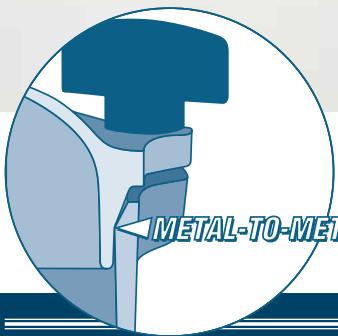


COOKING & CANNING WITH

# THE ALL-AMERICAN® PRESSURE COOKER/CANNER



The professional quality deluxe cast aluminum Pressure Cooker/Canners with the exclusive "Metal-To-Metal" seal.

## INSTRUCTIONS & RECIPES

# **CAUTION! READ THESE IMPORTANT SAFEGUARDS!**

**When using pressure cookers, basic safety precautions should always be followed:**

1. Read all instructions.
2. Do not touch hot surfaces. Use handles and pot holders.
3. Close supervision is necessary when the pressure cooker/canner is used near children.
4. Do not place the pressure cooker/canner in a heated oven.
5. Extreme caution must be used when moving a pressure cooker/canner containing hot liquids.
6. Do not use pressure cooker/canner for other than intended use.
7. This appliance cooks under pressure. Improper use may result in scalding injury. Make certain unit is properly closed before operating. See Operating Instructions beginning on page 6 of this booklet.
8. Never fill the unit over  $\frac{2}{3}$  full when cooking; however, when cooking foods that expand such as dried fruits, or vegetables, the unit must never be over  $\frac{1}{2}$  full. One-half full means the food, as well as all other ingredients and liquids combined. See Food Preparation Instructions beginning on page 8 of this booklet.
9. Do not cook foods such as applesauce, beans, cranberries, pearl barley, oatmeal or other cereals, rice, split peas, noodles, macaroni, rhubarb, or spaghetti. These foods tend to foam, froth, and sputter, and may block the pressure release device (steam vent). Refer to page 4 "Suitable Foods" for additional information and listings.
10. Always check the pressure release devices for clogging before use.
11. Do not open the pressure cooker/canner until the unit has cooled and internal pressure has been released. Gauge should read zero at this time. Remove pressure regulator weight. Any pressure in the cooker can be hazardous. See Operating Instructions beginning on page 6 of this booklet.
12. Do not use this pressure cooker/canner for pressure frying with oil (broasting).
13. Always make sure that the pressure regulator weight vent pipe opening is clean and you can see through it. Read page 6 "Cleaning Vent Pipe."
14. Never loosen wing nuts until the steam pressure gauge registers zero and you have allowed any remaining pressure to escape by removing the Pressure Regulator Weight.
15. Do not subject your cooker/canner to sudden extreme temperature changes as this will cause expansion or contraction which can crack a cast aluminum utensil. Do not move a cooker from a cold storage area directly onto a hot flame or element. Do not add cold water to a cooker/canner which has boiled dry and is still hot. Do not cool a hot cooker/canner suddenly by pouring cold water on it or wrapping cold wet towels around it.
16. When normal operating pressure is reached, turn the heat down so all the liquid, which creates steam, does not vent out.
17. Be sure that handles are assembled and fastened properly before each use. Cracked, broken or charred handles should and must be replaced. The No. 64 Bakelite wing nut should be threaded into the No. 54 clamp bolt four (4) complete revolutions before bringing assembly into the hold down position. When all the wing nuts are in hold down position, tighten all evenly.
18. ALL-AMERICAN Pressure Cooker/Canners are NOT recommended for use on glass top/flat ranges because its weight may cause the glass/ceramic to break. The diameter of the canner is also larger than most burners, and may cause heat to transfer outward and damage the surrounding surface.

## **19. SAVE THESE INSTRUCTIONS.**

# **COOKING AND CANNING WITH HEAVY CAST ALUMINUM ALL-AMERICAN PRESSURE COOKER/CANNER**

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## **CAUTION!**

**READ THIS BOOKLET BEFORE USING. IMPROPER USE MAY RESULT IN SCALDING INJURY. DO NOT OPEN COOKER/CANNER UNTIL ALL PRESSURE IS RELEASED AND GAUGE IS AT ZERO. DO NOT OVERFILL UNIT. BE SURE TO READ AND UNDERSTAND ALL OPERATING INSTRUCTIONS BEFORE USING COOKER. READ THE IMPORTANT SAFEGUARDS ON THE OPPOSITE PAGE.**

## **ALL-AMERICAN HEAVY CAST ALUMINUM PRESSURE COOKER/CANNER LIMITED WARRANTY**

This quality pressure cooker/canner is designed and manufactured to provide many years of satisfactory performance under normal use. Wisconsin Aluminum Foundry pledges to the original owner that should there be any defects in material or workmanship during the first year after purchase, we will repair or replace it at our option. This pledge does not apply to damage caused by shipping. To obtain service under the warranty:

1. Call the Customer Service Department to obtain a Return Authorization Number. Items returned without a Return Authorization Number will be refused.

2. Return pressure cooker/canner, postage prepaid, with sales receipt, Return Authorization Number and a description of the claimed defect to:

Wisconsin Aluminum Foundry Co., Inc.  
Consumer Products Division  
Corner of S. 18th and Franklin Streets  
Manitowoc, WI 54220

### **IMPORTANT — PLEASE READ**

Any alterations, modifications or changes of any type made to the pressure cooker/canner or to any component thereof will void this warranty!

We want you to obtain maximum performance from using this quality pressure cooker/canner, and we ask that you take the time to read and follow the operating instructions. Failure to follow instructions, damage caused by improper replacement parts, abuse, or misuse will void this pledge. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This is Wisconsin Aluminum Foundry's personal pledge to you and is being made in place of all other express warranties.

### **DIMENSIONS, WEIGHTS AND CAPACITIES OF ALL-AMERICAN PRESSURE COOKERS**

<b>MODEL</b>	<b>910</b>	<b>915</b>	<b>921</b>	<b>925</b>	<b>930</b>	<b>941</b>
LIQUID CAPACITY (Qts.)	10½	15½	21½	25	30	41½
Inside Diameter, Inches	10 5/8	12 5/8	12 5/8	12 5/8	12 5/8	15 1/4
Inside Height, Inches	7 7/8	7 1/2	10 1/2	11 1/2	14	13 3/4
Shipping Weight, lbs.	14	20	23	24	29	41
<b>Will Hold:</b>						
Pint Jars	7	10	19	19	19	32
Quart Jars	4	7	7	7	14	19
No. 1 Cans	14	22	35	36	44	73
No. 2 Cans	7	12	18	20	25	36
No. 3 Cans	3	5	10	10	10	21
No. 10 Cans	1	1	1	2	2	6

Please note: Jar counts are based on the Standard Mason Jar.

**Record your model number here**

### **UPC CODES**

910 ..... 0 89149 00910 5

915 ..... 0 89149 00915 0

921 ..... 0 89149 00921 1

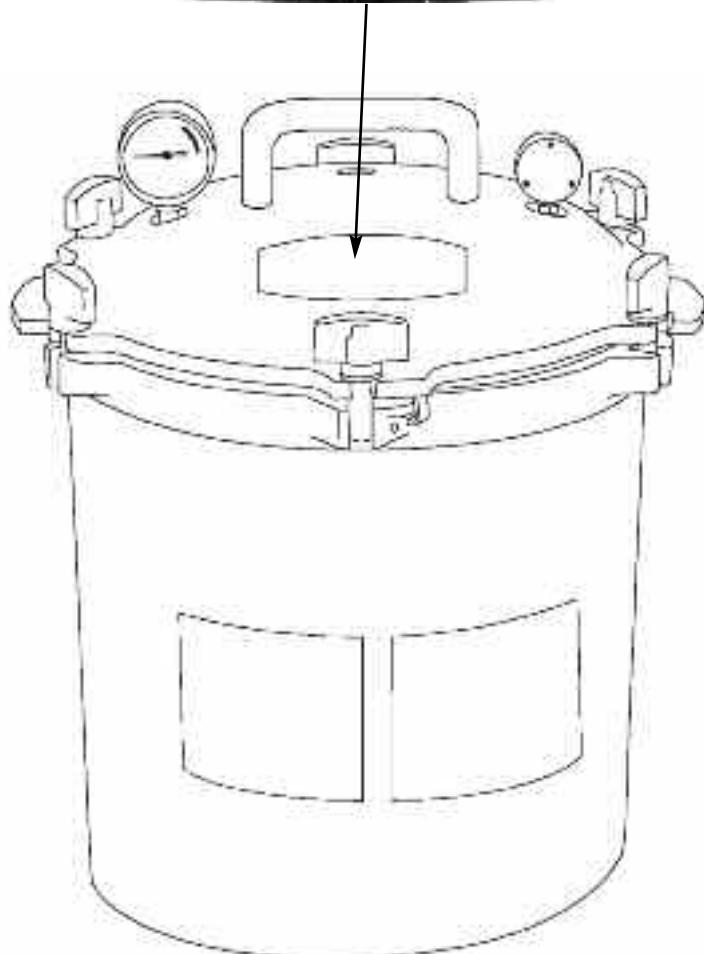
925 ..... 0 89149 00925 9

930 ..... 0 89149 00930 3

941 ..... 0 89149 00941 9

## SAFETY WARNING LABELS

The warning label pictured below is located on the top of your pressure cooker. Please refer to the drawing below for location placement of safety warning label. In the event that your pressure cooker ever requires replacement labels, please contact the manufacturer and a new replacement label will be promptly sent out to you free of charge. Instructions for placing the label on the unit will be included.



# ABOUT THE ALL-AMERICAN PRESSURE COOKER/CANNER

The ALL-AMERICAN Pressure Cooker/Canner offers the busy cook many money-saving advantages:

**Safe canning.** Pressure cooking provides the only safe method for canning non-acid foods such as vegetables, fish, meat and poultry. It is perfect for canning in tin cans as well as in glass jars.

**Saves energy and time.** The pressure cooker prepares foods in a fraction of the time required by other cooking methods.

**More healthy.** Foods cook quickly in a minimum amount of liquid, helping foods retain flavor and healthy nutrients.

**Saves money.** Budget cuts of meat are quickly cooked to juicy goodness in the pressure cooker. And the high temperature makes meat tender and flavorful without the use of chemical tenderizers.

**Saves clean-up.** Since food flavors do not mingle in live steam, several foods may be prepared in the cooker at the same time without mixing flavors.

## OTHER CANNING/COOKING INFORMATION AND RESOURCES

- County University/Extension Office (every county has one)
- Extension Agent/Home Economist (Check local phone book for number or call information)
- Library  
Books under Canning, Food Preservation, Home Canning
- Internet  
National Center for Home Food Preservation  
[http://www.uga.edu/nchfp/how/can\\_home.html](http://www.uga.edu/nchfp/how/can_home.html)
- Bookstores  
Books under Canning, Food Preservation, Home Canning

## SUITABLE FOODS

### IMPORTANT INFORMATION (from No. 9 inside front cover):

It is especially important that you **never** cook rice, applesauce, beans, cranberries, macaroni, rhubarb or spaghetti in your cooker. There are many varieties of dry, hard beans and peas, examples of which are pinto beans, black beans, lima beans, blacked-eyed peas, kidney beans, lentils, soy beans, mung beans, small red beans, garbanzo beans (chick peas).

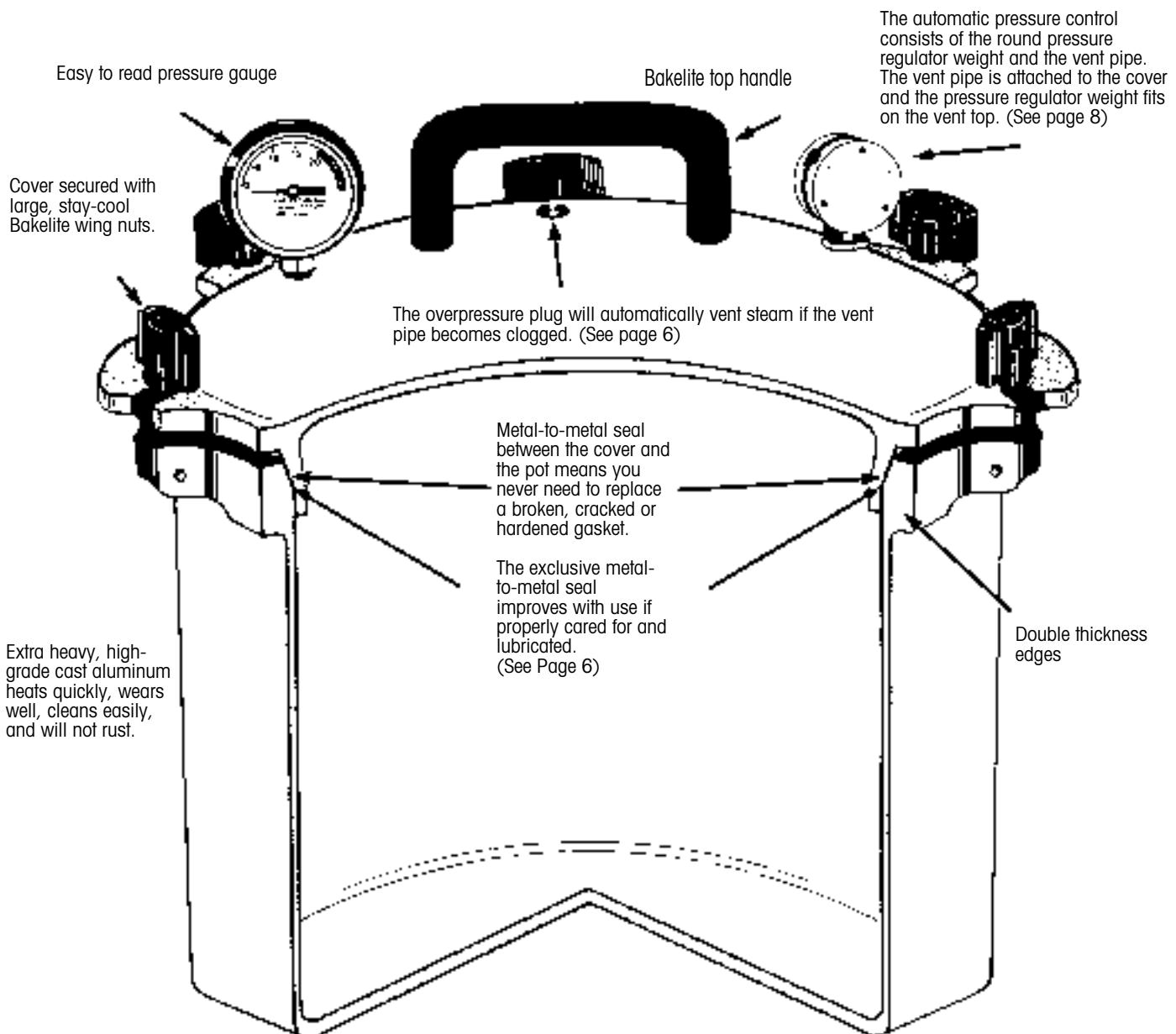
In the interest of safety, do not use your cooker to cook the foods listed above. These foods tend to foam, froth, and sputter and pieces of food could block the safety or pressure release devices; therefore, **we urge you not to cook these foods in your pressure cooker.**

Safety must be of first concern.

Please write to:  
WISCONSIN ALUMINUM FOUNDRY  
Consumer Products Division  
P.O. BOX 246  
MANITOWOC, WI 54221-0246

### PLEASE READ THIS IMPORTANT STATEMENT:

Wisconsin Aluminum Foundry will not be held responsible for any accidents, injuries, or any other problems resulting from the cooking of any of the foods listed above.



## HANDLE SAFETY

### IMPORTANT NOTICE

Only use the side handles to lift the pressure cooker. This applies to the pressure cooker when it is empty or contains items. NEVER use the top handle to lift the complete unit. The top handle is used to remove the cover only.

# IMPORTANT SAFETY PRECAUTIONS: READ BEFORE USING PRESSURE COOKER/CANNER

For your own safety and to avoid damaging the cooker, please read these instructions carefully before using.

## Lubricate Before Using

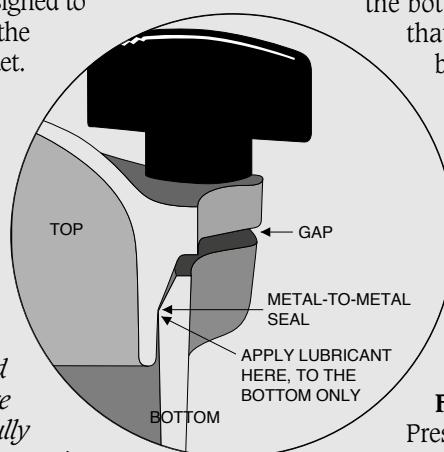
Before using your cooker, lubricate the metal-to-metal seal with petroleum jelly or Vaseline to prevent the cover from scratching or sticking. Apply a thin film of lubricant to the edge inside the cooker where the inside wall begins to bevel out (**see diagram below**). Use just enough lubricant to wet the edge, but not enough to actually see it.

Place a similar amount of lubricant on the threads of the bakelite wing nuts and also on the metal face around the opening. Wipe away excess lubricant. This will help the wing nuts turn more easily and hold the cover securely to the cooker/canner, preventing steam leaks.

## About the Metal-to-Metal Seal

The cover of your pressure cooker/canner is designed to seal tightly without the use of a rubber gasket.

The metal surfaces where the cover and cooker meet are beveled to produce the exclusive metal-to-metal seal. As a result, the cover will **wobble** slightly when placed on the bottom before the wing nuts are fully fastened. When the cover is properly seated, there is a small gap between the cooker/canner and the cover (see diagram above). To secure the cover, gradually and evenly tighten two opposite wing nuts at the same time, maintaining the same size gap around the entire unit where the cover meets the bottom. **Never tighten just one wing nut at a time.** A new cooker will sometimes leak slightly around the metal-to-metal seal. This will do no harm, and should cease after being used a few times.



## Keep Safety Openings Clear

It is important to inspect the openings to the overpressure plug, the vent pipe, and the steam pressure gauge regularly and to make sure steam can pass through them.

## Cleaning Vent Pipe

Before using cooker/canner, hold the cover up to the light to see if the vent pipe is clear. If you cannot see light through the vent pipe, it may be blocked. Carefully insert a piece of wire in the vent pipe and run it gently in and out to be sure the tube is clear and unobstructed. You may wish to purchase a #75 cleaning rod for this purpose. Rinse with hot water.

## Use Adequate Liquid/Water

It is critical to understand the importance of having water in the cooker when in use. During cooking or canning there must be at least  $1\frac{1}{2}$ " of water (or the amount called for in the recipe or canning instructions) in the bottom of the cooker so that the cooker won't boil dry due to steam blow-off. If there is not enough water in the pressure cooker and it boils dry, the unit will be ruined, cannot be repaired, and must be replaced.

## Filling Cooker

Pressure cooker should never be more than  $\frac{3}{4}$  full

when cooking foods like soups or stews. When cooking foods which expand, including all dried beans & peas, such as pinto beans, fill cooker  $\frac{1}{2}$  full. Half full means the pot is  $\frac{1}{2}$  full of the beans and water combined, resulting in occupying never more than  $\frac{1}{2}$  of the total volume of the cooker.

## Excess Pressure Inside Cooker

The selective Pressure Regulator Weight is designed to release excess steam at 18 pounds of pressure. However, if the Vent Pipe becomes

clogged inside with food or grease buildup, **it will not function**. If the steam pressure gauge registers in the **CAUTION** range and the selective Pressure Regulator Weight has not automatically released pressure, do the following **at once**:

1. Turn off the heat source. Do not move the pressure cooker!
2. Allow the cooker to stand until cold to the touch (this may take an hour or more). Only then is it safe to remove the cover, and only remove cover after the gauge reads at ZERO.
3. Clean the Vent Pipe and the steam pressure gauge passage as described above. You may purchase a new Vent Pipe from the factory if needed.

## Temperature Fluctuation

Do not subject your cooker to sudden extreme temperature changes as this will cause expansion or contraction which can crack a cast aluminum utensil. Do not move a cooker from a cold storage area directly onto a hot flame. Do not add cold water to a cooker which has boiled dry and is still hot. Do not cool a hot cooker suddenly by pouring cold water on it or wrapping cold wet cloths around it.

## Open Cooker Safely

Be sure pressure has dropped to zero and that you have removed the selective Pressure Regulator Weight before loosening the Bakelite wing nuts. *When removing cover, raise the farthest edge first to protect face and arms from steam.*

## Dropping The Cooker

If you ever drop your pressure cooker, it must be examined for damage. If it is dropped on a hard surface, call for a Return Authorization number and return the unit to Wisconsin Aluminum Foundry with a note explaining that the unit was dropped and that you would like it examined. We will check it thoroughly, including the selective Pressure Regulator Weight and steam pressure gauge, and notify you of our findings and the repair charges.

# CARING FOR YOUR COOKER

## Metal-To-Metal Seal, Cleaning And Maintenance

The metal-to-metal seal must be lubricated periodically to prevent the cover from sticking to the bottom as a result of dryness. Lubricate the metal-to-metal seal on the bottom with petroleum jelly or Vaseline to prevent scratching and sticking of the seal. (See diagram page 4.) It is recommended that a thin film be applied every third or fourth use. The metal-to-metal seal must not be permitted to become dry, as this could result in severe damage to the metal-to-metal seal and make it very difficult to remove the cover. Lack of lubrication also makes it very difficult to maintain a steam-tight seal.

It is also important to periodically wipe off the metal-to-metal seal with a clean towel to remove any build-up of foreign material trapped in the lubricant. You may use 0000 grade steel wool and carefully go around the seal to remove any build-up of hardened lubricant. However, avoid hard scrubbing of the metal-to-metal seal to prevent damage.

## Accuracy Of Steam

### Pressure Gauge

ALL-AMERICAN pressure cooker canners are weighted-gauge canners. The pressure gauge is supplied as a reference only for when the unit is pressurized and timing for canning may roughly begin, or when the pressure has dropped to zero and the lid may be safely removed. The accuracy of your steam pressure gauge is at  $\pm 2$  pounds. Please refer to information provided on page 8 under "**Using Cooker**" - Item #2 - the bold print. If you would like to have your gauge tested you may contact your county extension agent. If they are unable to provide this service, you will have to purchase a new gauge.

### Discoloration And Pitting

Discoloration of aluminum inside is harmless. It can be removed by boiling a solution of one tablespoonful of vinegar or two level tablespoons cream of tartar in a quart of water, or by scrubbing with an aluminum cleaner or soap impregnated steel wool cleaning pad.

Pitting is caused by the interaction of aluminum with other metals in the presence of moisture. This can be prevented by washing, rinsing and drying the unit thoroughly after every use. Always store the pressure cooker in a dry area when not in use. While pitting is not injurious to health, if pitting becomes present and you detect it in the metal, then we recommend that the unit be returned to the factory for examination. **DO NOT USE THE UNIT IF PITTING**

**IS PRESENT** until it is determined the extent of damage caused by pitting.

### Storage

The cover should be stored separately from the bottom or upside down on the bottom to allow air circulation. Always be sure the cover and bottom are thoroughly dried to protect against pitting and corrosion. Protect the metal-to-metal seal from being struck or dented.

## OVERPRESSURE PLUG, No. 2040

### IMPORTANT INFORMATION

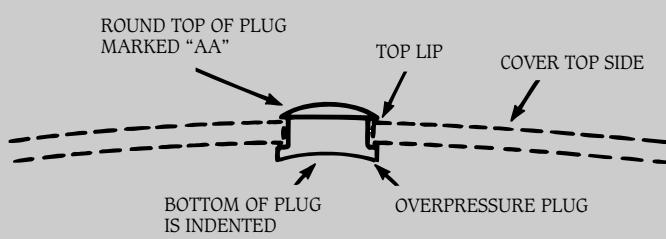
**T**he overpressure plug releases if the vent pipe becomes blocked and cooker/canner develops too much pressure. This is a protection that permits excess pressure to be released safely. If you follow directions for using the unit properly, the plug will probably never release.

*A small amount of steam or moisture may be visible around the overpressure plug as the pressure is starting to build inside the unit.* It is normal for the overpressure plug to leak steam until approximately 5 pounds is shown on the pressure gauge. If leakage continues beyond that point, the cause may be:

1. The overpressure plug needs replacing if it is worn, cracked or hard. We recommend that you replace the overpressure plug every 12 months, or before if it becomes hard or deformed. Never reuse a blown overpressure plug.

2. Built-up food or grease may be in the opening. We recommend that the opening in the cover where the overpressure plug fits be cleaned with hot soapy water and a small brush *at least once every month during periods of use* to maintain a clean opening. This cleaning/inspection is in addition, of course, to normal cleaning performed after using the unit.

**TO REMOVE THE OVERPRESSURE PLUG:** From the underside of the cover, pull the plug out of its opening using your fingers. After cleaning, reinsert the overpressure plug by pushing the round top side of the overpressure plug into the opening from the underside of the cover. When the overpressure plug is correctly in position, the indented portion will be visible when the underside is viewed. *Be certain to check*, after inserting plug, that the round top of plug and top lip are fully through the opening so that the top lip is not folded under.



# HOW TO USE YOUR COOKER

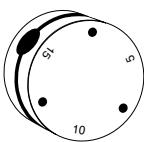
Check metal-to-metal seal for lubrication. (See pages 6-7). Check to make sure vent pipe is clear. (See page 6)

## Place Food And Water Inside

Place 1½" of water (or the amount called for in the recipe or canning instructions) in bottom of cooker. (Note: Whenever canning, add water BEFORE placing jars or cans into cooker.) Always place a rack in bottom of the pressure cooker with the rim facing down when using pans, canning jars, or tin cans. Never allow these containers to stand directly on the bottom of the cooker. The rack is also useful for holding meat or vegetables out of the water while cooking.

## Place Cover On Cooker

Place cover on cooker bottom so that arrow on cover aligns with the arrow on the bottom.<sup>1</sup> Gradually and evenly tighten two opposite wing nuts at the same time, maintaining the same size gap around the entire unit where the cover meets the bottom. **Never tighten just one wing nut at a time.**



The pressure regulator weight lets you select one of three pressure settings.

Pressure	Cooking Temperature	
5 lbs.	228° F	107°C
10 lbs.	240° F	113°C
15 lbs.	250° F	118°C

When the pressure cooker reaches the proper temperature, the pressure regulator weight will jiggle audibly, and you can see the steam being released. The pressure will be automatically maintained for proper pressure cooking. The pressure regulator weight itself never requires adjustment or testing for accuracy.

## Exhausting

There are two ways in which you may use this pressure cooker, one would be for cooking food and the second would be for canning food in either glass jars or metal cans.

The following instructions apply to both methods; however, there is one step that must be taken whenever you are using the pressure cooker as a pressure canner, and that is "after placing lid on cooker, you must allow steam to escape from the vent pipe for 7 minutes before placing selective pressure regulator weight on cover." *This procedure is called "exhausting" and is necessary only when canning food.*

For more detailed CANNING instructions, please refer to pages 18 and 22.

## Using Cooker

1. Set the pressure regulator weight over vent pipe, aligning the weight so that the hole corresponding to the desired pressure is directly over the vent pipe.
2. Place pressure cooker over heat source, and when the pressure regulator weight begins to jiggle and sputter, adjust the heat until it jiggles only one to four times each minute. The pressure regulator weight will jiggle or rock when the pressure is reached. NEVER TURN UP THE HEAT TO THE POINT THAT A CONSTANT FLOW OF STEAM IS ESCAPING, THEREBY CAUSING THE PRESSURE REGULATOR WEIGHT TO BE CONSTANTLY IN THE "UP" POSITION. REDUCE THE HEAT SO THAT THE PRESSURE REGULATOR WEIGHT ONLY JIGGLES AND SPUTTERS FROM ONE TO FOUR TIMES A MINUTE.

Experience with the pressure regulator weight will teach you what setting on your stove will maintain the proper pressure and how long it takes to bring the pressure cooker to the point where the pressure regulator weight jiggles or rocks. This will depend

on which size pressure cooker you have and how much food your are cooking.

**Please understand that there will not be an exact correlation between the pressure shown on the gauge to the corresponding pressure setting on the pressure regulator weight. For example, even though you have set the pressure regulator weight at 10 lbs., the gauge may show a range during the cooking process of 8 to 12 lbs. Do not expect the gauge to always show the exact pressure setting as the pressure regulator weight, as the pressure is changing within the unit as the pressure regulator weight jiggles and sputters, which is simply a process of constantly building up and releasing pressure to maintain the setting on the pressure regulator weight.**

**Even in the situation where the gauge is not registering correctly for any reason, you can be assured that the unit will still operate at the pressure regulator weight setting. The basic reason that our pressure cooker retains the gauge is to provide additional information as to the pressure and temperature within the unit, but you can be assured that the unit is functioning at the pressure regulator weight setting.**

Try to keep the pressure as steady as possible by regulating the amount of heat applied to the cooker. ***At no time should the pressure be allowed to rise above 15 P.S.I.*** Excess pressure should be decreased by turning heat down. Remember, *it is the amount of heat applied to the unit that regulates the pressure.*

3. To count your cooking time, begin from the first jiggle or rock of the pressure regulator weight, and when the food has cooked to

<sup>1</sup> This means that you have the cover and bottom correctly positioned together. (Older pressure cookers will have a linemark on the rim of the bottom.)

# HOW TO USE YOUR COOKER

proper pressure for the correct period of time, turn off the heat.

## Reduce Pressure

**WARNING:** Steam escaping from the vent pipe can scald or burn you and the pressure regulator weight may be hot. Protect your hand with a pot holder or mitt.

When cooking is completed and heat is off, reduce pressure as follows:

- After most normal cooking, permit cooker to cool until steam pressure gauge reads zero.
- After cooking soup, cereals, or any food that might boil over in the pans, turn heat off and permit cooker to cool.
- After canning in glass jars, turn heat off and permit cooker to cool gradually until the steam gauge drops to zero. Remove the selective pressure regulator weight slowly and do not release steam pressure too rapidly as liquid will be drawn from jars.
- After canning in tin cans, turn heat off and release pressure as quickly as possible by removing the selective pressure regulator weight with fork or hot pad.

Do not put cold cloths or water on the cooker to hasten cooling. This may crack the aluminum.

Do not move the pressure cooker until the pressure is completely reduced.

## Opening Cooker Safely

**CAUTION:** Never loosen wing nuts until the steam pressure gauge registers zero, and you have allowed any remaining pressure to escape by carefully removing the selective pressure regulator weight.

Remove cover, *raising farthest edge first to protect face and arms from steam.*

When the pressure regulator weight is left on, a vacuum may form inside the cooker making the cover difficult to remove. To avoid a vacuum, which will cause the cover to be drawn to the bottom very tightly, you must remove the pres-

sure regulator weight from the vent pipe as soon as the pressure gauge indicator reaches zero P.S.I. and then remove the cover. The longer you wait without removing the pressure regulator weight, the more vacuum will form, pulling the cover tighter and tighter to the bottom.

Another reason that a cover sticks to the bottom is that the metal-to-metal seal has been permitted to build up a coating of foreign material such as dried grease, lubricating oil, etc. Please refer to page 7 under the section "Metal-to-Metal Seal, Cleaning and Maintenance" for complete instructions.

## Removing a "Stuck" Cover (due to a vacuum)

In the event that a vacuum forms, use a large standard screwdriver to pry the top loose. Place the end of the screwdriver *at an angle* between the cover and bottom near a wing nut assembly. Do not go straight in with the screwdriver or you will damage the metal-to-metal seal. Gently pry upward using the screwdriver as a lever. Continue to pry upward at each wing nut assembly area uniformly so that the cover is raised evenly. In most cases, the cover should come off rather quickly.

If you need further assistance, please call the factory.

# COOKING IN THE PRESSURE COOKER

## Meat

When cooking meats, place empty cooker on stove to heat. Put fat in bottom of cooker and sear meat on all sides to seal in juices. Add  $\frac{1}{2}$ " water to bottom of cooker (or the amount called for in the recipe), and cook for time given in timetable or recipe. Follow instructions under How to use Your Cooker, page 6.

The length of cooking period for meats depends on the amount and distribution of the fat on the meat, the amount of bone, toughness, size, thickness of cut, and the position of the meat in the cooker. Rolled roasts require a longer cooking time per pound than unboned roasts, and short, chunky roasts require longer cooking time than long, flat ones. Due to the difference in surface area of small roasts up to 3 or 4 pounds, they require a longer cooking time per pound than larger roasts. Consequently, it is possible to give only general rules regarding average cooking time for meats. Average times are about 8 to 10 minutes per pound for rare, and at least 12 to 15 minutes per pound for well done. With a little experimenting, you will be able to regulate the cooking time according to a particular cut of meat.

### MEAT TIMETABLE

#### **Beef.....Cook at 15 Pounds Pressure**

Rump or chuck roast .....	12 to 15 min. per lb.
Corned beef .....	12 to 15 min. per lb.
Ground meat loaf .....	8 to 10 min. per lb.
Pot roast, thin .....	8 to 10 min. per lb.
Pot roast, thick .....	10 to 12 min. per lb.
Fresh tongue .....	35 to 45 min.
Tongue, smoked or cured .....	60 min.
Round steak, 1" thick .....	15 min.
Stew meat cubes .....	15 to 20 min.
Hearts .....	15 to 20 min.

#### **Lamb or Mutton**

Shoulder roasts .....	10 to 12 min. per lb.
Stew cubes .....	15 min.

#### **Pork**

Fresh ham .....	12 to 15 min. per lb.
Loin roasts .....	10 to 12 min. per lb.
Shoulder roasts .....	12 to 15 min. per lb.
Pork chops, 1" thick .....	10 min.
Pork steak, 1" thick.....	10 min.
Pork shanks .....	20 to 30 min.

#### **Spareribs**

Spareribs .....	15 min.
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### GRAIN TIMETABLE

#### **Cook at 15 Pounds Pressure**

##### **Bulgur, Cracked Wheat .....**5-10 Minutes

Preparation: Wash. Place in pan. Cover grain with 1" of water. Add warm water to bottom of cooker to level of rack. Never fill the pressure cooker more than one-half full. This one-half includes the water and all ingredients.

##### **Whole Wheat Berries & Other Whole Grains .....**35 Minutes

Preparation: Hard grains may be soaked overnight to reduce cooking time. Cover grain in pan with 2" of water. Continue as above.

# COOKING IN THE PRESSURE COOKER

## Vegetables

Prepare vegetables in the usual manner and season. Pour about  $\frac{1}{2}$ " of water in the bottom of the cooker.

Place vegetables on rack or in a metal pan resting on the rack.

For best color and texture, when done cooking, turn the heat off, allow pressure to reach zero, remove the regulator weight, then remove

the cover, raising the farthest edge first to protect face and arms from steam. Do not allow the vegetables to remain in the cooker once the pressure is down to zero.

### VEGETABLE TIMETABLE

Vegetable	Preparation	Cooking Time (Min.) At 15 Pounds Pressure
Asparagus .....	Clean and wash. Use pan .....	1-3
Beans, green or wax .....	Wash and cut.....	2-3
Beets .....	Wash, leaving root and 2" of stem on. Cook. Peel and dice. Season with salt, butter, pepper, and a little vinegar and sugar .....	New 12-18; Old 15-20
Brussels Sprouts.....	Wash .....	2
Cabbage.....	Quarter and season with salt.....	8
Carrots.....	Slice, put in pan. Season .....	Sliced 2; Whole 3-4
Cauliflower .....	Soak head $\frac{1}{2}$ hour in cold salt water. Divide sections. Place in pan .....	1-2
Celery.....	Wash and dice .....	2-3
Corn-on-the-Cob .....	Clean and place on rack.....	3-5
Hominy .....	.....	30
Onions .....	Place in pan. Season.....	Sliced 3; Whole 10
Parsnips .....	Wash. Cook on rack.....	Sliced 3; Whole 10
Peas .....	Shell and wash .....	2-3
Potatoes, Irish.....	Peel and place in pan.....	10-20
Potatoes, scalloped.....	.....	10
Potatoes, sweet .....	Wash, peel, quarter or halve, cook on rack.....	8-10
Pumpkin or Winter Squash .....	Wash and remove seeds. Break in pieces and place in pan .....	10-12
Rutabagas .....	Peel and wash.....	Sliced 5; Quartered 12
Spinach, Swiss Chard .....	Wash thoroughly in several waters .....	2
Turnips .....	Slice or dice turnips. Use pan. Season with salt and a little sugar .....	4-5

# PRESSURE COOKING RECIPES

## Meats

### Pot Roast

4 lbs. beef for pot roasting  
2 tbsp. drippings  
4 tbsp. flour  
2 tsp. salt  
1/4 tsp. pepper  
1 cup celery, chopped fine  
1/2 cup carrots, cut in cubes  
2 green peppers, diced  
2 cups stewed tomatoes  
1 medium sized onion, chopped fine  
Enough water to fill bottom of cooker to 1/2"

Dredge the meat on all sides with flour, salt and pepper; put drippings in cooker and brown meat on all sides. Add green pepper and onion, pouring water and stewed tomatoes over meat. Cover cooker and cook for about 60 minutes at 15 pounds pressure. Release steam, open cooker and add celery and carrots. Cook another 10 minutes at 15 pounds pressure.

### Swiss Steak

1 3/4 lbs. round steak  
3 tbsp. butter or margarine  
Flour to be pounded into meat  
2 tbsp. flour for gravy  
2 tsp. onion, chopped  
1 tsp. salt  
1/8 tsp. pepper  
1/2 tsp. Worcestershire sauce  
1 cup water for gravy

Brown the chopped onion in the butter in an inset pan. Add meat and brown as well. Lift meat from the inset pan. Add 2 tablespoons of flour; brown. Add 1 cup water; stir until thoroughly blended, making a rather thick gravy. Add seasonings and meat. In the bottom of the pressure cooker put water to just below height of rack, and the pan of steak. Cook for 40 minutes at 15 pounds pressure. Reduce steam to zero; remove meat and serve.

### Rolled Beef Roast

Sear the roast (5 pounds) on all sides in fat or drippings in the bottom of the cooker. When partially seared, dredge with flour and finish browning. Add salt, pepper and such seasonings as desired. Put roast on rack and add 1/2" of water. Seal cooker and cook for 60 minutes at 15 pounds pressure. Let pressure condense slowly. Use liquid in bottom of cooker for gravy. For smaller roasts cook a shorter time.

### Chili Elegante

1 lb. ground beef  
2 onions, chopped  
2 tbsp. oil  
1 green pepper, sliced into strips  
2 cups diagonally sliced celery  
1 clove garlic, minced  
1 (16 oz.) can kidney beans, undrained  
1 (4 oz.) can mushrooms, undrained  
2 (16 oz.) cans whole tomatoes  
1/2 cup red wine  
2 tsp. salt  
1-1/2 tbsp. chili powder  
Dash of cayenne pepper

Heat oil until hot; add beef and cook until browned. Add onion, celery, green pepper and garlic; saute lightly. Drain beans and mushrooms, reserving liquid; set beans and mushrooms aside. Add unused liquid, tomatoes, wine, chili powder, salt, and cayenne to beef mixture; stir well. Close cover of pressure cooker securely and cook 20 minutes at 15 lbs. pressure. Let pressure drop of its own accord. Add beans and mushrooms; heat to boiling. Serve hot. Makes 6-8 servings.

### Beef Stroganoff

1 lb. beef stew meat cut in 1" pieces  
1 tbsp. flour  
1 tbsp. oil  
1 4-oz. can mushrooms, drained (reserve liquid)  
1 onion, medium, sliced  
1 tsp. salt  
1/4 tsp. pepper  
Dash ground marjoram  
2 tsp. dry mustard  
3 tbsp. catsup  
1/2 cup dairy sour cream

Roll beef in flour. Brown in hot oil in cooker. Add enough water to reserved mushroom liquid to measure 3/4 cup. Use 1 1/2 cups for 6-8 qt. recipe. Add mushrooms, mushroom-water mixture and remaining ingredients except sour cream to cooker. Cover, when pressure gauge reaches 10 lbs., cook 20 minutes (or cook at 15 lbs. for 15 minutes). Cool cooker for 5 minutes, then release steam. Stir in sour cream; heat through. Serve with noodles. Makes 4 servings

### Barbecued Beef Short Ribs

3 lbs. beef short ribs, cut in pieces  
2 tbsp. bacon fat  
2 tbsp. onion, chopped  
1 tbsp. green pepper, chopped  
1 cup catsup  
1 tsp. salt  
1 tsp. celery seed  
2 tbsp. brown sugar  
2 tbsp. lemon juice  
2 tsp. dry mustard  
1 cup water

Brown short ribs in fat in cooker. Pour off excess fat. Mix remaining ingredients; pour over ribs. Cover, when pressure gauge reaches 10 lbs., cook 45-50 minutes (or cook at 15 lbs. for 35-40 minutes). Cool cooker for 5 minutes, then release steam. Remove ribs. Mix 2 tablespoons flour and 1/4 cup cold water for each cup liquid. Gradually stir into broth. Cook until thickened, stirring constantly. Makes 4 servings

# PRESSURE COOKING RECIPES

## Stuffed Green Peppers

4 green peppers  
3/4 lb. ground beef  
1/3 cup rice, cooked  
1 tsp. salt  
Dash pepper  
1 egg  
1/3 cup onion, chopped  
1 10 3/4-oz. can tomato soup  
3/4 cup water

Remove seeds and wash peppers. Mix beef, rice, salt, pepper, egg, onion and 1/3 cup soup. Stuff peppers lightly and place on rack in cooker. Top each pepper with 1 tablespoon soup. Mix remaining soup and water; pour into cooker. Cover, when pressure gauge reaches 10 lbs., cook 15 minutes (or cook at 15 lbs. for 12 minutes). Turn off the heat source and wait for the steam gauge to read zero, then release pressure. Makes 4 servings

## Corned Beef and Cabbage

2 lbs. corned beef brisket  
1 1/2 cups water  
4 carrots  
4 potatoes, medium, cut in halves  
4 cabbage, wedges  
4 onion, small, whole

Place corned beef in cooker. Add water. Cover, when pressure gauge reaches 10 lbs., cook 60 minutes (or cook at 15 lbs. for 45 minutes). Cool cooker for 5 minutes, then release steam. Add remaining ingredients. Cover, when pressure gauge reaches 15 lbs., cook 5-8 minutes. Reduce pressure instantly. Makes 4 servings

## Whole Ham

A whole ham is very easily prepared in the pressure cooker. Pour 1/2" of water in the bottom of cooker. Place ham (about 10 pounds) on the rack. Cover. Cook about 50 minutes at 15 pounds pressure. A nice flavor is added to the ham by crumbling up three ginger snaps in kettle in which ham is cooking.

Remove ham from cooker. Remove the outside skin, sprinkle ham with brown sugar and fine cracker crumbs and stick cloves into ham. Brown in oven.

## Stuffed Round Steak

1 1/2 lbs. round steak, cut thin  
3 tbsp. butter or margarine  
2 tsp. salt  
1/4 tsp. pepper  
2 tbsp. minced onion  
1 cup hot water  
1 cup cracker or bread crumbs  
1/3 cup butter or substitute  
1/3 cup boiling water  
1 tsp. salt  
1/2 tsp. pepper

Make a dressing of crumbs, melted butter, water and seasoning. Season steak with salt and pepper, spread on dressing, roll and tie. Put butter in cooker and brown onions, roll steak in flour and brown with onions. Add 1/2" of hot water and cover cooker. Cook for 15 minutes at 15 pounds pressure.

## Scalloped Potatoes and Ham

3 potatoes, medium  
3 tbsp. flour  
3/4 tsp. salt  
1/4 tsp. pepper  
1 cup ham, cooked, cubed  
2 tbsp. onion, chopped  
2 tbsp. butter or margarine  
1 cup milk

Cut potatoes in thin slices (about 3 cups). Mix flour, salt and pepper. In greased 1 1/2 quart metal or heat proof glass bowl, arrange 3 layers of potatoes and ham, sprinkling each layer of potatoes with part of flour mixture and dotting with butter. Pour milk over potatoes and cover bowl with foil. Pour 1 1/2 cups water in cooker. Place bowl on rack in cooker. Cover, when pressure gauge reaches 15 lbs., cook 18-20 minutes. Cool cooker for 5 minutes, then release steam. Garnish potatoes, if desired, with paprika, chopped parsley or grated Cheddar cheese. Makes 4 servings

## Chop Suey

1 lb. pork and veal stew meat cut in 1" pieces  
1 tbsp. oil  
1 cup celery, cut in 1 in. pieces  
2 onions, medium, sliced  
1/2 tsp. salt  
Dash pepper  
1 cup water  
1 1-lb. can bean sprouts, drained  
1/4 cup soy sauce  
3 tbsp. cornstarch  
1/4 cup water

Brown meat in oil in cooker. Add celery, onions, salt, pepper and water. Cover, when pressure gauge reaches 10 lbs., cook 10 minutes (or cook at 15 lbs. for 8 minutes). Cool cooker for 5 minutes, then release steam. Add bean sprouts. Simmer uncovered 3 minutes. Add soy sauce. Mix well. Mix cornstarch and water in separate bowl. Gradually stir into pork mixture. Cook until thickened, stirring constantly. Serve with rice. Makes 4 servings

## Spiced Pork Roast

4 lbs. fresh pork loin  
1 tbsp. mixed pickle spice  
Salt and pepper  
3 tbsp. butter or drippings  
1 onion  
Flour

Sprinkle the meat with salt and pepper and dredge with flour. Put butter in the bottom of cooker and brown meat on all sides. Slice onion over the meat; add 1/2" hot water and spices tied in a cheesecloth. Seal cooker and cook 45 minutes at 15 pounds pressure.

## Leg of Lamb (5 Pounds)

Sprinkle meat with salt and pepper and roll in flour. Brown meat in bottom of cooker. Add 1/2" hot water in bottom of cooker and cover. Cook for 50 minutes at 15 pounds pressure. If you have the lower end of the bone broken, it makes it easier to brown meat in cooker.

# PRESSURE COOKING RECIPES

## Veal Loaf

*1½ lbs. ground veal  
1 cup ground ham, raw or cooked  
2 eggs  
1 cup dried bread crumbs  
½ teaspoon nutmeg  
Grated rind of ¼ lemon  
Juice of 1 lemon  
1 cup milk  
1 tbsp. butter, melted  
1½ tsp. salt  
¼ tsp. pepper  
1 pint strained tomato juice*

Mix all ingredients except the tomato juice in the order given. Place loaf in a separate pan or dish; pour the tomato juice over the loaf. Place water in bottom of cooker almost to top of rack and put meat in pan on the rack. Seal cooker by fastening cover properly. Cook for 30 minutes at 15 pounds pressure.

## Veal Roast

*3 lbs. veal  
½ bay leaf  
1 small onion  
2 tbsp. flour  
2 tbsp. catsup  
1 tsp. salt  
1 tbsp. drippings  
¼ cup water in pan*

Brown roast and onion in drippings in a pan. Mix seasonings and ¼ cup water and add to pan. In bottom of cooker put water to just below top of the rack and pan containing the roast. Cook for 30 minutes at 15 pounds pressure. Turn off heat and allow pressure to return to zero before removing the selective Pressure Regulator Weight.

# Seafood

## Fried Perch

The fine bones of the fish are softened by the high temperature of pressure cooking. Roll 6 cleaned perch in salted flour and brown quickly on the bottom of cooker, in hot oil or drippings. Remove to a pan and then place pan inside cooker. Add water to cooker and cook for 15 minutes at 15 pounds pressure. Serve with egg sauce.

## Lobster

Plunge lobster into boiling water to cover. Remove lobster and place on rack in cooker with 2 cups boiling water, salted. Place cover on cooker. Allow steam to flow from Vent Pipe for at least two minutes, to remove all air from cooker. Process for ten minutes at 10 pounds pressure. Reduce pressure gradually and remove lobster as soon as gauge has returned to zero. Plunge lobster into cold water but remove immediately. Crack shell; clean and serve.

# Fowl

## Stewed Chicken

Place cut up stewing chicken into pressure cooker, adding ½ teaspoon salt and ⅛ teaspoon pepper. Cover with boiling water and place cover on cooker. Cook 40 minutes at 15 pounds pressure. Release steam slowly. Gravy may be made by adding ¼ cup of flour diluted with enough cold water to pour easily.

## Fried Chicken

Cut up chicken. Season with salt and pepper and roll pieces in flour. Brown in oil or drippings in bottom of cooker. Adding four thin slices of bacon cooked at the same time will give a good flavor. Add ½" boiling water and seal the cooker. If cooking an older chicken, cook for 40 minutes at 15 pounds pressure; if cooking a younger chicken, 10 to 15 minutes.

## Browned Chicken Fricassee

*One 4½ or 5 lb. chicken  
4 tbsp. flour  
3 tsp. salt  
⅛ tsp. pepper  
4 tbsp. butter or margarine  
4 cups cold water  
1 large, peeled, quartered onion  
Celery tops*

Cut up chicken. Dredge each piece with some of the flour combined with 2 teaspoonfuls of salt and pepper. Brown on all sides in hot butter. Add cold water, onion, a few celery tops, and the remaining 1 teaspoon of salt. Place cover on cooker and cook 40 minutes at 15 pounds pressure. Release steam slowly. Move chicken to a hot platter and cover with a gravy made as follows:

Measure the chicken stock, having first skimmed off any surface fat. Add 2 tablespoons flour mixed to a smooth paste in 3 tablespoons cold water for every cupful of chicken stock. Simmer 5 minutes while stirring; add more salt and pepper if needed. Serves 6.

# PRESSURE COOKING RECIPES

## Roast Fowl

Prepare bird for roasting, rinsing inside and outside with cold water, and wipe dry with clean cloth. Stuff with desired dressing. The giblets may be cooked separately in bottom of cooker or may be added to the dressing as desired. If giblets are left whole, add  $\frac{1}{2}$ " of boiling water and seasoning. Place rack over giblets and put chicken on rack. Cover, leaving selective Pressure Regulator Weight off until steam escapes freely. Replace selective Pressure Regulator Weight and bring to 15 pounds pressure. For a young chicken, retain this pressure for 20 minutes; for a chicken one year old, retain pressure for 25 minutes; and for an older chicken, 35 minutes. Turn off heat and allow hand on dial to return to zero. Put chicken in pan and brown in oven for a few minutes. While chicken is browning, make your gravy in the pressure cooker.



## Soups

You will enjoy soups cooked in the pressure cooker. Original flavors are retained because of the short cooking period.

NOTE: DO NOT COOK SPLIT PEA SOUP IN YOUR COOKER, AS IT WILL FOAM, FROTH AND SPUTTER. THIS ACTION MAY CLOG THE VENT PIPE.

### Cream of Potato Soup

Cut potatoes in slices, add a large slice of onion and cook for 5 minutes at 15 pounds pressure in  $\frac{1}{2}$ " of boiling water. Mash and add thin white sauce, season. Chopped parsley may be added just before serving.

### Cream of Celery Soup

Dice 1 cup celery and cook in  $\frac{1}{2}$ " boiling water for 10 minutes at 15 pounds pressure. Add 2 cups of thin white sauce; season and serve.

### Vegetable Soup

1 cup lima beans  
1 small stalk celery  
2 quarts of water  
3 carrots  
2 onions  
2 tbsp. barley  
3 potatoes  
1 tsp. salt  
2 cups tomatoes, either  
canned or fresh  
1 small soup bone

Dice vegetables and place in clear, cold water. Place soup bone in cooker; cover with water. Cover cooker and cook at 15 pounds pressure for 15 minutes. Place diced vegetables in cooker and cook together for 10 minutes.

### New York Clam Chowder

4 tbsp. butter or margarine  
4 slices bacon, cut in pieces  
1 Spanish onion, minced  
2 potatoes, peeled and diced  
2 green peppers, seeded and chopped  
4 stalks celery, chopped  
2 cloves garlic, minced  
1 qt. clam broth or fish stock  
 $\frac{1}{2}$  cup dry red wine  
2 cups canned peeled tomatoes,  
chopped  
1 tsp. oregano  
 $\frac{1}{2}$  tsp. thyme  
2 cups minced clams, fresh or  
canned  
Melt butter in cooker. Add bacon,  
onion, potatoes, peppers, celery and  
garlic; cook, stirring, until onion is  
translucent. Add clam broth, wine,  
tomatoes, oregano and thyme. Cover,  
cook 7 minutes at 15 lbs. pressure.  
Remove from heat, cool 5 minutes  
and reduce pressure slowly. Stir in  
clams and heat through. Season to  
taste with salt and pepper. Serve with  
oyster crackers if desired. Serves 6

# Fruits & Vegetables

## Compote of Dried Fruits

1 lb. (about 2½ cups) dried fruits  
(prunes, peaches, apricots, apples)

2 cups water

1 tbsp. cornstarch

½ cup sugar

Pinch salt

Juice and grated peel of 1 lemon

Put your favorite assortment of dried fruits in cooker and add water. Cover, place over high heat until pressure gauge reaches 15 lbs. Reduce heat and cook for 10 minutes at 15 pounds pressure. Reduce pressure instantly. Transfer fruit to a serving dish using a slotted spoon. Mix cornstarch with 1 tbsp. water and stir into cooker. Add sugar, salt, lemon juice and lemon peel. Cook, stirring, until sauce is clear and thickened. Pour over fruit. Serves 6

## Acorn Squash

2 acorn squash

4 tablespoons butter or margarine

4 tablespoons brown sugar

1 teaspoon salt

¼ teaspoon pepper

Juice of ½ lemon

Wash squash; cut in half lengthwise and discard pith and seeds. Fill hollows with butter and brown sugar; season with salt, pepper and lemon juice. Pour 2 cups water into cooker and place squash halves, cut side up, on rack in cooker. Cover, place over high heat until pressure gauge reaches 15 lbs. Reduce heat and cook 6 minutes (or cook at 10 lbs. for 8 minutes). Serves 4

NOTE: The cooking time for acorn squash will vary according to its size and maturity.

# Desserts

In steaming breads and puddings, use molds large enough to allow for expansion. Coffee cans are good. Fill no more than ⅔ full.

## Chocolate Bread Pudding

1½ squares chocolate

2 cups cold milk

2 well-beaten eggs

½ tsp. salt

¾ cup sugar

½ tsp. vanilla

2 tbsp. butter or margarine

½ cup bread crumbs

Add grated chocolate to cold milk and heat until chocolate is melted. Add salt, sugar and vanilla to beaten eggs; mix until well blended. Add to hot chocolate mixture. Melt butter in pan. Put bread crumbs in buttered pan and stir until crumbs are well coated. Add chocolate mixture and mix with bread crumbs. Place pan on rack in cooker. Cover and cook for 10 minutes at 10 pounds pressure.

## Boston Brown Bread

2 cups graham flour

1 cup cornmeal

1 tsp. salt

1 tsp. soda

½ cup molasses

1½ to 2 cups buttermilk

¼ cup shortening (melted)

¾ cup seeded raisins

Measure and sift dry ingredients. Mix molasses and buttermilk until well blended, then add shortening. Add liquid to dry ingredients, mixing quickly. When well mixed, add raisins and mix just enough to distribute raisins. Put into greased molds, filling about ⅔ full. Place greased covers on, having some punctured to allow escape of steam.

Place molds on rack in cooker with 3 or 4 cups of water. Cover cooker, leaving selective Pressure Regulator Weight off. Steam for about 15 minutes. Replace selective Pressure Regulator Weight on Vent Pipe and cook one hour at 15 pounds pressure. Release steam at once. Place bread in the oven for a few minutes to dry the outside.

# PRESSURE COOKING RECIPES

## White Fruit Cake (9 Pound Cake)

1 lb. white Sultana raisins  
2 lbs. whole candied cherries  
2 lbs. broken candied pineapple  
2 $\frac{1}{4}$  lbs. shelled pecans  
7 eggs, separated  
 $\frac{1}{2}$  lb. butter or substitute  
1 cup grape juice  
1 $\frac{1}{4}$  cups white sugar  
2 tsp. nutmeg  
 $\frac{1}{2}$  tsp. salt  
4 $\frac{1}{2}$  cups sifted flour

Cream butter and sugar; add egg yolks (beaten separately), and beat again. Add 3 $\frac{1}{2}$  cups of flour, alternating with grape juice; mix well. Sift the other cup of flour over the fruit and nuts. Mix fruit and nuts into dough. Lastly, fold in well beaten whites of eggs.

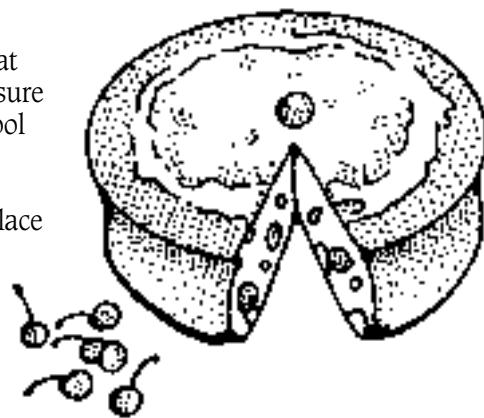
Use No. 3 sanitary tin cans lined with greased paper. Fill to desired thickness—cake rises very little. Cover cans and place on bottom of cooker. Put about  $\frac{1}{4}$ " of water in bottom of cooker. Cover and steam with selective Pressure Regulator Weight off for about 30 minutes. Place selective Pressure Regulator Weight on Vent Pipe and cook for 35 minutes at 5 pounds pressure. Then raise temperature to 10 pounds and cook for 40 minutes. Release pressure very slowly. Allow the cakes to stand in cooker for one-half hour. Remove from cooker and cool.

## Dark Fruit Cake

1 lb. butter or substitute  
1 lb. light brown sugar  
9 eggs  
4 cups flour  
 $\frac{3}{4}$  tsp. cloves  
 $\frac{3}{4}$  tsp. nutmeg  
 $\frac{3}{4}$  tsp. mace  
2 tsp. cinnamon  
1 tsp. soda  
 $\frac{1}{4}$  cup milk  
1 lb. currants  
3 lbs. raisins  
 $\frac{1}{2}$  lb. almonds  
 $\frac{1}{2}$  lb. citron  
 $\frac{1}{2}$  lb. candied orange peel

Clean raisins and currants. Blanch almonds and cut them. Heat in a moderate oven until a delicate brown. Cut orange and citron in small pieces. Cream butter and sugar until thoroughly blended. Add well beaten egg yolks to butter and sugar mixture, cream well. Add well-beaten egg whites. Sift one-half the flour over the fruit and mix until fruit is well separated. Sift the remaining flour, soda, spices and salt together and add to cake batter, alternating with the milk. Add the fruit and nuts and mix thoroughly. Line cake pans with waxed paper and fill with fruit batter.

Cover the pans with several thicknesses of waxed paper so the tops of the cakes will be kept dry. It is best to tie the paper in place so it will not slip off. Place 2 $\frac{1}{2}$  cups of water in the bottom of the cooker. Place pans on rack in cooker one above the other. Cover and cook for one hour and fifteen minutes, the first 45 minutes at 10 pounds pressure and the last 30 minutes at 15 pounds pressure. Release pressure very slowly, allowing cooker to cool before removing cover. Remove cakes from cooker and remove waxed paper from tops of pans. Place in slow oven and bake for about 12 minutes to dry out the cake.



# CANNING INSTRUCTIONS

## Two Types Of Food — Two Canning Methods

Foods are considered either acid or low-acid, each of which requires a different canning method. Acid foods, which include most fruits, tomatoes acidified with bottled lemon juice or citric acid, pickles, relishes, chutneys, jams, jellies and preserves, may be safely processed using a hot water bath. (Figs are a low-acid fruit, but if acidified before canning, they may be safely processed in a hot water bath.) Low-acid foods such as meats, poultry, seafood, milk and vegetables *must be processed in a pressure canner.*

### HOT WATER BATH FOR ACID FOODS: FRUITS AND TOMATOES

To process fruits and tomatoes, use the pressure canner as a hot water bath. Place rack in bottom of pot. Arrange sealed cans or jars on rack. Add enough boiling water to completely cover jars by 1-2 inches. Put lid on pot, but leave the Selective Pressure Regulator Weight off so all the steam escapes through the Vent Pipe and no pressure builds up in the cooker.

The Models 910 and 915 can only process pint jars using the hot water bath method, as quart jars are too tall.

Berries and grapes (hot pack) .....25 minutes  
Rhubarb (hot pack) .....20 minutes  
All other fruits (hot pack) .....30 minutes

Time given above is for quart jars, pint jars, No. 2 and No. 3 cans. Do not pressure cook cranberries or strawberries.

The USDA and the State Extension Services do not recommended 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 ten minutes.

Contact your county extension agent for further information on

processing tomatoes in a boiling water canner.

### PRESSURE CANNING FOR LOW-ACID FOODS: VEGETABLES, MEAT, POULTRY AND SEAFOOD

Pressure canning is the only safe method for canning meats, poultry, seafood and vegetables other than tomatoes.

Pour 1½" of water in cooker. Place sealed cans or closed jars on rack in pressure cooker. Stagger the top layer if there are two layers of cans or jars, using a rack between layers. Be sure

cooker doesn't boil dry when repeated batches of food are processed.

**Exhausting:** Place lid on cooker, place pressure cooker over heat source on high heat and allow steam to escape from the Vent Pipe for 7 minutes before placing the Selective Pressure Regulator Weight on Vent Pipe. Be sure to check the recipe if you are canning food such as cereals, macaronis, spaghetti and noodles, which may specify medium heat at this time. If your recipe calls for cooking at 15 pounds, set Pressure Regulator Weight over Vent Pipe at

### Canning Terms

#### ACID FOODS.

Fruits, acidified tomatoes, pickles, relishes, chutneys, jams, jellies and preserves are acid foods — those foods with enough natural acid or enough additional acid (lemon juice or vinegar) to result in a pH of 4.6 or lower. Acid foods may be safely canned using a hot water bath method.

#### BOTULISM.

A deadly form of food poisoning caused by toxins produced by the growth of botulinus spores. For more on botulism and how to prevent it, see page 20.

#### BUCKLING.

This term applies to cans in which one or both ends have been permanently distorted by excess pressure in the can. Slack filling, sealing at too low a temperature, or too sudden of a release of pressure after cooking can all cause buckling.

#### HOT-PACK METHOD.

Filling hot jars with hot precooked food before processing.

#### HOT WATER BATH.

The canning method used to process acid foods. See page 18.

#### HEADSPACE.

Headspace is the distance between the food in the can and the cover of the can. Leave at least ½" headspace to most canned foods. Failure to leave headspace may cause bulging of the cans due to over filling.

#### LOW-ACID FOODS.

Foods with little natural acid which have a pH above 4.6. This includes meats, poultry,

seafood, milk, vegetables and some varieties of tomatoes. Low-acid foods must be processed in a pressure canner.

#### PRESSURE CANNING.

The canning method used to process low-acid foods. See page 18.

#### RAW-PACK METHOD.

Filling hot jars with raw, unheated food prior to processing.

#### SWELL.

Swell is the commercial term given to cans whose ends have been distended or swelled by the gas which has been generated by spoilage of the food in the can. Any can with ends swelled out should be thrown away as it is not fit for use, unless the can was filled too full or was not sealed while hot. See "Headspace."

#### VACUUM.

Vacuum as it applies to cans refers to a lower pressure within the container than on the outside. This higher pressure on the outside causes the ends of the cans to be held in a concave position. Vacuum is obtained by sealing the cans while they are hot. The condensation of the vapor in the headspace and the contraction of the gases and contents of the can upon cooling produces a partial vacuum in the can. Proper vacuum may be obtained by thorough pre-heating or exhausting just previous to closing. A can with a vacuum—that is, with the ends properly pulled in—is considered to contain good food. If the products start to spoil, gas is generated which releases the vacuum and causes the ends of the can to bulge.

# CANNING INSTRUCTIONS

the No. 15 hole. If only 10 pounds pressure is required, place No. 10 hole over Vent Pipe. After this is done, listen for the Pressure Regulator Weight to signal when correct pressure has been obtained. This signal will be escaping steam. When the correct pressure has been reached, the Pressure Regulator Weight will jiggle and sputter.

Possibly a few drops of water will trickle from the Pressure Regulator Weight. You now begin counting the processing/cooking time from this moment. Reduce the heat so that the Pressure Regulator Weight will jiggle only about one to four times a minute. Do not permit constant jiggling, for this will cause excessive loss of moisture. The occasional jiggle and the hissing sound indicate that you are maintaining the correct pressure. If the steam escapes in a steady stream after you've reduced the heat, nudge the control to set pressure Regulator Weight properly.

At the end of the processing time, turn off the heat source. If using cans, remove the selective Pressure Regulator Weight to release steam quickly. If using jars, allow cooker to cool by itself; do not remove the selective Pressure Regulator Weight until steam pressure gauge registers zero. This could take 15 minutes or more. Remove the selective Pressure Regulator Weight slowly. After steam pressure gauge registers zero and selective Pressure Regulator Weight is removed, the cooker may be opened safely.

## Safety Tips For Home Canning

Home food preservation must be done with care to protect the quality and safety of the food. Jars or cans containing low-acid foods such as vegetables, meats, poultry and seafood must always be processed under pressure to prevent spoilage or food poisoning. The bacteria which cause botulism, a severe and potentially fatal form of food poisoning, are not killed by using the hot water

bath canning process. Low-acid foods must be processed under pressure at a temperature of 240°F (115.5°C) for the full recommended period of time.

To ensure the safety of the foods

you process at home, follow these precautions:

- Use only fresh food products.
- Keep all work surfaces, food and equipment clean.
- Make sure the pressure canner is

## Some Causes Of Spoilage

**FERMENTATION.** Any bulged can or can with a loose seal should be considered suspicious. Bulging is due to carbon dioxide gas produced from fermentation, although other bad smelling gases may be mixed with it. Fermentation results from under cooking or from the introduction of air through a leak. The product will smell sour, appear soft and discolored, and have an offensive odor.

**FLAT SOUR.** There is nothing about the outside appearance of a can to suggest flat sour spoilage. Flat sour food is typically soft and mushy, although it may sometimes appear firm. Flat sour foods smell and taste sour, a result of organisms (thermopiles) which develop best at lukewarm temperatures. To avoid flat sour spoilage, follow thorough processing times and temperatures, and work quickly while canning to avoid holding foods at lukewarm temperature.

Corn, peas, green beans, greens and asparagus are prone to flat sour spoilage. To avoid flat sour, follow these tips:

- Can only fresh products. The flat-sour germs may develop before the product is canned and all the cooking in the world won't destroy the sour flavor after it has developed. Two hours from the garden to jar is a good rule of thumb.
- Don't let pre-heated or scalded products stand at lukewarm temperature. Get them into the can quickly and have them as

hot as possible when they're put into the cans.

- Have the water boiling to avoid waiting too long for the temperature to come up after the cans are packed in the cooker.
- Don't try to can too much in one cooking.
- Keep burner at a relatively high temperature.
- Don't let cans stand after being packed or before putting them into the cooker.
- Don't pack cans too tightly; this ensures the heat will get to the center of the can.
- Cool quickly. Don't stack cans while cooling.
- Store in a cool place.

**BOTULINUS.** This rarely occurs alone in canned food but is found in connection with other spoilage. A rank cheesy odor is typical of botulism in its well-developed stage. Discard without tasting all canned foods which show any signs of spoilage. This will minimize the risk of botulism poisoning, although the presence of this spoilage cannot always be determined by the appearance or odor of the food.

Botulinus spores are found in the soil, so thorough washing of all soil-contaminated products is a good precaution. Be careful not to under-process. Don't pack foods too tightly. Get the heat to the center of the can.

If you have too much spoilage, there is something wrong with your processing method.

# CANNING INSTRUCTIONS

in good working condition and that the steam pressure gauge is reading accurately.

- Pack and close food containers correctly.
- Process food at the recommended time and pressure.
- Test seals after cooling containers.
- Store canned foods in a cool, dry place.

## Check Product Before Eating

All canned foods should be carefully inspected before use. As an added safety precaution, boil low-acid foods in an open pan before eating. (Boil meats, poultry, seafood, corn and spinach for 20 minutes; other vegetables, 10 minutes.) This will destroy the botulism toxin, should any be present.

To ensure the safety of home-canned fish, insert a meat thermometer in the can or jar with the tip at the center of the fish. Cover loosely with foil and heat in a 350°F (180°C) oven until the thermometer registers 185°F (85°C). Let container stand at room temperature for 30 minutes until temperature is uniform throughout.

Don't ever taste food which you suspect to be spoiled. Never take a chance on slightly off food. Discard it.

## Detecting Spoilage

Immediately destroy any canned product you suspect has spoiled. Dispose of it where it won't be eaten by humans or animals. Discard the product if:

- the ends of the can are bulged or the seal on the jar is broken (test each can or jar by pressing the ends or lid; they should not bulge or snap back);
- the product contains gas bubbles or foam, or liquid squirts out when can or jar is opened;
- product looks soft, mushy, slimy, moldy or, in the case of meat,

- off-color;
- product smells spoiled when boiled (heat brings out the characteristic odor of spoiled food).

## Canning Jars

Mason-type jars specifically designed for home canning are best. Commercial mayonnaise jars may not seal and may break, especially in a pressure canner.

Canning jars come in a variety of sizes from half-pint jars to half-gallon jars. Pints and quarts are the most commonly used sizes. Processing times have not been developed for many foods in half-

pint, 12-ounce or one and one-half pint jars. If the recipe does not specify processing in one of these jars, process half-pint and 12-ounce jars for the same time as pints. Half-gallon canning jars are recommended only for very acid juices. The U.S. Department of Agriculture does not provide pressure canning timetables for half-gallon jars.

### HOME CANNING IS EASIER WITH

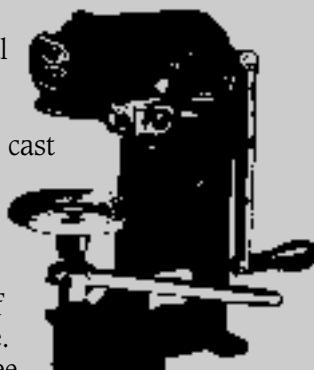
## THE ALL-AMERICAN AUTOMATIC MASTER CAN SEALER

For canning in tin cans, use an ALL-AMERICAN Automatic Master Can Sealer. The original Automatic Master Can Sealer is the best and most practical can sealer made for home use.

The Master Can Sealer frame is made of die cast aluminum. Perfectly cast and accurately machined, it's built tough for a lifetime of service.

The Master Can Sealer is simple and easy to operate. It's easily adjusted for different sizes of cans, making it economical to own and operate.

Before you buy any can sealer, be sure to see the ALL-AMERICAN can sealing equipment—a variety of sizes and styles are available to fit all home canning and community canning needs.



**THE AUTOMATIC MASTER CAN SEALER**  
No. 225—Equipped to seal No. 2 Cans.

**THE AUTOMATIC MASTER CAN SEALER, with Flywheel**  
No. 225-F—Equipped to seal No. 2 Cans.

Prices on additional SPECIAL EQUIPMENT to fit all sealer models, for sealing the Nos. 1, 2½, 3, 202, 208, 300, 301 and 303 diameter cans are available upon request. Be sure to state both the can diameter and height.

A SENIOR Can Sealer to seal cans up to the No. 12 size, and an Electric Model, to seal cans up to the No. 3 size, are also available.

**WRITE FOR PRICES AND DELIVERY INFORMATION.**

# PACKING CANS OR JARS

## Two Packing Methods

The **hot-pack** method is preferred for most foods, especially acid foods that are processed in a hot water bath. Bring food to a boil and simmer for a few minutes. Pack food loosely into hot jars along with any hot liquid as the recipe requires. Hot-packing shrinks food, removes air from its tissue, helps keep it from floating in jars, and lengthens a product's shelf life.

The **raw-pack** method requires packing unheated prepared food tightly into hot jars, then covering the food with hot liquid. Raw-packing is more likely to result in floating food than hot-packing. Air may be trapped in both the food and the jars, causing food to discolor during storage.

### Thermometer

Use a thermometer when canning meats or when instructions call for removing or exhausting air from cans or jars. With cans, the lid should not be placed on top until the contents are heated to at least 170°F (77°C). This is the minimum temperature needed to exhaust air properly so that a partial vacuum forms inside the can upon cooling.

### Adjustments For Altitude

The processing times and pressures given in this manual are for sea level (0-1000 ft.) If you live at an altitude of 2,000 feet or above, adjustments must be made if the food is to be processed properly.

If processing food under pressure, use the selective Pressure Regulator Weight 15# opening for the time specified on page 23.

If using the hot water bath method, add one minute for each 1,000 feet if total processing time is 20 minutes or less. Add two minutes for each 1,000 feet if time is more than 20 minutes.

### DIRECTIONS WHEN USING TIN CANS

For general home canning, plain finish "R" enamel cans be used. "R" enamel cans have an inside coating of enamel

intended primarily for the preservation of color in certain products. "C" enamel are used by commercial canners for certain products, and are not ordinarily available to the home canner. Follow instructions in each recipe as to the type of can to use, and unless otherwise stated in recipe, use plain cans.

### Lids And Can Sealers

Lids are furnished with either a paper gasket or with a semi-vulcanized rubber gasket called Gold Seal. Both lids are satisfactory providing the sealer roll has been adjusted to that particular cover. The paper gasket cover will stand a little looser adjustment than will the rubber compound cover.

Inspect cans, lids and gaskets to be sure they are perfect. Discard cans that are badly bent, dented or rusty. Discard lids with damaged gaskets. Wash cans in clean hot water just before use. Drain upside down. Do not wash lids, as washing may damage the gaskets. If lids have become soiled, rinse them with clean water or wipe with a damp cloth when ready to place on cans.

Check to see that your can sealer is in good working order. Test by sealing a can containing a small amount of water. Submerge the sealed can in boiling water for a few seconds. If air bubbles rise from around the can, the seam is not tight. Readjust.

### Exhaust Excess Air

Exhaust or drive out the excess air in the can by heating the contents to a minimum of 170°F (77°C). The product may already be that temperature if the hot-pack method is being used. Place open cans in pot; add boiling water to within 2" of the top of cans. Boil until the temperature of the food in the center of the can reads at least 170°F. This may take more than an hour if the raw-pack method is used.

Wipe off the rim of the can, place lid on can and seal at once, before the contents of the can cool.

Check to see the sealing rolls of your sealer are properly adjusted before sealing cans. For safety's sake,

test a few cans from each batch for leaks by plunging hot cans into cold water. Air bubbles indicate an imperfect seal.

### Cooling Cans After Processing

Tin cans should be removed from the cooker immediately after processing and placed in cold water. This stops the cooking and prevents discoloration of food. Change water frequently for fast cooling. Remove cans from water while they are still warm so they will air dry. To allow for air circulation, do not stack cans directly on top of one another.

A variety of canning problems can be traced to delayed cooling, such as flat sour in asparagus, beans, corn, spinach and peas; flavor and color deterioration in fruits and tomatoes; scorched flavor in tomatoes, corn, and sweet potatoes; and darkening of corn and kraut.

### Testing The Seal

Check containers for leaks when thoroughly cool—about 12 hours. Examine seams and seals carefully on all cans. Can ends should be almost flat, with a slight inward curve. Occasionally, a can packed too full will bulge at the ends. Set it aside and use it within a few days so it doesn't get mistaken for a can that has bulged from spoilage during storage.

### DIRECTIONS WHEN USING GLASS JARS

Inspect jars for chips in the rim and hairline cracks and discard damaged ones. Inspect metal rings and discard any with dents or rust. Wash jars, metal screw bands and lids in hot soapy water. Rinse. Place jars upside down on a clean, dry cloth or leave them in the dishwasher until needed. Some metal lids with sealing compound may need to be boiled or held in boiling water for a few minutes before use. Follow manufacturer's directions. Do not reuse flat metal lids.

### Recommended Jars and Lids

Regular and wide-mouth Mason-type, threaded, home-canning jars

# PACKING CANS OR JARS

with self-sealing lids are the best choice. With careful use and handling, Mason jars may be reused many times, requiring only new lids each time. When jars and lids are used properly, jar seals and vacuums are excellent and jar breakage is rare.

## Jar Cleaning

Before every use, wash empty jars in hot water with detergent and rinse well by hand, or wash in a dishwasher. Unrinsed detergents may cause unnatural flavors and colors. These washing methods do not sterilize jars. Scale or hard-water films on jars are easily removed by soaking jars several hours in a solution containing 1 cup of vinegar (5 percent acidity) per gallon of water.

## Sterilization of Empty Jars

All jams, jellies, and pickled products processed less than 10 minutes should be filled into sterile empty jars. To sterilize empty jars, put them right side up on the rack in a boiling-water canner. Fill the canner and jars with hot (not boiling) water to 1 inch above the tops of the jars. Boil 10 minutes at altitudes of less than 1,000 ft. At higher elevations, boil 1 additional minute for each additional 1,000 ft. elevation. Remove and drain hot sterilized jars one at a time. Save the hot water for processing filled jars. Fill jars with food, add lids, and tighten screw bands.

Empty jars used for vegetables, meats, and fruits to be processed in a pressure canner need not be presterilized. It is also unnecessary to presterilize jars for fruits, tomatoes, and pickled or fermented foods that will be processed 10 minutes or longer in a boiling-water canner.

## Lid Selection, Preparation, and Use

The common self-sealing lid consists of a flat metal lid held in place by a metal screw band during

processing. The flat lid is crimped around its bottom edge to form a trough, which is filled with a colored gasket compound. When jars are processed, the lid gasket softens and flows slightly to cover the jar-sealing surface, yet allows air to escape from the jar. The gasket then forms an airtight seal as the jar cools. Gaskets in unused lids work well for at least 5 years from date of manufacture. The gasket compound in older unused lids may fail to seal on jars.

Buy only the quantity of lids you will use in a year. To ensure a good seal, carefully follow the manufacturer's directions in preparing lids for use. Examine all metal lids carefully. Do not use old, dented, or deformed lids, or lids with gaps or other defects in the sealing gasket.

After filling jars with food, release air bubbles by inserting a flat plastic (not metal) spatula between the food and the jar. Slowly turn the jar and move the spatula up and down to allow air bubbles to escape. Adjust the headspace and then clean the jar rim (sealing surface) with a dampened paper towel. Place the lid, gasket down, onto the cleaned jar-sealing surface. Uncleaned jar-sealing surfaces may cause seal failures.

Then fit the metal screw band over the flat lid. Follow the manufacturer's guidelines enclosed with or on the box for tightening the jar lids properly.

Do not retighten lids after processing jars. As jars cool, the contents in the jar contract, pulling the self-sealing lid firmly against the jar to form a high vacuum.

If rings are too loose, liquid may escape from jars during processing, and seals may fail. If rings are too tight, air cannot vent during processing, and food will discolor during storage. Over tightening also may cause lids to buckle and jars to break, especially with raw-packed, pressure-processed food.

## Checking the Seal

Jars with flat metal lids are sealed if the lid has popped down in the center, the lid does not move when pressed down, and tapping the center of the lid with a spoon gives a clear ringing sound. A dull sound, however, does not always indicate a poor seal.

## Poor Seals

If a jar or can is not sealed, refrigerate contents and use or reprocess within 24 hours of the original processing. Process for the full time recommended. Quality of the food will not be as good after reprocessing.

Do not open and refill jars that have lost liquid during processing. Loss of liquid does not cause food to spoil; however opening would contaminate the sterile contents.

## Labeling Cans And Jars

Wipe containers off after they are cool. In labeling cans, use paste on selvage ends of the label, keeping it off of the tin, as this sometimes causes rust. Label with the date and contents of the container, particularly if some batches were packed differently — without salt, for example. If you canned more than one lot in one day, add a lot number.

## Storing Cans And Jars

Screw bands are not needed on stored jars. They can be removed easily after jars are cooled. When removed, washed, dried, and stored in a dry area, screw bands may be used many times. If left on stored jars, they become difficult to remove, often rust, and may not work properly again. Store cans and jars in a cool, dry place. Exposure to heat, freezing temperatures or light decreases the quality and shelf life of canned food.

Freezing may damage the seal so that spoilage begins. In an unheated storage area, cover jars and cans with a clean, old blanket, or wrap them in newspapers.

For best eating quality and nutritive value, use canned goods within one year.



# ALTITUDE ADJUSTMENTS FOR CANNING

When canning in an area which is 2,000 feet or less above sea level, process foods at required pressure and time period as specified in the recipe.

**If canning in an area which is over 2,000 feet above sea level, process at 15 pounds of pressure only, no matter what the recipe calls for, and for the**

**time period specified below.** All times below are at 15 pounds of pressure for jars up to one-quart unless specified. Do not can in half-gallon jars.

Times listed are minutes to process at 15 pounds of pressure for the altitudes listed.

	Above 2,000 feet but below 3,000 feet	Above 3,000 feet but below 7,000 feet	ALTITUDE Above 7,000 feet
Asparagus	15	25	35
Beans, lima	30	60	85
Beans, snap	15	30	45
Beef	50	90	135
Beets, sliced or whole	15	30	45
Carrots	15	30	45
Clams, littleneck*	25	50	75
Corn, whole kernel	50	90	135
Crab meat*	25	50	75
Fish	80	115	155
Fruits	-	-	-
Game foul, with bone	30	60	85
Game meat	50	90	135
Greens, all varieties	35	65	95
Lamb	50	90	135
Lobster†	35	65	95
Mushrooms*	20	40	60
Okra	15	30	45
Okra and tomatoes	15	30	45
Peas, black-eyed	30	60	85
Peas, green	30	60	85
Pork	50	90	135
Potatoes, new and whole	20	40	60
Potatoes, sweet	50	90	135
Poultry, with bone	30	60	85
Salmon*	80	115	155
Shrimp*	20	40	60
Squash, cubed	20	40	60
Tomatoes	-	-	-
Tuna*	80	115	155
Veal	50	90	135

\*Use only 1/2-pint or 1-pint jars

†Use only 1/2-pint jars

# MEAT TIMETABLES AND CANNING INSTRUCTIONS

Directions for canning cut-up meat applies to beef, veal, pork, lamb, mutton, and meat from large game animals.

Use only good quality meat. It is essential to use absolutely fresh meat from animals that are healthy and have been butchered and handled in a sanitary manner.

If meat must be held longer than a few days, freeze it. Store frozen meat at temperatures of 0°F (-18°C) or lower until canning time. Cut or saw frozen meat into pieces of desired size. If frozen meat is thawed before canning, thaw it in a refrigerator at a temperature of 40°F (4°C) or lower until most of the ice crystals have disappeared.

## Clean Equipment Before Canning Meat

When canning meat, take special care to keep all utensils and equipment as clean as possible. Scrub pans, knives and kitchen tools in hot

soapy water and rinse well with boiling water.

Tender cuts of meat can be canned in large pieces; less tender cuts and small pieces are good candidates for stew meat or ground meat. Bones are good for soups. Meat can be raw-packed or cooked and hot-packed as plain or rolled roasts, steaks, soups and stews, meat loaf, hash, chili or mincemeat.

Do not use flour on meat or in gravy when it is to be canned. Flour forms a coating of starch which makes sterilization difficult. For a thick gravy, add flour after jar or can is opened for use.

Always pack liver separately, as it will flavor everything else in the container.

width of the jar or can. Leave  $\frac{1}{2}$ " headspace at the tops of cans, 1" at the tops of jars. Salt can be added to meat for flavor, if desired. Instructions are included for canning ground meat, sausage, corned beef and stew.

## Hot-Pack

Meat may be cooked to 150°F and hot-packed loosely in containers, leaving appropriate headspace in cans and jars as indicated in Special Instructions, as headspace varies by item. Fill can or jar with boiling broth, once again allowing for appropriate headspace.

Salt can be added to meat for flavor, if desired. Instructions are included for canning ground meat, sausage, corned beef and stew.

## Raw-Pack

Slide raw strips of meat into cans or jars with grain of meat running the length of the container. Thickness of strips may vary from 1-2" to the

U.S. DEPT. OF AGRICULTURE DOES NOT PROVIDE PRESSURE CANNING TIMETABLES FOR HALF-GALLON JARS.

MEAT	SPECIAL INSTRUCTIONS	PROCESSING TIMES IN MINUTES			
		CANS #2½ #2 & #3	JARS pint	pint	quart
Roast Beef, Pork, Mutton, Lamb, or Kid Veal	Cut the meat so the muscle fiber will run lengthwise in the container. Wipe with a damp cloth. Heat 3 tablespoons of oil and sear the roast on all sides. Season to taste. Add 1 cup boiling water to the pan juices, and set meat in a hot oven to brown. Roast until meat is partly done (it should not be red in center). Cut the meat into small cubes, strips or chunks. Pack meat in cans to within $\frac{1}{2}$ " of top (1" in jars). Add the pan liquids with some boiling water to $\frac{1}{4}$ " of top of can (1" for jars). Add 10 minutes to processing time if meat is very fat.	65	90	75	90
Soup Stock	Prepare as if for serving. Boil until concentrated enough to jell when cold. Pour into containers boiling hot. If a clear soup is desired, the stock may be strained before canning. 1" headspace. Do not use deer bones.	20	25	20	25

# MEAT TIMETABLES AND CANNING INSTRUCTIONS

U.S. DEPT. OF AGRICULTURE DOES NOT PROVIDE PRESSURE CANNING TIMETABLES FOR HALF-GALLON JARS.

MEAT	SPECIAL INSTRUCTIONS	PROCESSING TIMES IN MINUTES			
		CANS		JARS	
		#2	& #3	pint	quart
Process at 10 pounds of pressure up to 1000 ft.; 15 pounds over 1000 ft.					
Beef Steak	Cut sirloin of beef into suitable pieces for steak. Wipe with a damp cloth. Sear quickly on both sides, season to taste, then brown nicely. Pack in containers and fill with pan juices and boiling water. If desired, nicely browned sliced onions, or small boiled and browned Irish potatoes may be packed in with the meat.	65	90	NA	NA
Beef Stew	See recipe on page 39. If using your own recipe, remember not to thicken gravy with flour, as this makes sterilization difficult. Pack hot into hot jars.	65	90	75	90
Hamburger Steak	Run the beef through the meat grinder twice. Season to taste and shape into patties. Fry lightly and quickly in hot grease until nicely browned. Hot pack with 1" headspace.	65	90	75	90
Bologna Style Ring Sausage	Prepare as if for serving. Cut into can lengths, pack, and add the hot liquid in which the sausages were cooked.	65	90	NA	NA
Beef Loaf	Prepare from your recipe. Pack raw into #2 or #3 cans to top of can. Remember to exhaust can before sealing. Recipe fills 6 #2 cans. Seal very hot.	75	90	NA	NA
Hash	Hash is one of the most convenient foods which can occupy the pantry shelf. Prepare exactly as for serving. Fill into cans as hot as possible. We suggest #2 cans. Seal very hot.	75	90	NA	NA
Corned Beef	When ready to can, place the meat in kettle and cover with cold water. Bring slowly to a boil; simmer for 1 hour. Cut in container-sized pieces. Return soup in which the meat was cooked to stove and season with bay leaves, cloves, and nutmeg. Pack meat in plain cans and cover with seasoned soup, to which some gelatin dissolved in cold water has been added. Exhaust 5 min.	65	90	NA	NA
Boiled Tongue	Clean thoroughly, salt and smoke lightly, or rub heavily with salt and leave standing with salt sprinkled over it for 8-10 hours. Then boil until done; remove skin, and pack in containers hot with a little soup stock or meat jelly added. Add broth to 1" headspace.	75	90	75	90
Liver, fried	Brown liver in fat (do not flour). Season with salt. Pack hot, adding about 2 tablespoons of pan juices. Add liquid to 1" headspace.	45	50	75	90

# MEAT TIMETABLES AND CANNING INSTRUCTIONS

U.S. DEPT. OF AGRICULTURE DOES NOT PROVIDE PRESSURE CANNING TIMETABLES FOR HALF-GALLON JARS.

MEAT	SPECIAL INSTRUCTIONS	PROCESSING TIMES IN MINUTES			
		CANS		JARS	
		#2	& #3	pint	quart
Process at 10 pounds of pressure up to 1000 ft.; 15 pounds over 1000 ft.					
Liver Sausage	Prepare from your own recipe. Pack hot into containers and fill with the hot water in which the sausages were boiled.	65	90	NA	NA
Pigs' Feet	Use enamel cans. Prepare from your own recipe. Reheat to boiling point and pack hot in inside-lacquered tin cans.	80	90	NA	NA
Heart (Beef or Hog) (Must be sliced or in cubes.)	Rinse in cold water and remove all portions unfit for use. Put in a stew kettle, cover with water, and boil 15 minutes. Pack into containers and cover with the boiling hot cooking broth.	65	80	75	90
Chops (Pork, Lamb)	Same as Beefsteak. If bone is left in when packed, add 10 minutes to the processing time.	65	90	NA	NA
Pork Tenderloin (Must be sliced or in cubes.)	Same as Roast Beef.	65	90	75	90
Pork Sausage	Prepare as if for serving. Can the same as for Hamburger Steak. A small amount of brown gravy made with boiling water and the brown parts left in the frying pan may be added.	65	90	75	90
Spareribs	Roast as for serving. Season and brown nicely. Cut down the inside of each rib and remove the rib bone. Cut the meat into serving size pieces and pack. Cover with pan drippings mixed with hot water.	65	90	75	90

# POULTRY TIMETABLES AND CANNING INSTRUCTIONS

Directions for poultry apply to chicken, duck, goose, guinea, squab and turkey, as well as to domestic rabbits and small game animals.

Chicken may be cooked to taste before placing in cans or jars, or packed raw. Bone breasts and saw

drumsticks off short, but leave bones in other pieces. Place thighs and drumsticks around outside of container, skin side facing outward. Fit breasts and other small pieces into the center.

U.S. DEPT. OF AGRICULTURE DOES NOT PROVIDE PRESSURE CANNING TIMETABLES FOR HALF-GALLON JARS.

MEAT	SPECIAL INSTRUCTIONS	PROCESSING TIMES IN MINUTES			
		CANS		JARS	
		#2 #2½ #2 & #3	pint	quart	
Fried Chicken	Process at 10 pounds of pressure up to 1000 ft.; 15 pounds over 1000 ft.  Cut into pieces; sear in hot fat, then season to taste. Fry until nicely brown, and process one of the following ways: (1) Pack without removing bones. Fill with broth. 1¼" headspace. (2) Remove bones. Pack and fill with broth. 1¼" headspace.	55 65	75 90	65 75	75 90
Stewed Chicken	Boil chicken until meat is well-loosened from the bones. Remove bones, and keep the pieces of meat as large as possible. Fill containers with meat. Pack and fill with broth. 1¼" headspace. Excellent for salad, pie and a-la-king.	6	90	75	90
Roast Fowl	(Turkey, Goose, Guinea, Chicken, Duck) Roast as in recipe on page 15. Cut meat from bones. Skim excess fat from pan drippings and pour drippings over meat in containers. Pack and fill with broth. 1¼" headspace.	70	80	NA	NA
Wild Duck	Prepare according to usual way of serving. Prepare for packing as for fried chicken. Put 2 tablespoons butter or margarine in roasting pan in oven. Lay duck in hot grease and turn until seared on all sides. Season. Cut up, and pack duck into a #3 can. Fill with broth. 1¼" headspace. Prepare quail and other game birds as usual, and process the same as fried chicken.	85	95	NA	NA
Rabbit or Squirrel	Wash in salted water. Dry the meat with a cloth. Cut into pieces and fry until nicely browned, but not entirely tender. Fill with broth. 1¼" headspace.	55	75	75	90

# SEAFOOD TIMETABLES AND CANNING INSTRUCTIONS

Many species of fish are suitable for canning — trout, northern pike, smelt and tuna as well as suckers and salmon.

Can only absolutely fresh seafood, as it deteriorates rapidly. For fish, remove entrails immediately; remove head, tail, fins and scales. Wash carefully, removing all blood; chill until ready to can.

Chilling helps firm the flesh of precooked fish; refrigerate overnight or for a few hours before canning.

Shellfish are soaked or cooked in water containing salt or acid (such as vinegar, lemon juice, or citric acid) before canning.

U.S. DEPT. OF AGRICULTURE DOES NOT PROVIDE PRESSURE CANNING TIMETABLES FOR HALF-GALLON.

Wide-mouth standard glass canning jars are the most convenient for packing fish. Only pint or half-pint sizes should be used. Use only new metal vacuum-seal lids with separate metal screw bands. Porcelain-lined zinc lids are not recommended because it is difficult to attain an adequate seal.

Using the ALL-AMERICAN Automatic Master Sealer (see pg. 18), seafood may also be safely canned in convenient tin cans.

Like other low-acid foods, fish must be canned under pressure in a pressure cooker to eliminate the risk of botulism.

**Water Pack.** Follow instructions below as to the addition of liquid. In general, no additional liquid is needed in canning raw fish, but it is required in canning shellfish. For precooked fish, add one tablespoon water per half pint after the containers are filled.

**Oil Pack.** After packing containers, add one tablespoon of vegetable oil per half pint, or enough to cover the fish by  $\frac{1}{4}$ ". One tablespoon of catsup diluted with water may be added instead of water or oil.

See fish recipes on page 39.

SEAFOOD	SPECIAL INSTRUCTIONS	PROCESSING TIMES IN MINUTES			
		CANS #2 & #3	JARS pint	pint	quart
Raw Fish	Split fish lengthwise. Cut into jar-sized lengths. Pack tightly in jars, skin side out. Drain off excess moisture. Leave $\frac{3}{4}$ " to 1" of headspace in order to achieve a good seal and help avoid boilout of oily liquid during processing. Exhaust 10 min.	90	90	110	110
Smoked Fish. (Use lightly smoked fish)	Cut fish into pieces that will fit vertically into pint canning jars, leaving 1-inch headspace. Measure 4 quarts (16 cups) of cool tap water and pour into the pressure canner. (Note: The water level probably will reach the screw bands of pint jars.) Do not decrease the amount of water or heat the water before processing begins. Pack smoked fish vertically into jars, leaving 1-inch headspace between the pieces and the top of the jar. The fish may be packed either loosely or tightly. Clean jar rims with a clean, damp paper towel. Do not add liquid to the jars.	—	—	110	—
<i>AS RECOMMENDED BY THE USDA THE MODEL 910 AND 915 ARE NOT RECOMMENDED FOR CANNING SMOKED FISH BECAUSE THESE UNITS HEAT AND COOL TOO QUICKLY FOR SAFE PROCESSING OF SMOKED FISH. QUART JARS ARE NO LONGER RECOMMENDED BY THE USDA FOR SAFE PROCESSING.</i>					
Fried Fish	See recipe on page 39. Drain and blot fried fish with paper towels. Cut into jar-sized lengths. Pack tightly; add one tablespoon of water, oil or diluted catsup per half pint jar. Exhaust 10 min. for jars.	50	—	110	110
Smelt	Fry according to recipe, page 39. Cut into jar-sized lengths; pack tightly. Add a tablespoon of mustard diluted with water per half pint jar.	—	—	110	110
Crab Meat	Keep live crabs cool until ready to can. Remove back by forcing the edge of the shell against a solid object and breaking in two by folding it like a book. Shake out extras and clean crab under running water. Cook in boiling acidic brine (2 tablespoons to 1 cup salt and $\frac{1}{4}$ cup white vinegar or lemon juice per gallon of water) for 20 minutes. Cool in cold water and drain. Remove meat from body and claws. Rinse meat in cool acidic brine (same as above, but increase vinegar or lemon juice to 2 cups). Squeeze excess moisture out of meat. Pack. Add 1 tablespoon vinegar or lemon juice to container and fill with boiling water. Exhaust 10 min. for jars.	80	—	70	80

# SEAFOOD TIMETABLES AND CANNING INSTRUCTIONS

U.S. DEPT. OF AGRICULTURE DOES NOT PROVIDE PRESSURE CANNING TIMETABLES FOR HALF-GALLON.

SEAFOOD	SPECIAL INSTRUCTIONS	PROCESSING TIMES IN MINUTES			
		CANS #2½ #2 & #3	JARS pint	pint	quart
Clams	Keep live clams cool until ready to can. Wash; steam to open. Remove meat, reserving juice. Wash meat in a weak salt brine (1–3 Tbsp. salt per gallon water). Blanch meat for 1–2 minutes in a boiling acidic solution (2 Tbsp. vinegar or lemon juice per gallon of water). Drain meat and pack. Pour hot juice over clams; fill with boiling water to 1" headspace.	90	—	60	70
Oysters	Keep live oysters cool until ready to use. Wash; steam to open. Remove meat. Wash meat in weak salt brine ( $\frac{1}{2}$ cup salt per gallon of water). Drain and pack into containers. Cover with hot weak salt brine (1 Tbsp. salt per quart of water) to 1" headspace.	42	—	75	75
Frog Legs	Both bullfrogs and green marsh frogs are edible, but the latter are more delicate and tender. Only the hind legs are eaten; they are considered at their best from June to October or later. Cut off legs. Loosen outer skin, turn downward and pull it off; then cut off the skin and the toes. Wash legs in lightly salted water (1 teaspoon salt to 1 quart water); drain and blanch for 3 minutes in boiling water that contains 2 tablespoons of vinegar or lemon juice and a teaspoonful of salt for each quart of water. Drain and wipe dry. Frog legs can be packed directly into the jars after blanching, covered with a light brine (2½ ozs. salt to 1 gallon water) to within $\frac{1}{4}$ " of top of jar.  To precook before packing, dip legs in beaten egg and fine cracker or bread crumbs; fry to a nice brown color. The meat may be cut off or left on the bones. Pack into clean, hot jars. A gravy made from the pan grease, with water added, is poured boiling hot into the jars to within $\frac{1}{4}$ " of top. To use, reheat and serve with a cream sauce.	80	—	NA	NA

# PREPARING FRUITS & VEGETABLES FOR CANNING

Select young, fresh, tender fruits and vegetables, those which are in choice condition for table use are best for canning. Gather or purchase only as much as you can practically handle in two or three hours. For best results work quickly throughout the preparation and canning process. Two hours from the garden to the can is a good rule of thumb.

Sort and grade fruits and vegetables according to the size, color, and degree of ripeness and maturity. Discard all overripe products, as they will cook to pieces and spoil the final appearance. No fruits or vegetables which are withered or otherwise imperfect should be canned.

All products should be washed thoroughly before paring, coring or slicing. There is less danger of spoilage if washing is done before the outside covering is broken. Berries and other soft fruits should be washed in a colander or wire strainer to prevent crushing the fruit.

Trim blemishes and prepare as called for in the recipe.

Blanching or precooking improves the texture and flavor, shrinks the products, makes them more flexible, insures a fuller pack, and makes it

possible to fill the cans or jars while the food is hot. Blanching consists of plunging fruit or vegetables into boiling water for a short time. Precooking is done by covering the products with water and boiling for several minutes, or by steaming them before they are packed. Precooking is recommended for most vegetables.

Pack product into clean jars to not more than 1" of top. Fill cans to  $\frac{1}{4}$ " of top. Be careful to follow packing instructions given in recipes exactly, as food packed too tightly may not heat through.

To avoid the loss of valuable food nutrients, fill can with the liquid in which the products were cooked.

Cover food in can or jar immediately with boiling hot liquid according to recipe. Salt may be added to vegetables for flavor if desired; salt does not help to preserve them, however. Run a wooden or plastic spoon or spatula gently down the sides of the can or jar to displace air bubbles. Add more hot liquid to the contents, if necessary, to get the correct headspace—generally 1" in jars and to top in cans.

## TREATING TO PREVENT DARKENING

Add 2 tablespoons each of salt and vinegar to one gallon of water. Drop apples, pears, peaches, or apricots into this solution as they are prepared. Do not soak more than 20 minutes. Rinse before canning.

NOTE: TIMES GIVEN ARE FOR HOT WATER BATH PROCESSING. FOR PRESSURE CANNING, SEE INSTRUCTIONS ON PAGE 18.

## SYRUP

Measure sugar and liquid (usually water or fruit juice) into saucepan. Cook until sugar dissolves. About 1 cup syrup is usually needed for one quart or #2½ can of fruit.

While sugar helps fruit hold its shape, color and flavor, it is not really necessary. Fruit can be preserved in juice or water.

2 cups sugar + 1 quart water	= 5 cups light syrup
3 cups sugar + 1 quart water	= 5½ cups medium syrup
4¾ cups sugar + 1 quart water	= 6½ cups heavy syrup

# FRUIT TIMETABLES AND CANNING INSTRUCTIONS

U.S. DEPT. OF AGRICULTURE DOES NOT PROVIDE PRESSURE CANNING TIMETABLES FOR HALF-GALLON JARS.

FRUITS Hot Water Bath Processing up to 1000 ft.	SPECIAL INSTRUCTIONS	PROCESSING TIMES IN MINUTES				
		CANS #2	JARS #2½	#3	pint	quart
Apples, whole, quartered, or sliced	Use good, firm cooking apples. Treat to prevent darkening. (See pg. 26.) Steam or blanch 1-5 min., just long enough to drive out air so fruit is pliable, but not mushy. Pack hot. Use thin or medium boiling syrup. $\frac{1}{2}$ " headspace.	10	10	12	20	20
Applesauce	Make as usual. Pack hot in jars to $\frac{1}{2}$ " of top, in cans to top.	10	10	10	15	20
Apple Cider	Press juice from apples. Allow to settle well. Pour off clear juice. Heat to 180°F (82°C), or simmering point; strain and fill into cans overflowing or to $\frac{1}{4}$ " of top in jars.	20	20	20	5	5
Apricots	Follow method for peaches. Peeling may be omitted.	25	30	30	20	25
Berries, Blackberries	Use enamel cans. Wash in colander under running water. Fill containers, shaking to pack berries down. Add medium or thick boiling syrup. Use berries within one year.	15	20	20	15	20
Cherries	Use enamel cans. Sweet cherries are never pitted. Stem and wash. Use hot medium syrup. Pit sour cherries and add hot, heavy syrup. It is best to steam or blanch unpitted cherries, as they have considerable air in them. Bring to boil and hot pack.	15	20	30	15	20
Figs	Wash. Retain stems. Boil 2 minutes in water to cover. Prepare thin syrup with this water. Boil figs for 5 minutes in syrup. Fill jars. Add 1½ teaspoons lemon juice per pint or 1 tablespoon per quart. Pour in boiling syrup, leaving $\frac{1}{2}$ " headspace.	10	15	15	45	50



# FRUIT TIMETABLES AND CANNING INSTRUCTIONS

U.S. DEPT. OF AGRICULTURE DOES NOT PROVIDE PRESSURE CANNING TIMETABLES FOR HALF-GALLON JARS.

FRUITS Hot Water Bath Processing up to 1000 ft.	SPECIAL INSTRUCTIONS	PROCESSING TIMES IN MINUTES				
		CANS #2	JARS #2½	#3	pint	quart
Fruit Juices (Grape, Currant, Berry, Cherry)	Use enamel cans. Crush fruit. Heat slowly to simmering point (about 185°F, 185°C). Strain through cloth bag. Let stand several hours in cool place until sediment settles out. Pour off carefully, leaving dregs. Add 1 cup sugar to 1 gallon juice, if desired. Hot pack. $\frac{1}{4}$ " headspace.	30	30	30	5	5
Grapes	Use enamel cans. Pack raw, adding hot medium syrup.	12	12	15	10	10
Grapefruit	Pare, cutting deep enough to remove white membrane. Run a thin knife between pulp and skin of each section and lift out pulp without breaking. Remove seeds. Pack raw with rounded sides to outside of container. Fill with boiling hot medium syrup.	25	25	25	10	10
Peaches (raw pack.)	Use thin or medium syrup. Boil 5 minutes and strain. Blanch peaches 1 minute to loosen skins. Plunge into cold water. Peel and pit. Treat to prevent darkening. (See pg. 30.) Pack placing halves in over-layers. Add boiling syrup. Stir to remove air bubbles.	25	30	30	25	30
Pears	Wash, pare and core. Cut into halves or quarters. Treat to prevent darkening. (See pg. 30.) Cook 4-8 minutes in light or medium syrup before packing. Hot pack.	25	30	30	20	25
Pineapples	Peel and core, removing all eyes carefully. Cut into cross sections $\frac{1}{4}$ to $\frac{1}{2}$ " thick. Put into kettle, cover with thin or medium syrup, and slowly bring to boil. Hot pack. Fill with thin or medium syrup.	15	20	25	15	20
Plums, Prunes	Use enamel cans. Can whole. Prick each plum to prevent skin from bursting. Raw pack. Cover with boiling hot thin syrup.	15	20	20	20	25
Rhubarb	Use enamel cans. Wash rhubarb. Cut into $\frac{1}{2}$ " pieces. Add $\frac{1}{2}$ cup sugar to each quart rhubarb and let stand to draw out juice. Bring to boiling. Pack hot.	10	10	10	15	15

# TOMATO TIMETABLES AND CANNING INSTRUCTIONS

U.S. DEPT. OF AGRICULTURE DOES NOT PROVIDE PRESSURE CANNING TIMETABLES FOR HALF-GALLON JARS.

**Tomatoes** **Quality:** Select only disease-free, preferably vine-ripened, firm fruit for canning.

**Caution: Do not can tomatoes from dead or frost-killed vines. Green tomatoes are more acidic than ripened fruit and can be canned safely with any of the following recommendations.**

**Acidification:** Since so many factors affect the acidity of canned tomatoes and juices, and because it is impractical if not impossible for the home canner to measure the pH of each container canned, **the USDA recommends that acid be added to home-canned tomato products.** To ensure safe acidity in whole, crushed, or juiced tomatoes, add two tablespoons of bottled lemon juice or 1/2 teaspoon of citric acid per quart of tomatoes. For pints, use one tablespoon bottled lemon juice or 1/4 teaspoon citric acid. Acid can be added directly to the jars before filling with product. Add sugar to offset acid taste, if desired. Four tablespoons of a 5 percent acidity vinegar per quart may be used instead of lemon juice or citric acid in catsup, chili sauce and salsa only.

**Recommendation:** Use of a pressure canner will result in higher quality and more nutritious canned tomato products. If your pressure canner cannot be operated above 15 PSI, select a process time at a lower pressure.

**Tomato Juice** Wash, remove stems, and trim off bruised or discolored portions. To prevent juice from separating, quickly cut about 1 pound of fruit into quarters and put directly into saucepan. Heat immediately to boiling while crushing. Continue to slowly add and crush freshly cut tomato quarters to the boiling mixture. Make sure the mixture boils constantly and vigorously while you add the remaining tomatoes. Simmer 5 minutes after you add all pieces. If you are not concerned about juice separation, simply slice or quarter tomatoes into a large saucepan. Crush, heat, and simmer for 5 minutes before juicing. Press both types of heated juice through a sieve or food mill to remove skins and seeds. Add bottled lemon juice or citric acid to jars (see acidification instructions). Heat juice again to boiling. Add 1 teaspoon of salt per quart to the jars, if desired. Fill jars with hot tomato juice, leaving 1/2-inch headspace.

	Pints	Quarts
Hot Water Bath up to 1000 feet	35 min	40 min
10 Pounds Pressure Canner up to 1000 feet	15 min	15 min

**Raw tomatoes filled with water** Wash tomatoes. Dip in boiling water for 30 to 60 seconds or until skins split; then dip in cold water. Slip off skins and remove cores. Leave whole or halve. Add bottled lemon juice or citric acid to jars (see acidification instructions). Add 1 teaspoon of salt per quart to the jars, if desired. For hot pack products, add enough water to cover the tomatoes and boil them gently for 5 minutes. Fill jars with hot tomatoes or with raw peeled tomatoes. Add the hot cooking liquid to the hot pack, or hot water for raw pack to cover, leaving 1/2-inch headspace.

	Pints	Quarts
Hot Water Bath up to 1000 feet	40 min	45 min
10 Pounds Pressure Canner up to 1000 feet	10 min	10 min



# VEGETABLE TIMETABLES AND CANNING INSTRUCTIONS

## BRINE

After raw-packing vegetables to within  $\frac{1}{8}$ " of top of can, add a hot brine using 2 or 3 tablespoons of salt to each quart of water, or add 1 teaspoon salt to each quart container ( $\frac{1}{2}$  teaspoon to each pint or #2 can). Then add boiling water or cooking liquid to 1" headspace.

Salt is used for flavor only; it is not necessary for safe processing.

VEGETABLES ARE PROCESSED AT 10 POUNDS OF PRESSURE, except for pimento peppers and sauerkraut, which can be processed in a boiling water bath.

U.S. DEPT. OF AGRICULTURE DOES NOT PROVIDE PRESSURE CANNING TIMETABLES FOR HALF-GALLON JARS.

VEGETABLES	SPECIAL INSTRUCTIONS	PROCESSING TIMES IN MINUTES				
		CANS	JARS	#2	#2½	#3
Process at 10 pounds of pressure up to 1000 ft.; 15 pounds over 1000 ft.						
Asparagus	Sort according to size. Tie in uniform bundles. Cook in open saucepan with tough end in boiling water for 2 minutes. Hot pack. Cover with cooking water.	20	20	25	30	40
Beans, lima	Wash and shell. Cover with water, bring to boil. Pack hot. Cover with hot cooking water.	40	40	45	40	50
Beans, string	Pick over, string, wash and cut into pieces of desired size. Add boiling water to cover. Boil 5 minutes uncovered. Hot pack. Cover with hot cooking water.	25	30	30	20	25
Beans, red kidney	Wash under running cold water. Soak 10-12 hours, changing water every 3 hours. Place in boiling water for 30 minutes. Pack hot. Fill with hot brine. (5 oz. salt to 1 gal. water) Seal cans hot.	65	75	75	75	90
Beets	Use enamel cans. Sort for size. Cut off tops, leaving 1" of stem. Leave root. Wash. Boil 15-25 minutes to loosen skins. Peel and trim. Can baby beets whole. Cut larger beets into $\frac{1}{2}$ " cubes or slices. Hot pack. Cover with boiling water.	30	30	35	30	35
Carrots, Parsnips, Turnips	Sort for size and color. Wash. Scald or steam 3-5 minutes to loosen skins. Dip into cold water. Peel. Pack whole or sliced. Add boiling water.	25	30	30	25	30
Corn, whole kernel	Use plain cans or "C" enamel. Can early in the season before corn becomes too starchy—17-25 days after silking. Husk corn and remove silk. Wash. Cut from cob at about $\frac{1}{8}$ depth of kernel. Cold pack. Fill to 1" of top in jars, $\frac{1}{2}$ " in cans. Do not shake or press down. Fill jars to 1" of top and cans to $\frac{1}{8}$ " with boiling water.	60	60	65	55	85
Corn, cream style	Use plain cans or "C" enamel. Cut corn from cob at center of kernel and scrape cobs. Use pint jars or #2 cans only. Hot pack, using 1 part water to 4 parts corn. Add salt and sugar to taste. Heat to boiling, pack into cans or jars. Headspace: 1" with jars, $\frac{1}{8}$ " with cans.	105	—	—	85	—

# VEGETABLE TIMETABLES AND CANNING INSTRUCTIONS

U.S. DEPT. OF AGRICULTURE DOES NOT PROVIDE PRESSURE CANNING TIMETABLES FOR HALF-GALLON JARS.

VEGETABLES	SPECIAL INSTRUCTIONS	PROCESSING TIMES IN MINUTES				
		CANS #2	JARS #2½	#3	pint	quart
Process at 10 pounds of pressure up to 1000 ft.; 15 pounds over 1000 ft.						
Greens	Can immediately after picking. Wash well and drain; steam until wilted. Cut into convenient lengths. Pack hot. Avoid packing too tightly. Fill with boiling water.	65	75	75	70	90
Mushrooms (domestic only)	Must be packed hot. Can fresh. Wash, peel, and immediately drop into cold water containing 1 tablespoon vinegar per quart. Place in colander or sieve and precook by covering and immersing for 3–4 minutes in boiling water containing 1 tablespoon of vinegar and 1 teaspoon salt per quart. Avoid exposing hot mushrooms to air—they will discolor. Pack, cover with freshly boiling water. May add vitamin C to prevent discoloration.	30	35	35	45	—
Okra	Remove stems, wash, cover with water and bring to boil. Pack hot. Cover with boiling water.	25	35	40	25	40
Black-eyed Peas	See Lima Beans	35	40	35	40	50
Green Peas	Put in kettle, cover with water, and bring to boil. Pack, leaving 1" headspace in cans, 1" in jars. Fill cans to top with hot cooking water, jars to 1" of top.	30	35	35	40	40
Pimento Peppers	Wash. To loosen skins, place on tray in 450°F (232°C) oven for 6–8 minutes, being careful flesh doesn't discolor. Or, loosen skins by dipping in hot cooking oil (290°F, 143°C) for 2–3 minutes. Cold dip, peel, cut out stem, and remove seeds. Pack dry, layer on layer. Fill cans as full as possible. Pimento Peppers will make their own juice when processed.	NA	NA	NA	30	40
Pork and Beans	Soak small navy beans 8–15 hours. Blanch 2 minutes. Place ¼ oz bacon and 10–11 oz. of soaked beans into a #2 can. Place ½ oz. bacon and 17–18 oz. beans into a #3 can. Fill with plain or seasoned tomato sauce and place another piece of bacon on top before sealing. Beans swell during processing.	90	95	105	NA	NA
		Not approved for jars				

# VEGETABLE TIMETABLES AND CANNING INSTRUCTIONS

U.S. DEPT. OF AGRICULTURE DOES NOT PROVIDE PRESSURE CANNING TIMETABLES FOR HALF-GALLON JARS.

VEGETABLES	SPECIAL INSTRUCTIONS	PROCESSING TIMES IN MINUTES				
		CANS	JARS	#2	#2½	#3
Process at 10 pounds of pressure up to 1000 ft.; 15 pounds over 1000 ft.						
Sweet Potatoes	Wash. Boil or steam 20-30 minutes until tender in center. Slip skins off. Do not mash or puree. Pack dry to top of can or to within 1" of top of jars. Add salt. Cover with boiling water or medium syrup, leaving 1" headspace in jars. Cans are packed to $\frac{1}{4}$ " of top, then filled with liquid. Exhaust 10 min.	80	95	105	65	90 Jars must be hot packed.
Irish Potatoes	Use new Irish potatoes, 1-2½" in diameter. Scald or steam until skins slip off. Skin must be removed. Pack hot and cover with boiling water.	35	40	40	35	40
Pumpkin and Winter Squash	Use enamel cans. Cube and pack hot to 1" of top in jars and $\frac{1}{4}$ " of top in cans. Spices and brown sugar may be added. Add hot liquid to 1" headspace.	75	90	90	55	90
Sauerkraut (No puree)	Can when crisp, firm, and well matured but not too acid. Place in a kettle with some of its juice and heat thoroughly. Stir constantly to avoid burning. Pack hot. Do not pack too tightly. Fill with boiling hot kraut brine or weak salt brine. Too high a processing temperature discolors kraut.	15	20	25	25	30 <b>(Boiling Water Bath)</b>
Soup Mixture	Prepare separately and then combine 2 parts cooked tomatoes, 1 part okra and 1 part corn or lima beans. Boil 10 minutes. 1" headspace	40	40	45	55	85
Spinach & Swiss Chard	See Greens.	50	50	55	70	90
Succotash	Prepare separately 3 qts. of sweet corn kernels and 4 qts. freshly hulled green lima beans. Mix and boil 10 minutes. Fill cans to $\frac{1}{4}$ " of top of can, 1" headspace in jars.	75	80	90	60	85
Note: Corn, peas and lima beans expand instead of shrink during processing and require a 1" headspace in the jar.						

# CANNING RECIPES

## Zucchini Pickles

6 cups sliced green zucchini  
6 cups sliced yellow zucchini  
2 large onions  
1 each yellow, red and green peppers  
½ cup salt  
2 cups sugar  
4 cups water  
4 cups vinegar  
2 tbsp. mustard seed  
2 tbsp. celery seed  
2 tsp. turmeric

Wash and cut vegetables (slice onions thin and zucchini about  $\frac{1}{2}$  inch thick). Cover zucchini, onion, and peppers with water to which salt has been added. Let stand for 2 hours. Drain and rinse the vegetables. Combine the sugar, water, vinegar, and spices and bring to a boil. When it boils add the vegetables and cook 2 to 3 minutes. Pack vegetables into hot jars and fill with the hot liquid, leaving  $\frac{1}{2}$  inch headspace. Release air bubbles, clean rims, and seal. Process in a water bath for 10 minutes. Makes 6 to 7 pints.

## Carrots with Mint

8 lbs. baby carrots  
In each jar:  
1 clove garlic  
1 sprig mint about 2 inches long  
1 tsp. lemon juice  
½ tsp. salt

Wash and scrape carrots. Put garlic, mint, lemon juice and salt in each pint. Add carrots and fill jar with boiling water to within  $\frac{1}{2}$  inch of tops of jars. Release air bubbles, clean rims, and seal. Process at 10 lbs. of pressure for 30 minutes. Makes 5 to 6 pints.

## Tomato Sauce

21 lbs. tomatoes  
2 onions  
1 large green bell pepper  
2 stalks celery  
½ cup bottled lemon juice  
1 tbls. sugar  
1 tbls. salt  
1½ tsp. black pepper  
½ cup chopped parsley

Peel tomatoes and puree in a tomato press or in batches in a food processor. Put into a large pan. Process onions, bell pepper and celery together and mince finely. Add to tomatoes. Add the rest of the ingredients and mix well. Cook over medium heat, stirring occasionally, until mixture thickens and has reduced by almost half. Ladle hot mixture into hot jars. Clean rims of jars, seal and process in a hot water bath for 35 minutes. Makes 7 pints.

## Salsa

5½ lbs. tomatoes, peeled and diced  
2 onions, diced  
1 can (7 oz.) chilies, diced  
2 tsp. salt  
1 tsp. cracked pepper  
2 tbls. bottled lemon juice  
2 tbls. chopped cilantro  
½ cup vinegar  
1½ tsp. cayenne pepper

Combine all ingredients and mix well. Heat salsa just until hot. Ladle into hot jars. Clean rims, seal and process in a hot water bath for 45 minutes. Makes 6 pints.

## Barbecue Sauce

44 oz. ketchup  
½ cup brown sugar  
½ cup honey  
⅓ cup cider vinegar  
¼ cup molasses  
3 tbls. Worcestershire sauce  
3 bay leaves, crushed  
2 tsp. liquid smoke  
1 tsp. cracked pepper  
1 tsp. salt  
1 small can (8¾ oz.) crushed pineapple  
2 cloves garlic, minced  
½ cup soy sauce  
1 tsp. ginger

Combine all ingredients in a large saucepan. Cook, stirring occasionally, 30 to 40 minutes until sauce is well blended. Ladle into hot jars. Clean rims, seal and process in a hot water bath for 20 minutes. Makes 7 pints.

## Currant Jelly

3 lbs. red currants  
2 cups water  
3½ cups sugar

Wash currants in a strainer. When clean, put currants and 2 cups of water into a heavy saucepan. Boil for 5 minutes. Stir to slightly crush berries. Remove from heat and put into a jelly bag to strain. You should get about 4 cups of juice. Put juice in a heavy pan and add sugar. Cook, stirring often, and skim foam as it accumulates. When the jell point is reached, remove from heat and skim the foam again. Ladle into hot jars. Clean rims and seal. Process in a hot water bath for 10 minutes. 4 or 5 half-pint jars.

# CANNING RECIPES

## Pepper Jelly

2 medium-sized green bell peppers  
½ cup fresh hot chili peppers or  
½ cup canned chilies  
1½ cups cider vinegar  
6 cups sugar  
6 oz. (2 envelopes) liquid pectin

Remove stems and seeds from peppers. Grind peppers in a food processor until liquefied. Measure ¾ cup into a heavy saucepan. Grind the hot chilies in the same way and add to the pan with the peppers. Add the vinegar and sugar. Bring to a full rolling boil, stirring constantly. Add pectin and stir until well blended. Bring back to a full rolling boil and boil for 1 minute. Remove from heat and skim foam with a metal spoon. Ladle into hot jars and seal. Process in a hot water bath for 5 minutes. Make 7 half-pint jars.

## Peach Jam

4 lbs. peaches  
2 tbs. bottled lemon juice  
5 cups sugar  
½ tsp. nutmeg

Prepare peaches by peeling, pitting and cutting into quarters. Chop in a food processor or cut into small pieces. Put peaches, lemon juice, sugar and nutmeg in a saucepan and cook over medium heat, stirring to dissolve all the sugar. Boil rapidly and stir constantly until the jam is thick or has reached the jell point on a thermometer. Remove from heat and let stand 5 minutes, skimming off any foam. Ladle into hot jars, clean rims, seal and process in a hot water bath for 10 minutes. Makes 5 half-pint jars.

## Cherry Preserves

6 cups (3 lbs.) sweet cherries  
3 tbs. bottled lemon juice  
4 cups sugar  
½ tsp. almond extract

Wash and pit cherries, or cut in half and remove pits. Put cherries, sugar and lemon juice in a heavy saucepan. Mix well and warm on stove 5 minutes, stirring constantly. Remove from heat and let stand 1 hour. This is to draw the juice out. Return to heat, add almond extract, and cook, stirring occasionally until thick and glossy. Continue cooking until the jell point is reached, 220°F at sea level. Skim foam as necessary. Remove from heat, ladle into hot jars, clean rims, seal and process for 10 minutes in a hot water bath. Makes 5 to 6 half-pints.

## Orange-Pineapple Marmalade

Peel of 3 oranges  
Pulp of 6 oranges  
2 cans (20 oz. each) crushed pineapple; do not drain  
¼ cup bottled lemon juice  
5 cups sugar  
½ tsp. ground ginger

Peel three oranges. Put peel in a saucepan with 1 cup of water and boil 40 minutes. Remove from heat and drain. Slice into slivers. Peel other oranges, remove white flesh, and slice orange pulp, removing seed and membrane. Put peel, pulp, undrained pineapple, lemon juice, sugar and ginger into a pan. Bring to a boil over high heat, stirring constantly to dissolve sugar. Continue cooking over medium heat, stirring occasionally until the marmalade thickens and turns a beautiful amber color. Remove from heat and let sit to cool 5 to 7 minutes. Remove any foam that has formed. Ladle into hot jars, wipe rims, seal and process in a hot water bath for 10 minutes. Makes 6 half-pints.

## Pickled Beets

8 lbs. beets  
2 cups sugar  
2 cups water  
4 cups cider vinegar  
2 whole sticks cinnamon  
6 whole allspice  
8 whole cloves  
2 large onions, sliced thin  
1 lemon, sliced thin

Wash beets. Cook until just tender (about 20 minutes), plunge into cold water, and slip off skins. Shred beets. Combine sugar, water and vinegar. Put spices in a piece of cheesecloth, tie them and add to the vinegar mixture. Bring the mixture to a boil, then lower heat and simmer for 5 minutes. Remove spices. Fill hot jars with beets and onions. Add a lemon slice to each jar and fill with the hot liquid to within ½" of the top of the jar. Release air bubbles, clean rims, seal and process in a hot water bath for 30 minutes. Makes 4 pints.

## Mango Chutney

2 cups mango, diced  
2 cups apple, diced  
1 onion, diced  
½ cup green pepper, diced  
½ cup golden raisins  
½ cup sliced almonds  
1 cup sugar  
1 cup apple cider vinegar  
¼ tsp. ground allspice  
¼ tsp. ground cloves  
1 tsp. cinnamon  
½ tsp. salt

Prepare fruit and vegetables. Put all other ingredients into a large, heavy saucepan. Bring to a boil, stirring constantly. Add fruits and vegetables and cook about 30 minutes or until desired consistency, stirring occasionally. Ladle into hot jars leaving ½" headspace. Clean rims, seal and process in a hot water bath for 10 minutes. Makes 5 or 6 half-pints.

# CANNING RECIPES

## Beef Stew

4-5 lbs. beef stew meat  
8 cups sliced carrots  
3 cups chopped celery  
3 cups chopped onions  
3 quarts cubed, pared potatoes  
(about 12 medium)  
1½ tbsp. salt  
1 tsp. thyme  
½ tsp. pepper

Cut meat into 1½ inch cubes; brown in a small amount of fat. Combine meat, vegetables and seasonings; cover with boiling water. Pack hot, into hot jars, leaving 1-inch head space. Remove air bubbles. Adjust caps. Process. Yield approximately 7 quarts.

Note: Vegetables do not need to be precooked.

Please refer to timetable on page 25.

## Canned Fresh Fish

Fresh fish  
salt

Thoroughly clean and fillet fish, removing all bones, skin, blood and belly fat. To draw out blood, prepare a brine of 1 ounce salt to every quart of water; soak fish for 10 minutes to 1 hour. Remove fish from brine and drain well. Cut into jar lengths. Use either ½ pint or pint jars with rubber snap lids.

Pack raw fish strips close together leaving 1" at the top. Add ½ teaspoon salt to the ½ pint jar, 1 teaspoon to the pint. Clean rims. Place lids on jars and seal by hand.

Fill cooker with 2 to 3 inches of water and place jars on rack. Heat until pressure gauge reaches 10 lbs., process for 110 minutes.

Remove from heat and let the cooker cool allowing gauge to return to zero. Hand tighten jars.

## Dial Gauge

0-2,000 ft.:

Process at 11 lbs. for 100 minutes

2,000-4,000 ft.:

Process at 12 lbs. for 100 minutes

## Weighted Gauge

0-1,000 ft.:

Process at 10 lbs. for 100 minutes

Above 1,000 ft.:

Process at 15 lbs. for 100 minutes

Turn off heat source and let the cooker cool, allowing gauge to return to zero.



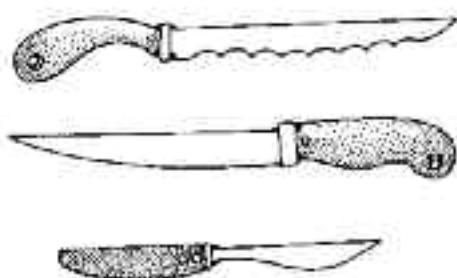
# QUESTIONS AND ANSWERS ON HOME CANNING

## 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. Arrange sealed cans or jars on rack. Add enough boiling water to completely cover jars by 1-2 inches. Put lid on pot, but leave the Pressure Regulator Weight off so all the steam escapes through the Vent Pipe and no pressure builds up in the cooker.

## 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 strongly 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?

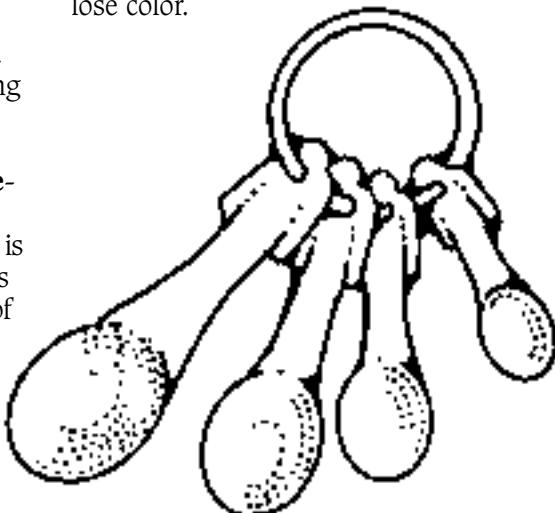
A. Darkening of foods at the tops of jars may be caused by oxidation due to air in the jars or by too little heating or processing to destroy enzymes. Over-processing may cause discoloration of foods throughout the containers.

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.

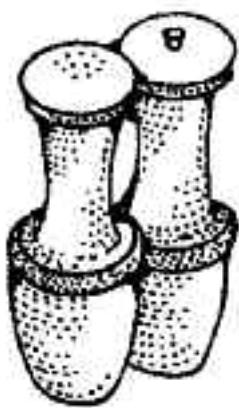
A common cause of highly colored foods fading is the dissolving of coloring materials by the packing liquid. The use of plain tin cans will cause some foods to lose color.



# 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.

# ALL-AMERICAN PRESSURE COOKERS PARTS PRICE LIST

Effective January 1, 2008

## Order by Part Number and Description

Part No.	Description	Price Each
	Bottom only (Specify size; not shown) .....	Price on Request
	Cover only (Specify size; not shown) .....	Price on Request
54	Clamp Bolt (630000).....	\$ 3.50
55	Pin for Clamp Bolt (630010).....	2.40
64	Bakelite Wing Nut (630020).....	6.80
65	Control Valve (No longer available—Replaced by Part Nos. 68 and 69)	
68	Pressure Regulator Weight (Z000122) .....	18.00
69	Vent Pipe for Pressure Regulator Weight (Z000130) .....	8.00
72	Geared Steam Gauge, includes lens, fits all sizes (Z000127) .....	16.00
73	Lens for Steam Gauge, replacement, not shown (670050) .....	3.25
74	Instruction and Recipe Book (610500) .....	6.00
75	Cleaning Rod for Vent Pipe (650060) .....	2.50
76	Bakelite Top Handle (630070).....	12.00
77	Bakelite Top Handle Screw (630080) .....	1.00
78	Retaining Bayonet Clamp (630090) .....	2.75
79	Retaining Bayonet Clamp Screw (670020) .....	1.00
111	Rack (9.5" diameter) for No. 910 Cooker (630110) .....	10.00
151	Rack (11.5" diameter)for Nos. 915, 921, 925, and 930 Cookers (630120).....	12.00
184	Cross Bar Set for use with pudding pan for Nos. 915, 921, 925 and 930 Cookers (630360) .....	3.25
253	Pudding Pan for Nos. 915, 921, 925 and 930 Cookers (630370) .....	11.00
405	Side Handle, complete, for Nos. 930 and 941 (Z000113) .....	18.00
2040	Overpressure Plug for Pressure Cookers, Black (Z000124) .....	3.50
2072	Wire Canning Rack fits No. 941 Cooker only, not shown (630150).....	16.50

- NOTE:
- Model No. 915 Pressure Cooker was formerly called Model No. 7
  - Canning baskets are no longer available.
  - The Cross Bar Set is only used when stacking pudding pans.
  - Pressure Cooker No. 907 and Rack No. 91 are no longer available.
  - Parts will fit all sizes unless specified.

### INSTRUCTIONS FOR ORDERING:

- All orders must be accompanied by check or money order payable in U.S. Dollars. Or provide us with your MasterCard or Visa card number and expiration date (subject to approximate 4% processing fee.)
- **No C.O.D. shipments.**
- **Wisconsin residents** must add 5% state sales tax, ½% county sales tax (if applicable) and stadium tax (if applicable) to order total, including shipping costs.
- Be sure to specify pressure cooker model number and order parts by part number and description.
- Shipping handling charges to be added to your order total as follows:

<b>Shipping/Handling Charges</b>					
<b>Order Total</b>	<b>U.S.A.*</b>	<b>CANADA**</b>	<b>Order Total</b>	<b>U.S.A.*</b>	<b>CANADA**</b>
\$5.00 Minimum Order	\$2.65	\$4.80	\$50.01 - \$75.00	\$11.70	\$21.20
\$5.01-\$10.00	\$4.50	\$6.90	\$75.01 - \$100.00	\$14.85	\$26.50
\$10.01 - \$25.00	\$6.40	\$11.70	\$100.01 - \$150.00	\$19.10	\$31.80
\$25.01 - \$50.00	\$9.30	\$16.95	\$150.01 - \$200.00	\$26.50	\$37.10

\* **Alaska, Hawaii, Puerto Rico, and Virgin Islands:** Orders are shipped via the United States Postal Service (first class mail or parcel post). Contact us directly for expedited or alternative shipping methods.

\*\* **Canadian Orders:** Send a postal money order or bank cashiers check payable in U.S.A. funds ONLY. Simply writing "U.S.A. Funds" on your personal check does not suffice. We are not responsible for any customs/clearance charge(s). Orders are shipped via United States Postal Service. Contact us directly for expedited or alternative shipping methods.

DO NOT USE AFTER January 1. 2009. Call or write for new price sheet after this date. Prices subject to change without notice.

**WISCONSIN ALUMINUM FOUNDRY CO., INC. Customer Service Dept.**

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# PARTS ILLUSTRATIONS

(Not to scale)



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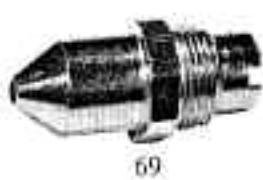
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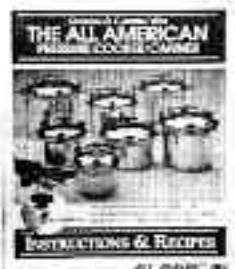
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131 &amp; 151



184



405



253



2040

# TABLES AND CHARTS

## Number Of Cans Per Bushel

	Weight per bushel	No. 2 Cans (pints)	No. 3 Cans (quarts)
1 bushel of Windfall apples .....	50 lbs.	30 .....	20
Cranberries .....	33 lbs.	— .....	—
Standard peaches .....	48 lbs.	25 .....	18
Pears .....	50 lbs.	45 .....	30
Plums .....	60 lbs.	45 .....	30
Blackberries .....	— .....	50 .....	30
Windfall oranges (whole) .....	50 lbs.	35 .....	22
Tomatoes .....	56 lbs.	22 .....	15
Shelled lima beans .....	— .....	50 .....	30
String beans .....	24 lbs.	30 .....	20
Sweet corn .....	— .....	16 .....	—
Shelled peas .....	— .....	45 .....	25
Sweet potatoes .....	50 lbs.	30 .....	20

## Steam Pressure Obtained In Pressure Canners And Corresponding Degrees Of Temperature

Pounds of Pressure	Degrees Fahrenheit	Degrees Centigrade
3	220	104.5
5	228	109.0
10	240	115.5
15	250	121.0
20	259	126.0
25	267	130.5

## Boiling Point Of Water At Different Altitudes Above Sea Level

Altitude Feet	Boiling Point Fahrenheit	Boiling Point Centigrade
1,025	210	99.0
2,063	208	98.0
3,115	206	97.0
4,169	204	96.0
5,225	202	94.4
6,304	200	93.0
7,381	197	92.0
8,481	196	91.0
9,031	195	90.5

## Show Weights On Labels

Suggested weight of contents to be used on labels to comply with the various state and national pure food laws. The following weights allow for reasonable tolerance. Cans which are reasonably well-filled will weigh more than weights expressed.

Fruits	Size Can	Lbs.	Ozs.
Apples	2	1	2
	3	1	14
Blackberries	2	1	3
	3	2	1
Grapefruit	2	1	4
	2½	1	13
Peaches	2	1	3
	3	2	1
Pears	2	1	3
	3	2	1

Vegetables	Size Can	Lbs.	Ozs.
Asparagus	2	1	3
Beans, String	2	1	3
Beets	2	1	4
Corn	2	1	4
Peas	2	1	4
Tomatoes	3	2	1
	2	1	3

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