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# The Pressure Pan

Selection, Use, Care



TEXAS AGRICULTURAL EXTENSION SERVICE  
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# The Pressure Pan . . .

## *selection, use, care*

HARRIET C. BRIGHAM  
EXTENSION HOME MANAGEMENT SPECIALIST  
TEXAS A. & M. COLLEGE SYSTEM

### *Selection*

The pressure pan is designed for long wear. It should be selected wisely, used correctly and kept in good condition. The size, quality of construction and special features determine its price.

Select the pressure pan which can do the job you want done; at the same time, it should save you time, money and energy. The expenditure for this equipment may result in better foods, more efficient work methods and greater health and happiness for the family.

Ask your friends and neighbors for their opinions on various makes. Consider the advantages or disadvantages according to your needs and the amount you can spend. A well-established manufacturer will back his product and will be able to supply parts when needed. Buy from a reliable, established dealer who can service the equipment.

### **Construction and Size**

The pan should be durable and simple in design. It should be easy to operate and to clean. Heavy-gage sheet aluminum or aluminum alloy, cast aluminum and stainless steel are materials generally used.

### **Handles**

Handles are usually of plastic materials or of wood. The handle should be large or long enough that the hands do not touch the hot metal. Some pressure pans have handles on two sides for easier lifting. Test the feel of the handles. Lift the pan. Would it be comfortable for you to lift when heated and filled with hot food?

### **Closure**

The cover must fit the pan tightly. Examine the many types of closures and select the one you like best. In each case the cover is locked into place. A gasket of rubber or rubberlike compound fits the space between the pan and cover to prevent leakage of steam as pressure building up inside the cooker. The gasket should be easy to remove for cleaning and easy to put back in place.

## Safety

Look for the pan with the Underwriters' Laboratory seal of approval. There are two types of safety releases in general use — a rubber plug or rubberlike plastic and a small metal plug. These act to release excess pressure before it reaches the danger point. Pressure is built up to a powerful force inside the pan and the safety features are especially important.

In the cover of the pressure pan is a small vent tube leading to the indicator or control. Inspect it to see that it is easily cleaned. It must be kept unclogged so that the pressure regulator will function properly.

## Pressure Indicators and Controls

Some pressure pans cook at one pressure only. The pan may have automatic pressure control. It may have a pressure indicator or a weight-gage, both of which require close control of the heat source to maintain the desired pressure within the pan.

Pressure controls are either weights or springs. Excess pressure lifts the weight or stretches the spring enough to let steam escape, a sign that the heat must be adjusted. Be sure the indicator or gage can be read easily and that you can see to read it when in use. When the control is the knob or lever type, the pressure is indicated by a hum or hissing sound.

In some electric pans the heat selector lever or knob, when set, automatically controls the heat to keep a constant cooking temperature. A pilot light on some electric pressure pans signals when the cooker starts and when the food begins to cook at the selected pressure.

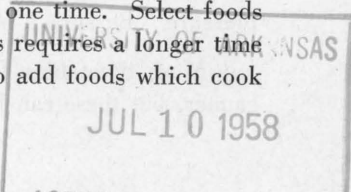
## *Use*

The pressure pan is widely used in meal preparation since it greatly shortens many cooking processes. Food colors are not destroyed and vitamins and minerals are preserved because of the brief steaming period.

## Moist Heat Cookery

Use the pressure pan for foods such as less tender meats, starchy vegetables, dried foods and others which cook well in water or steam at higher temperatures. Some foods such as meat loaf, can be cooked in the pressure pan until well-done then browned in the dry heat of the broiler or oven.

Combinations of food can be pressure cooked at one time. Select foods which cook at the same pressure. If one of the foods requires a longer time it can be cooked partially and then the pan opened to add foods which cook in a shorter time.



## Shorter Cooking Time

Pressure makes quicker cooking possible. The temperature within the pressure pan is raised as the pressure increases and foods cook in a shorter time at the higher temperatures. Without pressure the temperature is no higher with fast boiling than with slow cooking.

Fresh and frozen vegetables steam-cooked in the pressure pan a short time with little water hold their color, flavor and food value. Meats always have a well-done flavor. Starchy vegetables, dried foods and less tender meats can be well cooked in a much shorter time than without pressure. One minute can make a big difference in the quality of food cooked in a pressure pan.

## Adjustment for Altitude

At higher altitudes with reduced atmospheric pressure and lowered boiling point, increase the cooking time or cook at a slightly higher pressure.

To increase the cooking time at the selected pressure, allow 1 minute longer for each 1,000 feet of altitude if the cooking time is less than 20 minutes. For foods which cook longer than 20 minutes, add 2 minutes for each 1,000 feet of altitude.

Altitude		Add to cooking time if food is cooked LESS than 20 minutes		Add to cooking time if food is cooked MORE than 20 minutes
1,000 feet	—	Add 1 Minute	—	Add 2 Minutes
2,000 feet	—	Add 2 Minutes	—	Add 4 Minutes
3,000 feet	—	Add 3 Minutes	—	Add 6 Minutes
4,000 feet	—	Add 4 Minutes	—	Add 8 Minutes
5,000 feet	—	Add 5 Minutes	—	Add 10 Minutes

OR

Cook at a slightly increased pressure at higher altitudes. For each 1,000 feet of altitude add  $\frac{1}{2}$  pound to the cooking pressure.

Altitude		Pressure increased
1,000 feet	—	Add $\frac{1}{2}$ lb.
2,000 feet	—	Add 1 lb.
3,000 feet	—	Add $1\frac{1}{2}$ lb.
4,000 feet	—	Add 2 lb.
5,000 feet	—	Add $2\frac{1}{2}$ lb.

## Canning

The pressure saucepan is designed primarily for cooking. It may be used for canning small amounts of food, if the pan is deep enough to hold sealed jars of food on a rack without touching the top or obstructing the vent and has an indicator or control that operates accurately at 10 pounds pressure. Be sure a steady pressure can be maintained.

Most timetables for canning are for use with the large-size pressure canner, but these can be used with a pressure saucepan by adding water up

to the shoulder of the jars and by adding 20 minutes to the processing time for pint jars at 10 pounds pressure.

This increase in processing time is needed because the pressure pan, being smaller, reaches processing pressure quickly and after processing cools down more rapidly than pressure canners.

For detailed canning instructions, including large pressure-canner time-tables, see the following publication available from county home demonstration agents:

### B-194 Home Canning—Fruits and Vegetables

The following is recommended for processing food in pint jars in a pressure saucepan:

1. Process not more than 3 or 4 pints at one time.
2. Use a rack to keep the jars off the bottom of the saucepan.
3. Have at least 1 quart of water boiling in the pressure saucepan.
4. Place the jars of food in the saucepan; adjust the cover and vent the steam for one minute.
5. Process at 10 pounds pressure. (Adjust for altitude; see page 4.)
6. Cool gradually until pressure in pressure pan is reduced to zero.
7. Remove jars from pressure pan and cool.

## Using the Pressure Pan

- Read and follow carefully the directions for use and care of the pressure pan.
- Learn how the pan vents air and steam and how the steam pressure is adjusted and controlled. Keep the pan clean as well as the vents and controls. All pressure pans and cookers are equipped with safety devices to prevent accidents if too much pressure builds up. These devices are safety plugs, safety vents and safety sealing devices. Safety plugs must be replaced if they blow out.
- Follow recipes and directions for the correct amount of water. The amount depends on the size of the pan, length of the cooking period and the type of steam control.

Only enough water is used for most foods to insulate them from the heat at the bottom of the pan and to create steam for cooking. More water is used for soup and dried foods. Some recipes call for a small amount of table fat instead of water.

- Place the food in the pan, filling it not more than two-thirds to the top. If the pan is too full, food may block the vent.

- The gasket or closure must be clean and in good working order with nothing on the rim of the pan or lid to interfere with a tight seal.

- Position the cover for sealing.

- Clamp or lock the cover onto the pan.

Follow manufacturers' instructions for pressure and time of cooking. Time the cooking accurately to the minute. It is not advisable to leave the cooker unattended. If you must leave the room for more than a few minutes, turn off the heat and resume the cooking when you return, making the necessary time allowance.

- Heat quickly with high heat until there is a steady flow of steam from the open vent. With the air driven out and the pan filled with steam the steam gage or indicator can function. If air is left in the pan when the vent is closed, the temperature may not be as high as the pressure gage indicates.

- Close the vent; then use high heat until the required pressure is reached. Reduce the heat and adjust it to maintain a steady pressure.

To control frothing of such foods as split peas, cranberries, rhubarb and applesauce, use lower heat to bring the pressure up slowly.

- Remove the pan from the heat. Follow the manufacturer's instructions for reducing the pressure. To cool the pan quickly set it in a pan of water or cool it with running water until the gage shows there is no pressure in the pan. With some pans there is a steam release device which can be adjusted to release the steam gradually.

With some foods such as meats, dried fruits and vegetables, the pan is removed from the heat and allowed to cool gradually until the pressure is back to normal. After the pan has cooled and the pressure dropped, release any remaining steam as directed by instructions.

*Always open the vent or steam release before opening the cover.* It is good practice to lift the edge of the cover farthest from you first to let the heat escape away from your face and arms.

## *Care*

### **Take Care of Your Pressure Pan**

Good care and use will pay in safety and good cooking results as well as longer life for the pressure pan. Wash and clean your pressure pan to preserve the shiny finish. This finish helps reflect the heat back into the pan for better cooking results and cooler cooking.

To remove odors or stains pour about 1 quart of water in the pan with 1 tablespoon of vinegar or the juice of  $\frac{1}{2}$  lemon. Process at 5 pounds for about 5 minutes. Wash and rinse. Avoid using harsh scouring powders. Fine steel wool can be used. Stains also can be removed with a paste of whiting and vinegar.

Avoid damage to the rim of the pressure pan and its lid. A dent could cause a leak that would make it difficult or impossible to build up steam pressure. Never pound the rim of the pan with the stirring spoon.

It is preferable not to put the pressure indicators in water. Wipe them with a soapy cloth and then with a clean damp cloth. Dry them thoroughly. A pipe cleaner can be used to clean the vents. Be sure the vents are open and clean before using the pressure pan. Any obstruction in the vent may cause the pressure to build up without a means for the steam to escape. New safety plugs or caps can be purchased if needed.

Grease is destructive to rubber and rubber compounds. Wash the gasket well with mild soap and water. Most gaskets are removable for washing and can be replaced when worn. Some can be turned upside down to prolong their usefulness in sealing the closure.

Never add cold water to a hot pan. Guard against sudden cooling that might cause it to warp.

When not in use leave the cover loose so that the air can circulate. Store the weight nearby if detachable.

To Help You Select a Pressure Pan . . .

	Brands		
	1	2	3
Make of pressure pan	_____	_____	_____
Dealer	_____	_____	_____
Price	_____	_____	_____
Guarantee	_____	_____	_____
Capacity—How many quarts?	_____	_____	_____
Nonelectric or electric	_____	_____	_____
Safety	_____	_____	_____
Underwriters' Laboratory seal	_____	_____	_____
Air and steam vent	_____	_____	_____
Steam exhaust	_____	_____	_____
Automatic pressure gage	_____	_____	_____
Weights	_____	_____	_____
Lever setting	_____	_____	_____
Nonautomatic pressure indicator	_____	_____	_____
Dial	_____	_____	_____
Gage	_____	_____	_____
Sound of steam exhaust	_____	_____	_____
Other	_____	_____	_____
Construction	_____	_____	_____
Straight sides	_____	_____	_____
Flat bottom	_____	_____	_____
Metal	_____	_____	_____
Aluminum, pressed or cast	_____	_____	_____
Stainless steel	_____	_____	_____
Enameled steel	_____	_____	_____
Cover material	_____	_____	_____
Gasket material	_____	_____	_____
Easily removed for cleaning	_____	_____	_____
Easily replaced for use	_____	_____	_____
Closure	_____	_____	_____
Handles drawn together lock cover	_____	_____	_____
Encircling clamp holds cover on	_____	_____	_____
Flexible lid draws up to pan rim	_____	_____	_____
Rigid oval lid draws up to rim	_____	_____	_____
Slide closure with lugs	_____	_____	_____
Handles	_____	_____	_____
Easy to hold to lift pan	_____	_____	_____
Long enough to keep hands away from hot pan	_____	_____	_____
Electric	_____	_____	_____
Watts—how many	_____	_____	_____
Cord adequate, easily cleaned	_____	_____	_____
Sanitary	_____	_____	_____
Few grooved parts	_____	_____	_____
Easily cleaned	_____	_____	_____
Storage space needed	_____	_____	_____
Width x depth x height, inches	_____	_____	_____

