



4-H CLUB Canning Project

Unit III

VEGETABLE CANNING BUDGET *for 1 person*

Circular 379

University of Kentucky . College of Agriculture
and Home Economics . . . Extension Service

Thomas P. Cooper, *Dean and Director*

UNITS OF CANNING PROJECT

SIX UNITS of the canning project are available to 4-H club girls. The first three are to be taken in order:

- Unit I Fruits
- Unit II Tomatoes and Soup Mixture
- Unit III The Vegetable Canning Budget
For One Person

Units IV, and V may be taken in the order desired, tho Unit IV must be completed before a girl may exhibit her canned products in the Championship Class at the State Fair.

- Unit IV Meats and Relishes
- Unit V Canning For Salads and
Refreshments

Unit VI is planned for older girls in 4-H clubs and Utopia clubs.

- Unit VI The Family Gardening and
Canning Budget

Lexington, Kentucky

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4-H Canning Project

Unit III

Vegetable Canning Budget For One Person

By ANITA BURNAM DAVIS

ALL VEGETABLES are excellent sources of vitamins. Green leafy vegetables are good sources of vitamins A, B, and C. Yellow and green vegetables supply vitamin A. Tomatoes, cabbage and potatoes are good sources of vitamin C.

Vegetables also are good sources of minerals, especially iron which is necessary for building red blood. In order to be well nourished, every person should eat plenty of vegetables during winter as well as in summer. Home storage can be made for cabbage, potatoes, pumpkins, sweetpotatoes and root crops, but most other vegetables grown in the summer should be canned for the time when they are not available fresh.

Canned vegetables have about the same food value as those cooked for immediate serving, provided they have been selected, prepared, packed and processed correctly. In flavor, color, texture and taste a home-canned vegetable closely resembles a fresh-cooked one. Salt is added for flavor, but does not have any influence on the keeping qualities. If vegetables are canned in the water in which they are precooked, the vitamin and mineral loss is less. When a jar is opened the liquid on the vegetables should not be thrown away. It may be poured off, boiled down and the vegetables put back into the liquid and heated about five minutes. The vegetable will take up most of the liquid. The liquid may be added to soup stock.

The College of Agriculture and Home Economics, thru the Extension Service, strongly recommends the use of a steam pressure cooker for canning all vegetables except tomatoes and rhubarb. This recommendation is made because steam under pressure raises the temperature above the boiling point sufficiently to destroy heat-resisting bacteria and practically eliminate spoilage. Moreover, the steam pressure cooker reduces the time needed for processing.

GROW ENOUGH VEGETABLES FOR CANNING

Good canned vegetables cannot be had without good fresh vegetables and in order to have the fresh vegetables in variety and sufficient amounts it is necessary to plan the garden carefully. Club girls will want to talk with their parents early in the year to arrange for a garden that will do more than just furnish vegetables for the summer. According to the best information on nutrition, 50 quarts of vegetables per person are needed during the time when the garden is not producing.

In making garden plans follow the College of Agriculture and Home Economics Extension Circular 376, "The Vegetable Garden, Month by Month." This circular gives information on the varieties of vegetables to plant and detailed instructions for growing them.


WHAT TO DO IN UNIT III

1. Can 50 quarts, the vegetable canning budget for one person. The vegetables to be canned and the amounts are as follows:

	<i>Quarts</i>
Leafy greens (mustard, kale, turnips, spinach, etc.)	6
String beans (pole or bush)	6
Yellow vegetables (yellow corn, carrots, summer squash, etc.)	4
Tomatoes	20
Soup mixture	6
Starchy vegetables (corn, lima beans, black-eyed peas)	4
Other vegetables (asparagus, peas, okra, peppers, etc.)	4

While fruits are not mentioned in the requirements for this project, it is hoped that Club girls will also can fruits.

2. Label each jar, giving the information shown on the sample label below. Refer to Canning Record Book, page 1, for explanation. Make labels for home storage. Get 4-H Club labels from the county extension office for exhibits in county and state shows.

NAME OF PRODUCT	
HOW PACKED	HOW PROCESSED
EXHIBITOR'S NAME	
POST OFFICE	COUNTY
	

3. Keep a complete record of all canning in the Canning Record Book.
4. Use the score card (page 7) and practice judging canned vegetables.
5. Exhibit 6 quarts of vegetables as follows:

1 quart leafy greens	1 quart green beans
1 quart yellow vegetable	1 quart tomatoes
1 quart soup mixture	1 quart other vegetable

Fruits may be exhibited in "Open Class" at county, district and state events.

HOW TO USE THE STEAM PRESSURE COOKER

When one has a new cooker it should be used for the first time under supervision. A Club girl should not attempt to operate it alone. Her Club Leader, her mother or the county Home Demonstration Agent should be called upon for assistance. Follow instructions to the letter.

The pressure cooker has, on the top of the lid, a pressure gage, a petcock for escape of air, and a safety valve to prevent pressure from becoming dangerously high. A Club girl should know each gadget and its purpose.

Cover the rack in the bottom with water (about 1 c.). Place jars partly sealed on rack. Adjust the lid of the cooker, tighten clamps and place the cooker over hot fire to run up the pressure quickly. Leave the petcock open until steam flows freely from it. Close the petcock and watch the pressure gage rise. When desired pressure is reached begin counting time, and draw the cooker back or turn flame down to keep pressure constant. If pressure goes too high product may be overcooked and liquid forced out of jars. When time of processing is up, remove cooker and let it stand until hand of pressure gage goes to zero. Wait a few minutes or so, then open the petcock, undo the clamps, remove the lid being careful to turn it so that steam will not be directed toward the person. Remove jars and finish sealing.

CARE OF PRESSURE COOKER

1. Handle carefully to prevent nicks, dents, and scratches.
2. Avoid knocking petcock, gage, or safety valve.
3. Do not immerse lid in water — wash it with cloth.
4. Clean small ball in safety valve after each using.
5. Leave spring in safety valve released when cooker is not in use.
6. Wash, and dry thoroly after each using.
7. Leave cover unfastened when not in use.
8. Wrap gage in cotton and pack carefully if carrying cooker in a car.

GENERAL RULES FOR CANNING VEGETABLES

(See Kentucky Extension Circular 362, "How To Can Fruits And Vegetables.")

1. Select fresh vegetables in prime condition and can them immediately. "An hour from the garden to the can" is a good rule.
2. Wash vegetables thoroly and discard bruised, decayed or otherwise imperfect pieces.
3. Wash the jars and lids in clean, hot, soapy water and rinse them in boiling water.
4. Sterilize the jars either by immersing them in boiling water or placing them upside down in a small amount of water and then boiling the water. Keep the jars hot until packed. Place glass tops or lids in the container with the jars to be sterilized.
5. Use new, tested rubbers on the jars.
6. Prepare the product to be canned according to the way it is usually served; for example beans cut in pieces, baby beets whole.
7. Pack boiling-hot precooked vegetable into hot jars, add 1 teaspoon salt to each quart, and cover the vegetable with boiling liquid in which it was cooked. Completely seal the jars if they are to be processed in a water-bath canner; partly seal them if they are to be processed in a pressure cooker. To partly seal a glass-top jar, put the top clamp in place for sealing but leave the lower clamp up. To partly seal a screw-top jar, turn the top until it is tight and then turn it back only enough ($\frac{1}{4}$ to $\frac{1}{2}$ inch) to break the seal.
8. Process according to directions in time table.
9. Remove the jars from the canner one at a time, completing the seal of partly sealed jars as they are removed.
10. Place glass jars out of draft to cool. Even a slight air current striking hot jars may cause them to break.
11. Label jars according to directions.
12. Store canned products in a cool, dark, dry place.

TIME TABLE FOR CANNING VEGETABLES

(From Circular 362, "How to Can Fruits and Vegetables.")

	Precook by boiling in enough water to cover the vegetables	Time of processing		
		Steam pressure canner, 10 lb.		Water-bath canner or steamer, quarts or pints
		Quart	Pint	
		<i>Min.</i>	<i>Min.</i>	<i>Min.</i>
Asparagus	2 to 4 minutes	35	30	120
String beans	5 minutes	35	30	180
Lima beans	2 to 10 minutes	55	50	180
Soybeans	5 minutes	90	80	180
Baby beets	Enough to loosen skin (About 15 minutes)	35	30	150
Carrots	5 to 10 minutes	35	30	150
Corn	To boiling	70	60	180
Greens	Until wilted	65	60	180
Okra	3 to 5 minutes	40	35	180
Peas, green	3 to 5 minutes	60	45	180
Peas, black-eyed	2 to 10 minutes	55	50	180
Soup mixture	(See recipe)	70	60	180
Squash	Until tender	75	60	180
Succotash	Corn, 5 minutes Beans, 3 minutes	60	55	180
Tomatoes	Scald before peeling	10*	10*	45

* At 5 pounds pressure.

SCORE CARD FOR JUDGING CANNED VEGETABLES

	<i>Score</i>
Vegetable	60
Condition of product: uniform in size and ripeness; not defective, tough, old, stringy, or woody.	
	20
Condition of finished product: natural, clear, bright color, not unduly blanched or darkened; not overcooked; shape preserved	
	40
Pack	40
Uniformity: pieces of appropriate size to serve, econom- ically arranged; fancy pack not acceptable	
	10
Condition of liquid: clear, not cloudy, no bubbles, no sediment or foreign matter.	
	10
Proportion of liquid to vegetable: jar full of product but not crowded, product well covered with liquid	
	10
Container: of uniform or specified size, clear white glass, clean, plainly and neatly labeled according to directions	
	10
Total	100

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