product just before serving.

"FORBIDDEN" INGREDIENTS

These ingredients are not recommended for home canning because they alter the thickness and/or density of the final product which effects how long it takes for the soup to reach a safe temperature in the core of the jar. This may also impact product quality; the non-vegetable starches may break down during processing, and the dairy ingredients may separate or curdle.



Do not add these ingredients to soups intended for home canning:

- Any vegetables that do not have current USDA canning guidelines—such as broccoli, cabbage, cauliflower, celery, summer squash
- Pureeing a portion of the soup for thickening purposes
- Dairy products—such as cream, milk, cheese, sour cream, yogurt

• Non-vegetable starches—such as noodles, pasta, rice, flour, cornstarch, arrowroot

All soups MUST be pressure canned. Refer to the Canning Basics fact sheet (HYG-5338) for step-by-step directions for pressure canning. If you don't want to pressure can, or the soup already contains "forbidden" ingredients, then freeze it.

DO NOT ADD "FORBIDDEN" INGREDIENTS TO YOUR SOUP BEFORE PROCESSING!

GUIDELINES

There are endless varieties of soup you can make. The USDA guidelines for canning soup do not specify exact ingredients and measurements. They allow a lot of room to make your own combinations of ingredients—so long as you stay away from the "forbidden" ingredients referred to above.

So, what do you do when the recipe you want to make includes these "forbidden" ingredients? If possible, break down your family recipe to see if you could pressure can a combination of liquid, vegetables, dried beans or peas, meat, poultry, or seafood for shelf stable, long-term storage. Then you could add additional ingredients before serving the soup as part of a meal. See Table 1 for some examples.

There are four basic steps.

- 1. Decide what kind of soup "base" you want to make.
- 2. Determine what ingredients you can safely home process to make your soup "base."
- 3. Pressure can according to USDA guidelines in the charts below.
- 4. Prior to serving the soup, add additional ingredients (such as the "forbidden") or puree a portion of the soup to achieve the desired final product.

TABLE 1.				
What Kind of Soup Do You Want?	What Goes in the Canning Jar?	What to Add Prior to Serving Forbidden Ingredients		
Cream of soup (mushroom, celery, chicken, etc.)	Broth or water, meat, vegetable, seasonings	 Add butter, milk, cream, thickeners Puree a portion of the soup 		
Vegetable soup (with or without meat)	Broth or water, meat, vegetables, seasonings	Add thickener, rice, pasta, or noodles if desired		
Chicken or beef with noodles or rice	Broth or water, meat, vegetables, seasonings	Add thickeners, rice, pasta, or noodles		
Cheesy soup	Broth or water, meat, vegetables, seasonings	 Add butter, milk, cheese, thickeners Puree a portion of the soup Add pasta or noodles 		
Pureed vegetable (carrot, squash, tomato, etc.)	Broth or water, vegetables, seasonings	 Puree a portion of the soup Add milk, cream, or other thickeners if desired 		
Bean soup	Broth or water, fresh or rehydrated beans, meat, vegetables, seasonings	Puree a portion of the soupAdd thickenersAdd dumplings		
* Tomato or vegetable juice may be used in place of broth or water				

^{*} Tomato or vegetable juice may be used in place of broth or water.

Pressure can according to the charts below.

STEPS TO PREPARE SOUP FOR CANNING

- 1. Select, wash, and prepare vegetables, meat, poultry, or seafood as described for the specific foods in their own canning instructions.
 - a. Preparing meat, poultry, or seafood: Cover meat with water and cook until tender. Cool meat and remove bones. Cut meat into bite-sized pieces. Reserve broth, if desired.
 - b. Preparing vegetables: Wash, trim, and prepare. Cook vegetables as described for a hot pack. Refer to OSU Extension Basics for Canning Vege tables fact sheet (HYG-5344). Be sure to check for proper size of vegetable pieces. **DO NOT** puree.
 - c. Preparing dried beans or peas: For each cup of dried beans or peas, add 3 cups of water, boil 2 minutes, remove from heat, soak 1 hour, and heat to boil; drain.



- 2. Combine solid ingredients with broth, tomato/vegetable juice, or water to cover. Boil 5 minutes. Salt to taste, if desired.
- 3. Using a slotted spoon, fill jars halfway with solid mixture. Add remaining liquid, leaving 1-inch headspace. Remove bubbles. Wipe jar rim.
- 4. Adjust lids and process following the recommendations in Table 2 or Table 3 according to the method of canning used.

Table 2. Recommended Process Time for Soups in a Dial-Gauge Pressure Canner.				
			Canner Pressure (PSI) at Altitudes	
Style of Pack	Jar Size	Process Time	0 - 2,000 ft.	2,001 - 4,000 ft.
Hot	Pints	60* min.	11 lbs.	12 lbs.
	Quarts	75* min.	11 lbs.	12 lbs.
* Caution: Process 100 minutes if soup contains seafood.				

Table 3. Recommended Process	Time for Soups in a Weigh	nted-Gauge Pressure
Canner		

		Canner Pressure (PSI) at Altitudes of		
Style of Pack	Jar Size	Process Time	0 - 1,000 ft.	Above 1,000 ft.
Hot	Pints	60* min.	10 lbs.	15 lbs.
	Quarts	75* min.	10 lbs.	15 lbs.

^{*} Caution: Process 100 minutes if soup contains seafood.

MAKING YOUR OWN STOCK/BROTH

RED MEAT

Rinse bones, cover with water, cover pot and simmer 3 to 4 hours. Remove meat from bones. Chill broth, skim off fat and return meat to broth. Reheat broth and meat to boiling. Fill jars, leaving 1 inch of headspace. Adjust lids and process according to Table 4 or Table 5.

POULTRY

Place carcass bones in a large stockpot and cover with water. Cover pot and simmer 30 to 45 minutes or until meat can be easily stripped from bones. Chill broth and skim off fat. Strip meat, discard excess skin and fat, and return meat to broth. Reheat to boiling and fill jars. Leave 1 inch of headspace. Adjust lids and process according to Table 4 or Table 5.

Homemade soups are something to savor, especially on a cold winter night. They can be a quick and easy meal on a rushed day. While it may not be possible to home can soup exactly like what you might buy in the store, with a few adjustments, you "can" home preserve your families favorite soup recipes.

Table 4. Recommended Process Time for **Meat Stock** in a Dial-Gauge Pressure Canner.

		Canner Pressure (PSI) at Altitudes of		
Style of Pack	Jar Size	Process Time	0 - 2,000 ft.	2,001 - 4,000 ft.
Hot	Pints	20 min.	11 lbs.	12 lbs.
	Quarts	25 min.	11 lbs.	12 lbs.

Table 5. Recommended Process Time for **Meat Stock** in a Weighted-Gauge Pressure Canner.

		Canner Pressure (PSI) at Altitudes of		
Style of Pack	Jar Size	Process Time	0 - 1,000 ft.	Above 1,000 ft.
Hot	Pints	20 min.	10 lbs.	15 lbs.
	Quarts	25 min.	10 lbs.	15 lbs.

REFERENCES

National Center for Home Food Preservation. University of Georgia. nchfp.uga.edu

United States Department of Agriculture. *Complete Guide to Home Canning*, Agriculture Information Bulletin No. 539. 2009.

Ohio State University Extension. *Canning Meat, Poultry and Game*, Fact Sheet HYG-5330. ohioline.osu.edu/factsheet/HYG-5330

Ohio State University Extension. *Canning Basics*, Fact Sheet HYG-5338. ohioline.osu.ed u/factsheet/HYG-5338

Ohio State University Extension. *Basics for Canning Vegetables*, Fact Sheet HYG-5344. o hioline.osu.edu/factsheet/HYG-5344

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