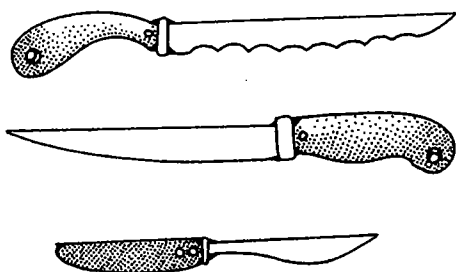


QUESTIONS AND ANSWERS ON HOME CANNING

Q. May a pressure cooker be used for processing fruits?

A. Yes, if it's deep enough it may be used as a hot water bath canner. The USDA and the State Extension Services do not recommend processing fruits in a pressure cooker under pressure, since the high temperature has a tendency to break down the delicate tissues of these products. If you prefer to process fruits under pressure, process at ten pounds pressure for 10 minutes.



Q. Must glass jars and lids be sterilized by boiling before canning?

A. No, not when a boiling hot water bath or pressure-canner method is used. The containers as well as the food are sterilized during processing. But be sure jars and lids are thoroughly clean, and to prevent breakage, have jars hot when filling them.

Q. Why is the cooking liquid used for packing some vegetables and boiling water for others?

A. Cooking liquid is recommended for packing most vegetables because it may contain minerals and vitamins dissolved out of the food. Boiling water is recommended when cooking liquid is dark, gritty, or strong-flavored, and it may be used if there isn't enough cooking liquid.

Processing time is the same whether hot cooking liquid or boiling water is used for packing.

Q. Why is liquid sometimes lost from glass jars during processing?

A. Loss of liquid may be due to a number of things:

- 1) Cooking food too short a time to drive out the air that is in it before packing it in the jars.
- 2) Packing jars too full.
- 3) Leaving air bubbles in the jars.
- 4) Not keeping pressure steady in a pressure canner.
- 5) Lowering pressure too suddenly at the end of the processing period.
- 6) Food is packed too tightly.
- 7) Food is processed at too high a temperature.
- 8) Leakage of steam between lid and bottom of pressure cooker.

Q. Should liquid lost during processing be replaced?

A. No, never open a jar and refill with liquid—this would let in bacteria, and you'd need to process again. Loss of liquid does not cause food to spoil, although the food above the liquid may darken.

Q. What causes cloudy liquid in canned fruits and vegetables?

A. Cloudy liquid may be a sign of spoilage. It may also be caused by the minerals in hard water or by starch from overripe vegetables.

Q. How can you tell whether food with cloudy liquid is spoiled?

A. Boil the food and note the odor. Do not taste or use any food having an off odor.

Q. Why does canned fruit sometimes float in jars?

A. Fruit may float because the pack is too loose or the syrup too heavy. It's also possible that air in the tissues of the fruit has not all been forced out during heating and processing.

Q. Why does my food turn moldy after processing?

A. Mold can only form in the presence of air. Therefore, jars are not sealed if mold is present.

Q. What makes canned foods change color?

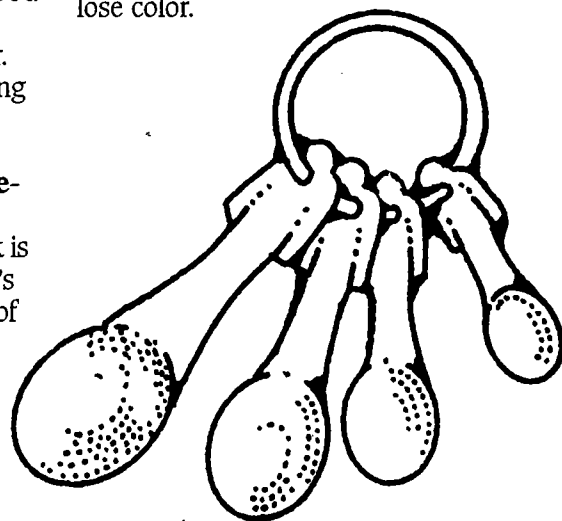
A. Darkening of foods at the tops of jars may be caused by oxidation due to air in the jars or by too little heating or processing to destroy enzymes. Over-processing may cause discoloration of foods throughout the containers.

Pink and blue colors sometimes seen in canned pears, apples and peaches are caused by chemical changes in the coloring matter of the fruit.

Iron and copper from utensils used in preparing foods, or from the water in some localities, may cause brown, black and gray colors in some foods. Corn turns brown during processing when too high a temperature is used. The high temperature causes a caramelization of the sugar in corn. It may also be caused by some chemical, such as iron, in the water used in canning.

When canned corn turns brown, the discoloring may be due to the variety of corn, the state of ripeness, or over-processing.

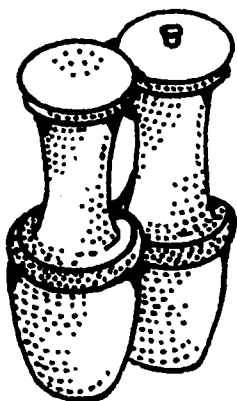
A common cause of highly colored foods fading is the dissolving of coloring materials by the packing liquid. The use of plain tin cans will cause some foods to lose color.



QUESTIONS AND ANSWERS ON HOME CANNING

Q. Is it safe to eat discolored canned foods?

A. The color changes noted above do not mean the food is unsafe to eat. However, spoilage may also cause color changes. Any canned food that has an unusual color should be examined carefully before use.



Q. Why does the underside of metal lids sometimes discolor?

A. Natural compounds in some foods corrode the metal and make a brown or black deposit on the underside of the lid. This deposit is harmless and doesn't mean that the food in the jar is unsafe to eat.

Q. Why do jars not seal properly?

A. Jars that do not seal may be due to a number of things:

- 1) Incomplete sterilization; failure to follow exact timetables and recipes.
- 2) Failure to wipe sealing edge of jar clean before placing lid on jar.
- 3) Food, seeds or grease lodged between lid and jar.
- 4) Clamps not properly adjusted on lightening or bail-type jars.
- 5) Jars which are nicked or cracked or have sharp sealing edges.
- 6) Band screwed down too loosely before processing on Mason jar and two-piece metal lid.
- 7) Turning jars upside down while jars are cooling and sealing.

Q. When canned or frozen fruits are bought in large containers, is it possible to can them in smaller containers?

A. Any canned or frozen fruit may be heated through, packed, and processed the same length of time as recommended for freshly prepared food. This canned food may be of lower quality than if it had been canned when fresh.

Q. Is it safe to leave food in tin cans after opening?

A. Yes, but like fresh cooked food, food in tin cans needs to be covered and kept in a refrigerator or other cold place.

Q. When processing food, is it necessary to have the pressure cooker filled with jars?

A. It is economical to process at one time as many jars as the cooker will hold, for it saves time and fuel. But if you do not have enough jars to fill the cooker, a smaller number may be successfully processed.

Q. What causes the lids to buckle?

A. Buckling lids may be due to a number of things:

- 1) This problem may be caused by tightening the jar rings too tightly before processing the jars. During processing, the flexible metal lid permits the jar to exhaust air, and rings that are too tight will not allow the air to escape during processing.
- 2) Not following the correct preheating process for the brand of lids used.
- 3) Filling the jars too full.
- 4) Using the raw-pack method for starchy vegetables.
- 5) A steam leak from the pressure canner lid.
- 6) Cooling the pressure canner with water or cool air.
- 7) Using a jar with a mouth that is too large for the lid (such as a mayonnaise jar).

Q. What causes the jars to break?

A. Breakage of jars may be due to a number of things:

- 1) Jars are too tight in pressure cooker.
- 2) Not using standard jars.
- 3) Jars improperly tightened.
- 4) Not placing jars on rack (jars touching the bottom of canner).
- 5) Over filling jars or packed too solidly.
- 6) Sudden temperature change between jars and water in unit.
- 7) Jars have invisible hairline cracks.
- 8) Fluctuation of pressure during processing; be sure to maintain a steady pressure.

Q. If a jar does not seal and must be reprocessed, does it have to be processed the full length of time?

A. Just what should be done with the unsealed jar will depend upon the cause. If the cap or lid is at fault and the product is a fruit, simply replace the cap or lid with new one and process until product reaches boiling point. If it is a vegetable or meat, it should be reprocessed approximately one-fourth to one-third the regular processing period. If the jar is defective, any product would require repacking. It is doubtful if this will be profitable since the reprocessing would need to be of approximately the same length as a normal period for that particular food. Few foods will stand up under such treatment.

Q. Is it possible to process two layers of jars in cooker at one time?

A. Yes, providing the model you have has sufficient room for two layers of jars. Use the rack between layers of jars.

Q. Is it necessary to precook any meats before canning?

A. Most authorities recommend precooking meats. Meats may be packed raw, but if packed raw, add no liquid.