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# CANNING QUESTIONS AND ANSWERS

BULLETIN No. 734



## CAPS AND LIDS

1. ARE KERR CAPS AFFECTED BY VINEGAR OR ANY FOOD ACIDS?

The gold lacquer on Kerr Caps is subjected to a baking process and the cap is absolutely impervious to vinegar or food acids.

2. CAN KERR LIDS BE USED A SECOND TIME? WHY NOT?

No. Because to open a jar sealed with a Kerr Lid the lid should be punctured. If it is otherwise removed it should not be used a second time because the composition will be damaged by the first use.

3. WILL KERR CAPS FIT OTHER MAKES OF JARS?

Kerr Mason Caps fit all Mason Jars.

4. IS IT NECESSARY TO PURCHASE NEW ECONOMY CLAMPS WHEN, AFTER YEARS OF USE, THE CLAMPS FIT LOOSELY AND WILL NOT EFFECT A SEAL?

If Economy Clamps fit loosely, this can be corrected by bending the middle and increasing their tension.

5. SHOULD THE SCREW BANDS ON KERR MASON AND KERR WIDE MOUTH MASON JARS BE TIGHTENED AFTER THE JARS ARE COLD?

No—never, as to do so might turn the lid and break the seal.

6. WILL PRODUCTS CANNED IN KERR JARS KEEP IF THE SCREW BANDS ARE REMOVED?

Yes, if the screw band is removed after the jar is cold and sealed. Many housewives prefer to remove the screw band the day

after the product is canned. If left on, fruit juices that are on the threads of the screw band may cause the band to stick to the jar.

7. WILL THE FLAVOR, COLOR OR KEEPING QUALITY OF CANNED PRODUCTS BE IN ANY WAY AFFECTED BY THE LACQUER ON KERR CAPS?

Kerr Caps are clean, pure, and 100% sanitary, and in no way affect the flavor, color or the keeping quality of any canned food. The fact that practically all commercially packed products in glass use gold lacquered caps is an additional endorsement as to their safety and practicability.

8. IS IT NECESSARY TO STERILIZE JARS AND LIDS BEFORE CANNING?

Yes. All jars, caps and lids should be as sterile as possible when filling jars and putting on caps and lids.

9. WILL IT INJURE THE COMPOSITION ON THE KERR CAPS AND LIDS WHEN STERILIZING TO LET STAND IN HOT WATER?

No.

10. SHOULD SCREW BANDS BE SCREWED AS TIGHTLY AS POSSIBLE BEFORE BEING PLACED IN THE BOILER, OVEN, OR PRESSURE COOKER TO PROCESS?

No, the bands should be screwed only firmly tight.

11. HOW CAN KERR LIDS BE SEPARATED IF STUCK TOGETHER?

By submerging them in boiling water for a few minutes.

12. WHY DO SOME SCREW BANDS STICK TO THE JARS?

This is caused by food juices on the jar



threads. The juices holding the screw band to the jar can be dissolved in warm water, or the adhesions can be broken by tapping the screw band lightly with the handle of a knife. This can be completely avoided by removing the screw bands from the jars the day after products are canned. Once jars are sealed, bands are unnecessary.

13. WHY IS IT SAFE TO TIGHTEN KERR CAPS BEFORE PROCESSING?

Kerr Caps seal by the cooling of the contents and not through pressure of the screw band on the lid. Therefore, although the screw band is firmly tight the jar is not sealed until it has cooled, and during the processing the flexible gold lacquered lid permits the jar to exhaust.

## GENERAL

14. DOES SOIL AFFECT THE KEEPING QUALITIES OF FOOD?

Since most of the bacteria found in products comes from the soil, and during some seasons there are occasional outbreaks where fields are infected with an unusual type or a larger number of bacteria than ordinarily exists, it is inevitable that more bacteria would be present on the product than in normal seasons and would make the product harder to sterilize.

15. WHAT IS THE EFFECT OF HEAT AND COLD ON KEEPING QUALITIES OF CANNED FOODS?

Excessive heat may destroy the seal of the jar through causing expansion of the contents. Warm storage encourages rapid growth of micro-organisms causing spoilage. Freezing and thawing injures the flavor and texture of canned products.

16. IS IT GOOD PRACTICE TO LAY JARS

(3)

ON THE SIDE AND ROLL THEM WHEN NEARLY COLD TO PREVENT FRUIT FROM RISING TO TOP?

No, because it is likely to destroy or prevent a seal. The efficacy of this practice is also questioned.

17. WILL JARS BOILED IN WATER BEFORE CANNING BE TOUGHER?

No, glass is fully tempered when the jars are made and the boiling will not increase the temper.

18. WHY DO JARS, AFTER BEING TESTED AND SEALED FOR SIX MONTHS OR MORE, OPEN AND CONTENTS SPOIL?

This is very rare, but when it happens it is usually caused by small particles of meat, fruit or vegetable pulp on the sealing edge of the jar where it comes in contact with the sealing composition, and disintegrates, which action permits air to enter the jar.

19. WHAT CAUSES LIQUID TO BOIL OUT OF JARS DURING PROCESSING OF FRUITS AND VEGETABLES?

- (a) Having jars too full. If using water, fill jar to within  $\frac{1}{2}$  inch from top of jar; if using syrup, fill to within  $1\frac{1}{2}$  inches from top of jar.
- (b) Too high a temperature or too rapid boiling. In oven canning too great a heat or regulator not registering properly will cause this (occasional testing of regulator or control is suggested).
- (c) Sudden lowering of temperature in using a pressure cooker. Pet cock should not be opened and cover removed until indicator or gauge goes back to zero.

20. ARE THE KEEPING QUALITIES OF FOODS AFFECTED WHEN LIQUID HAS BOILED OUT DURING PROCESSING?

No.

(4)



21. IN COLD PACK CANNING WHEN SHOULD ONE START TO FIGURE TIME OF PROCESSING?

With a pressure cooker, figure the time from minute pressure reaches that shown in the recipe. For the wash boiler method, figure time from the minute water surrounding the jars starts to boil. When oven method is used, filled jars should first be placed on the rack in the oven. Jars should not touch so as to allow free circulation of heat and also to prevent breakage. Oven should then be lighted. Time is counted beginning with the lighting of the oven.

22. WHY IS THE INTERMITTENT METHOD USED CHIEFLY IN THE SOUTH?

Advocates of the intermittent method say that it is used chiefly in the South on account of the warm, damp climate which is more favorable to the development of bacteria.

23. AFTER PROCESSING SHOULD KERR JARS BE TURNED UPSIDE DOWN TO TEST FOR LEAKS? ARE KEEPING QUALITIES AFFECTED BY SUCH A TEST? HOW SHOULD KERR JARS BE TESTED?

- (a) Kerr Jars should never be turned upside down while cooling and jars are sealing.
- (b) Since the seal is not completed until jars are cold, it is decidedly risky to turn Kerr Jars upside down as seeds or particles of food may thus lodge between the glass sealing surface and the composition, thus preventing a seal.
- (c) To test Kerr Jars for seal: When jars are cold, take a spoon and gently tap the lids. If properly sealed, they will give a clear, ringing note, and be slightly concave (curved inwardly), caused by the vacuum inside. If not properly sealed, the sound will be dull and low in key, in which case you have an opportunity to recan contents and thus save your food.

24. WHEN USING A WATER BATH FOR COLD PACK CANNING SHOULD WATER COMPLETELY COVER THE JARS?

Perfect satisfaction in canning by water bath method may be had by completely covering the jars with water. However, another method which is successful is when canning fruits pour sufficient water in the boiler to reach one inch above the rack and for vegetables and meats, pour sufficient water in boiler to reach half way up on jars. Do not let water fall below these heights and if it does add additional water of the same temperature. If the cover for the boiler does not fit snugly, place a cloth between lid and boiler so that steam will not escape.

25. WHAT ALLOWANCE SHOULD BE MADE FROM THE TIME TABLES FOR DIFFERENCES IN ALTITUDE?

Practically all time tables specify that the time should be increased 10 per cent for each additional 500 feet over the first thousand, except for pressure cooker canning, which requires no additional time. However, the reading of the pressure gauge is slightly affected by altitude and the pressure reading should be increased 1 pound for each additional 2000 feet elevation above 2000 feet.

26. SHOULD CHEMICALS OR PRESERVING POWDERS BE USED IN CANNING?

No. The use of any artificial preservatives is not recommended.

27. CAN KERR JARS AND CAPS BE SUCCESSFULLY USED FOR ALL METHODS OF CANNING?

Kerr Jars and Caps in all four styles have been tested and proved highly successful for canning all fruits, vegetables, meats, poultry, game, fish, etc., by all methods. They are approved by Good Housekeeping, Household Searchlight and other institutes.



28. WHAT EFFECT DOES OVER-PROCESSING HAVE ON FRUITS, MEATS AND VEGETABLES?

Over-processing often causes shrinkage, discoloration and loss in flavor and food value.

29. WHEN DOES COMPLETE COOKING START TAKING PLACE IN A JAR?

When boiling temperature reaches center of the jar.

30. WHAT DEGREE IS CONSIDERED BOILING TEMPERATURE?

212 degrees Fahrenheit or 100 degrees Centigrade, at sea level.

31. DO KERR HOME CANNING BOOK RECIPES CALL FOR LEVEL MEASUREMENTS?

Yes. Unless otherwise specified, all measurements are level.

32. IN THE COLD PACK METHOD IS IT NECESSARY TO COOK THE SYRUP BEFORE IT IS POURED ON THE FRUIT?

No. Plain uncooked syrup may be used and the cooking during the processing is sufficient.

33. HOW LONG SHOULD JARS BE BOILED TO STERILIZE?

We recommend washing jars in hot suds or soda water. (Be sure no particles of solid soap are in the water). Rinse the jars, then place in pan of clear water, with folded cloth at bottom of pan, set on stove letting water come to boil, and boil for at least 15 minutes.

34. SHOULD BUBBLES APPEAR IN THE JAR AFTER IT IS TAKEN OUT OF THE BOILER TO COOL?

Bubbles often appear in the jar after it is removed from the boiler because the food is

still boiling in the jar. Ordinarily bubbles do not appear once the product has been allowed to thoroughly cool, unless the jar is shaken.

35. DO COMPLETELY FILLED JARS BECOME CONTAMINATED BY FOOD COMING IN CONTACT WITH THE LID?

No, food coming in contact with the lid does not become contaminated. However, jars should be filled only to within  $\frac{1}{2}$  inch of top if water is used, or  $1\frac{1}{2}$  inches of top if syrup is used, so that when lid is placed it will not force food out on sealing edge of jar and prevent a seal. Food touching lid also interferes with the test for seal.

36. CAN KERR JARS BE TESTED TO DETERMINE WHEN A SEAL IS OBTAINED?

Yes, after the jar is cold it may be tested for seal as follows: Take a spoon and gently tap the lids. If properly sealed they will give a clear, ringing note. If not properly sealed the sound will be dull and low in key. Observe the lid closely. A concave surface indicates a tight seal and a convex surface means no seal.

37. IF A JAR DOES NOT SEAL AND MUST BE REPROCESSED DOES IT HAVE TO BE PROCESSED THE FULL LENGTH OF TIME?

Just what shall 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 cap or lid with new one and process in water bath until product reaches boiling point. If it is a non-acid food it should be reprocessed approximately one-fourth to one-third the regular processing period. If the jar is defective the 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 product. Few foods will stand up under such treatment.

38. SHOULD JARS, AFTER BEING PROCESSED BY ANY METHOD, BE SET ON A COLD SURFACE?

Hot jars should never be set on a cold surface, but set on a bread board, or on a surface on which several thicknesses of cloth have been laid.

39. WHY IS A SHORTER PERIOD OF PROCESSING USED WHEN CANNING IN A PRESSURE COOKER?

Because a higher degree of temperature is obtained under pressure.

40. IN THE HOT WATER BATH METHOD OF PROCESSING IS IT ALL RIGHT TO ALLOW JARS TO COOL IN THE WATER, AND WHY?

No. The product will be overcooked and certain types of spoilage may occur.

## OVEN CANNING

41. IN OVEN CANNING WILL FRUIT PACKED TO WITHIN  $\frac{1}{2}$  INCH OF TOP OF JAR AND COVERED WITH WATER TO WITHIN  $\frac{1}{2}$  INCH OF TOP OR SYRUP TO WITHIN  $1\frac{1}{2}$  INCHES OF TOP OF JAR, BOIL OUT WITH REGULATOR SET AT  $250^{\circ}$ ?

No. If it does, oven regulator needs adjustment, or it is too solid a pack.

42. HOW FAR APART SHOULD JARS BE SET ON RACK IN OVEN?

Jars should be set apart sufficiently for heat to circulate around them. Jars must not touch each other or the sides of the oven, as this may cause them to break.

43. HOW MUCH WATER OR SYRUP SHOULD BE USED ON FOOD PRODUCTS IN OVEN CANNING?

Fill the jars to within  $\frac{1}{2}$  inch of top of jar if using water, or  $1\frac{1}{2}$  inches from top if using syrup.

## FRUITS

44. WHAT EFFECT DO SOME METHODS OF CANNING HAVE ON THE FLAVOR OF CANNED FRUITS?

The open kettle method causes, (with a consequent loss of flavor), the boiling away of some of the food values which are retained in the cold pack method.

45. WHAT FRUITS CONTAIN SUFFICIENT ACID TO MAKE IT UNNECESSARY TO PROCESS THEM?

Rhubarb, cranberries and gooseberries. Care must be exercised in canning with the cold water method to use only pure, or distilled water, and firm, freshly picked fruits.

46. MAY FRUIT BE CANNED SUCCESSFULLY WITHOUT SUGAR?

Yes, by using water in place of syrup.

47. HOW DOES ONE LYE-PEEL PEACHES?

Use only firm peaches. To a gallon of boiling water, add two tablespoons of lye, and bring to boiling point. Place peaches in wire basket or cheese cloth bag and lower into boiling



solution for about one minute. Remove and rinse in cold water using a crash towel to rub off peeling. This method may also be used with apricots, if they are firm.

48. IN CANNING STONE FRUIT, WILL THE FLAVOR BE IMPROVED BY LEAVING IN AN OCCASIONAL STONE?

This is a matter of individual taste. Some people prefer the slightly bitter flavor occasioned by leaving a stone or two.

49. WHAT CAUSES PEACHES AND PEARS TO TURN DARK BROWN AFTER THEY HAVE BEEN CANNED? HOW CAN THIS BE PREVENTED?

- (a) Discoloration of fruits in the top of the jar is due to enzyme activity and sometimes indicates under-processing. The remedy is an increase of 5 to 10 minutes in the processing time and a thorough exhausting of all air from the jars.
- (b) In oven canning, occasionally we find an oven which seems to accumulate an excessive amount of heat at the top, which will cause upper layers of fruit in jar to turn brown, but in no way affects the flavor.
- (c) Fruit exposed to air too long after being peeled and before being canned. This can be overcome by dropping peeled fruit into slightly salted or plain water until ready to put in jars.
- (d) Pears canned by cold pack method will retain original color better if a tablespoon of lemon juice is added to each quart jar.
- (e) Fruits canned without sugar, after being opened and exposed to air, sometimes turn brown just as fresh fruit does when exposed to air.

50. WHAT IS THE BEST WAY TO TEST FRUIT JUICES FOR PECTIN IN JELLY MAKING?

- 1. To one teaspoon of cooked juice, add one teaspoon of grain alcohol and stir slowly. Wood or denatured alcohol may be used but DO NOT TASTE as the latter two are POISON.
  - (a) Juice rich in pectin will form a large amount of bulky gelatinous material.
  - (b) Juices moderately rich in pectin will form a few pieces of gelatinous material.
  - (c) Juices poor in pectin will form small flaky pieces of sediment.
- 2. Or mix 2 teaspoons sugar, 1 tablespoon Epsom salts, 2 tablespoons cooked fruit juice. Stir well and let stand for 20 minutes. If mixture forms into a semi-solid mass the juice contains sufficient pectin.

51. HOW MAY STRAWBERRIES BE CANNED TO RETAIN THEIR ORIGINAL COLOR AND ALSO BE KEPT FROM FLOATING?

See recipe for Strawberries (will not float) in Kerr Home Canning Book.

52. WHAT FRUITS CONTAIN PECTIN AND ACID? WHICH LACK PECTIN? WHICH LACK ACID?

Cranberries, quinces, green apples, crab-apples, blackberries, gooseberries, orange rind and white pulp of oranges contain pectin.

Peaches, pears, cherries, strawberries, pine-apples and rhubarb contain practically no pectin when ripe.

Cherries, pears and sweet apples contain practically no acid.



53. WILL FRUITS WHICH LACK ACID MAKE JELLY?

No. Three ingredients are essential: pectin, acid and sugar, in their proper proportions.

54. WHY ARE HOME CANNED FRUITS, VEGETABLES, MEATS, POULTRY, PICKLES, AND PRESERVES BETTER THAN COMMERCIAL CANNED PRODUCTS FOR THE HOUSEWIFE FROM A STAND-POINT OF ECONOMY AND FOOD VALUE?

Home canned products are much more economical than commercially packed ones and if processed in jar by water bath, pressure cooker or oven method, all food values are retained.

55. HOW ARE BERRIES, OTHER FRUITS AND TOMATOES KEPT FROM FLOATING?

- (a) By not over-processing.
- (b) By not using over-ripe fruit.
- (c) By not packing too loosely.
- (d) By not using too heavy syrup.

56. WHAT MAKES JELLY (a), SOFT? (b), TOUGH? (c), CRYSTALLIZE? (d), CLOUDY?

- (a) Jelly sometimes is syrupy because more sugar has been used than the fruit juice requires, or because boiling (after the addition of sugar) was not continued long enough.
- (b) Jelly is tough or stringy because too small an amount of sugar was used for the quantity of fruit juice taken, or because the boiling was continued after the jelling point had been reached.

(c) Crystals appear throughout the jelly because of an excess of sugar; when sugar is boiled with an acid for a sufficient length of time, it is changed into a form which does not crystallize. Crystals are found in jelly sometimes because the juices are boiled to too great a concentration before the addition of sugar; or in boiling, the syrup spatters on the side of the pan, dries and in pouring the finished product, these crystals are carried into the glass of jelly, and in that way the jelly becomes seeded with crystals. Canning grape juice a few weeks before making the jelly minimizes the crystals in grape jelly.

(d) Cloudy jelly may be due to having cooked the fruit too long before straining off the juice or to not having used sufficient care in straining the juice. Sometimes it is noticed in apple and crab-apple jelly that, although it is clear when first made, the jelly becomes cloudy after a time. In these cases it is usually due to the use of partly green fruit, the starch in this fruit probably causing the cloudy appearance.

57. WHY SHOULD FRUITS BE GRADED ACCORDING TO SIZE AND RIPENESS?

- (a) Fruits should be uniform in size and firmness so that heat penetration will be equal, which would not be the case if large and small fruits were all canned in one jar.
- (b) Partly ripe and fully ripe fruits should never be canned in the same jar. All partly ripe fruits should be canned together and all fully ripe fruits should be canned together.
- (c) Over-ripe fruits should never be used for anything unless it be jams or preserves.



## VEGETABLES

### 58. WHY DO BEETS TURN WHITE?

The color of the beet fibre is white and the juices give them the red color. In canning, this color can best be preserved by blanching the beets with two inches of the top of the beet left on, as this sets the color without allowing the juice to escape from the beet. Some varieties are more susceptible to loss of color than others.

### 59. SHOULD SALT BE USED FOR SEASONING OF VEGETABLES IN THE CANNING PROCESS, OR ADDED WHEN SERVED?

Salt may be added at the time of canning or when served, as preferred.

### 60. SHOULD CANNED VEGETABLES BE RECOOKED BEFORE USING?

Yes, ten to fifteen minutes to destroy toxins that may have formed on vegetables in the jar.

### 61. WILL CORN RETAIN MORE OF ITS FOOD VALUE BY CANNING ON THE COB?

No. Canning on the cob is apt to toughen the corn.

### 62. WHAT CAUSES CLOUDINESS IN CANNED PEAS? HOW CAN IT BE PREVENTED?

This may be caused from insufficient blanching, by some mineral in the water that is used, by using peas that are too old for canning, or by peas bursting during processing. Proper blanching, use of soft or distilled water, and careful handling ordinarily eliminate cloudiness. It may also indicate flat sour.

### 63. WHAT VEGETABLES EXPAND INSTEAD OF CONTRACT WHEN PROCESSING?

Corn, peas and lima beans.

### 64. WHY DO SOME VEGETABLES FALL TO PIECES AND LOOK SOUPY WHEN CANNED?

- (a) Because they have been over-processed.
- (b) Because of using overripe products.

### 65. CAN ANY VEGETABLES OR VEGETABLE AND MEAT MIXTURES BE CANNED SAFELY BY THE OPEN KETTLE METHOD?

No, all vegetables except tomatoes must be canned by the cold pack method (processed in the jar).

### 66. IN WHAT PART OF TOMATOES AND BEANS DO WE FIND THE HIGHEST HEAT RESISTING BACTERIA?

Heat resisting bacteria are generally found in the core of tomatoes and the string of beans.

### 67. SHOULD ALL VEGETABLES BE BLANCHED BEFORE CANNING?

All vegetables should be blanched or pre-cooked according to recipe.

### 68. DOES IT INJURE VEGETABLES TO OVERCOOK THEM?

It is better to overcook them than to undercook, as overcooking will do little harm, but when you undercook you fail to kill the bacteria.

### 69. HOW LONG SHOULD VEGETABLES STAND AFTER GATHERING BEFORE BEING CANNED?



No longer than is necessary to prepare them for canning. The slogan of 2 hours from garden to jar is a very good one.

70. WHY IS IT MORE DIFFICULT TO CAN VEGETABLES THAN IT IS TO CAN FRUIT?

Because vegetables are non-acid products, in which heat resisting bacteria is difficult to kill.

## MEAT AND FISH

71. IS IT NECESSARY TO PRECOOK ANY MEATS BEFORE CANNING?

Some prefer to precook meats, as they believe it improves flavor, hence we leave it to the option of the individual. In packing meats raw, however, add 20 minutes to processing time if using pressure cooker or one hour for water bath or oven.

72. WHAT CAUSES CONGEALED LIQUID IN CANNED MEAT TO LIQUEFY WHEN IT IS NOT OR DOES NOT SEEM SPOILED?

Meat stock congeals at a comparatively low temperature, and liquefaction in a jar is caused by a slight rise in temperature of the room in which the jar is kept. If this jar is put in a refrigerator or some other cool place the stock will soon solidify. This does not affect the keeping qualities of the meat.

73. SHOULD CANNED MEATS BE RE-COOKED BEFORE USING?

Yes, ten to fifteen minutes to destroy toxin that may have formed on meats in the jar.

74. WHAT IS THE BEST WAY TO HARDEN FISH MEAT FOR CANNING WHEN

## MEAT IS LOOSE OR SOFT?

Fish meat that is loose or soft should not be canned; only firm, fresh meat should be selected.

75. SHOULD BONES BE REMOVED FROM POULTRY AND GAME BIRDS BEFORE CANNING?

Poultry and game birds can be canned either with or without the bones.

76. IS IT NECESSARY TO PROCESS MEAT AND POULTRY LONGER WHEN BONES ARE NOT REMOVED?

No.

77. HOW SHOULD MEAT BE PROCESSED SO AS TO PREVENT THE LIQUID FROM BOILING OUT OF THE JAR, ADHERING TO THE SEALING COMPOSITION AND THEREBY PREVENTING A SEAL?

By following directions for filling and processing as given in recipes, care being taken that jars are never too full and are not processed at a higher temperature than called for in recipes.

78. WHAT IS GENERALLY CONCEDED THE PROPER TIME FOR ANIMAL MEAT TO LEAVE THE BODY OF WILD GAME?

Twenty-four hours, provided it is hanging in the open. Meat should not be canned until all animal heat is gone.

79. SHOULD MEAT BE SOAKED IN WATER BEFORE PACKING?

Meat should not be soaked, because it makes it stringy and tough, but it should be wiped with a clean, damp cloth.

80. WHY DO CHICKEN FEET MAKE EXCELLENT CANNED SOUP?



Because they contain a large percentage of gelatin.

81. SHOULD STEAK BE ROLLED IN FLOUR FOR CANNING? WHY?

No. Flour retards heat penetration, flakes off in bottom of jar and gives the meat a slightly warmed-over taste.

82. SHOULD MEATS OR FISH BE COMPLETELY OR NEARLY COVERED WITH JUICES OR LIQUIDS?

No, use only a few tablespoons of liquid in each jar.

## PICKLING

83. WHY DO PICKLES SHRIVEL?

Placing the cucumbers at once in heavy syrup, too strong brine or too strong vinegar solution will cause them to shrivel.

84. WHAT IS THE BEST VINEGAR TO USE IN BRINING OR PICKLING?

Pure apple vinegar.

85. WHY DOES SCUM FORM ON PICKLED FOODS?

Scum will not form on pickles if they are perfectly sealed. If stored in open containers, scum forms when the liquid comes in contact with bacteria which are usually found in the air.

86. HOW CAN CRISPNESS OF PICKLES BE ASSURED?

- (a) By using pure apple vinegar.
- (b) By using water as free from minerals as possible.
- (c) By proper brining.

## SPOILAGE

87. WHAT CAUSES FLAT SOUR? HOW CAN IT BE PREVENTED?

Flat sour is usually caused by canning over-ripe food; it may be prevented by using fresh products and properly processing, cooling and storing.

88. WHAT CAUSES FRUIT TO MOLD WHEN JARS ARE APPARENTLY SEALED?

When fruit molds, the jar is not sealed, as mold can form only in the presence of air.

89. WHAT ARE THE REASONS FOR SPOILAGE OR JARS NOT SEALING?

1. Incomplete sterilization.
2. Food, seeds, grease or juices lodged between lid and jar.
3. If Economy Jar—Clamp not properly adjusted; several clamps used.
4. In Oven Canning—Oven regulator out of adjustment or incorrect degree of heat.
5. Jars which are nicked or cracked or have sharp edges.
6. If Kerr Mason or Kerr Wide Mouth Mason—Band screwed down too loosely before processing.
7. Inadequate knowledge of jar. (Send for our free leaflet entitled "Kerr Principle of Sealing.")
8. In Open Kettle Method—Filling a number of jars at one time and allowing to cool before putting on caps. Improper sterilization of jar and lid.
9. Displacement of composition on lid by careless handling.
10. Removing kettle from fire and filling jars with result fruit put in last jars is practically cold.

90. DO ALL TYPES OF SPOILAGE CAUSE THE SEAL ON THE JAR TO RELEASE?

No. Flat sour is an exception and ordinarily shows no indication of spoilage until the jar is opened.



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All methods of canning fully explained and illustrated with movie-tones, step by step.

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Tells how to can, how to test a jar for seal, how to use Kerr Jars and gives some selected recipes with complete directions for canning.

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Complete instructions for the proper use of the pressure cooker in home canning.

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With complete details of preparing fruit and vegetable puree for babies.

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Explains how Kerr Jars are used and seal is obtained.

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