



## FOOD PRESERVATION

In general the methods comprise drying, pickling and bottling. It is preferable to use methods using least energy. Each method can be safe but requires care.

Refrigeration and freezing are also used but guidelines are either well-known or are available in the refrigerator manual and in fact sheets on the SA Health website [www.health.sa.gov.au/pehs](http://www.health.sa.gov.au/pehs)

### Drying

Drying (dehydration) can be done using only the heat of the sun with or without a small electric pump to assist air flow. Items can be placed on cloth stretched over frames; on window screens, cake-cooling racks or in a purpose-built dryer. Vegetables can be blanched by steam or microwave before placing in the dryer. Fruit can be dipped in lemon juice which helps to maintain their colour and is best placed skin-side down. Herbs can be dried suspended in the air in cloth bags, or in paper bags with holes punched in them. Peas and beans can be dried hung up in strings. Ensure that fruit or vegetables are dry right through before storing in air-tight jars.

Member Ashley Campbell offers help with design and construction of solar dryers, tel. 8297 6249

A design for a solar dryer is shown at [www.jrwhipple.com/sr](http://www.jrwhipple.com/sr)

### Pickling

Pickling depends on vinegar and salt to destroy potential food-poisoning organisms. Some tested recipes are included below. All products bottled with oil also contain vinegar, essential to maintain acidic conditions and prevent growth of harmful bacteria.

### Bottling

Home bottling needs to be carried out with care. Food hygiene precautions must be observed. All utensils used for preparing foods for preservation must be thoroughly cleaned. All containers and lids for storing preserved foods must be sterilised by boiling. Most harmful organisms will be destroyed by boiling.

Botulism caused by the bacteria *Clostridium botulinum* is a rare but potentially serious risk in canned and bottled food. [Botulism](#) has been virtually eliminated from the commercial canning industry which uses [sterilization](#) techniques to kill the *C. botulinum* spores.

For home bottling it is essential to follow these guidelines to prevent the growth of *C. botulinum*:

- Fruits including tomatoes are acidic, containing natural acids that kill the botulism bacteria. They can be bottled
- Vegetables are non-acidic and require high temperature and pressure which are not achieved reliably in a domestic pressure cooker. Vegetables are not suitable for bottling at home

## **EXAMPLES OF RECIPES FOR PRESERVING GARDEN PRODUCE**

### **Solar Dehydration**

#### **DRIED HERBS**

Why dried herbs?

- Dried herbs have a different flavour
- Some recipes reflect this difference, some calling for fresh herbs, some for dried
- Dried herbs are much more intense
- Some herbs are seasonal, eg basil is a summer herb
- Easy storage in your pantry

Gather herbs in summer when they are at their peak, including the flower heads - maximum flavour. It is a good opportunity to raid your friends' gardens if they have excess.

Dry them outside under shelter from direct sunlight and rain. When herbs are crunchy walk all over the bags they are in (pillow cases) to break up the herbs. Why pillow cases? They are cheap from a second hand shop; air goes through them; hang up easily outside; easy to walk over bags for crushing

Processing - remove stalks; put the herbs through a vitamiser or sieve; put in dry containers and label, including date

Uses

- Toppings for pizzas
- Sauces. including home made tomato sauce
- Casseroles
- Soups
- And anything else you can imagine

#### **Drying fruit and vegetables in a solar dehydrator**

Cut fruit or vegetables into appropriate sized pieces and place on a tray in dehydrator. Turn as required until dried. Note: The temperature in the drying section can reach 70 degrees.

## **SUN DRIED TOMATOES IN OIL**

Dry tomatoes as above, place in a jar with dried Italian herbs, cover with olive oil and seal. Store in refrigerator

## **Pickles and chutneys**

### **ZUCCHINI RELISH**

Slice 2 kg zucchini, sprinkle with salt and leave overnight in fridge.

Next morning drain and rinse with cold water

Put into pan with 500g chopped onions, 1 diced red capsicum, 2 cups sugar, 2 cups vinegar, 1 Dsp each celery seed and turmeric

Boil 15 mins. Thicken with 1 Tbs blended cornflour (I leave it out in the sun to thicken up), bottle and seal.

### **ZUCCHINI PICKLE**

1 kg small (white, green and/or yellow) zucchini, sliced on diagonal.

3 onions, finely sliced

½ cup salt

3 cups white wine vinegar

1½ cups sugar

1 tablespoon yellow mustard seeds

1 teaspoon dry mustard

2 teaspoons turmeric

Toss zucchini and onions with salt in a stainless steel or ceramic bowl, then cover with cold water. Leave for one hour, then drain in a colander.

Return remaining ingredients in a saucepan and stir over gentle heat until sugar has dissolved. Bring to a boil and pour over drained zucchini. Leave to cool.

Use at once or pack into sterilized jars and refrigerate. Use within 2 months.

Makes 1 litre

### **PICKLED CAPSICUM**

Put a small amount of vinegar into a jar, shake jar around to smear all inside with vinegar (plus lid). Place ½ cup vinegar to ½ cup sugar into pan, bring to boil

Add cut up capsicum and stir well. Bottle and twist lids on tightly.

### **EGGPLANT PICKLE**

1 large eggplant, about 10 oz cut into small cubes

Stir about ½ tsp salt over

Fry 1 Tbs each garlic, ginger and whole chilli

Add 2 tsp cumin powder, ½ tsp chilly, ¼ tsp fenugreek powder, 1 tsp mustard seed, 1 dstsp tomato paste

6 Tbs vinegar

Add salted eggplant, salt to taste, 2 dstsp sugar

1 can tinned tomatoes and a bit of paprika (for colour)

Cook slowly about 30 mins.

## **ROGER'S MILD TOMATO SAUCE**

30 medium (3kg) ripe tomatoes, chopped  
3 medium (360g) onions, chopped  
2 large (400g) apples, chopped  
1 cup white vinegar  
1 cup water  
1 nutmeg  
2 cups sugar

Combine tomatoes, onions, apples, vinegar, water and nutmeg in large saucepan. Bring to the boil, simmer, uncovered, stirring occasionally for about 1 hour or until thick. Add sugar, stir over heat, without boiling, until sugar is dissolved. Blend or process mixture in several batches until smooth, push through fine sieve. Discard pulp. Pour into hot sterilized bottles; seal when cold. Makes about 6 cups (1½ litres)

## **SALTED LEMONS OR LIMES**

Cut into quarters but not all the way down so they are still joined at the bottom. Put about a 1 tsp rock salt into slits. Pack tightly into glass jar. Add juice of lemon and a bit more salt. Cover with boiling water and seal while hot. Leave in a cool, dark place for 40 days, do not refrigerate. You are meant to discard the flesh and eat the soft skin, but I like it all! I also use the lemony brine in other savoury dishes I'm cooking.

## **CUCUMBER CHIPS**

6 cucumbers and 4 onions  
Sprinkle with ½ cup salt, then cover with crushed ice, stand for 3 hours  
Drain off the liquid  
Add 3½ cups white vinegar, 1 dsp mustard seeds. 3 cups sugar, 1 tsp celery salt, 1 tsp turmeric  
Bring almost to the boil but DO NOT BOIL. Put in warm jars and seal hot

## **SPICED VEGETABLE PICKLES**

2 medium cucumbers peeled ( 560g)  
6 medium spring onions halved (250g)  
½ medium cauliflower chopped (1 kg)  
250gm green beans chopped  
1 medium red pepper chopped (150g)  
2 Tbs coarse cooking salt  
Spiced vinegar, and 6 cups white vinegar  
3 bay leaves  
¼ cup sugar  
1 Tbs black peppers  
2 cm piece fresh ginger peeled and sliced  
5 small fresh red chillies halved  
2 cloves garlic, chopped

Cut cucumbers length ways, remove seeds, chop cucumber coarsely.

Combine cucumber, cauliflower, onions, beans and peppers in large bowl. Sprinkle with salt and cover with boiling water, stand for 10 minutes, then drain. Pack vegetables into sterilized jars, cover vegetables completely with spiced vinegar, seal.

### **Spiced vinegar**

Combine vinegar and sugar in saucepan, stir over heat without boiling until sugar is dissolved. Tie remaining ingredients in a piece of muslin, add to pan, bring to boil, cool and discard bag.

### **KASOUNDI CHUTNEY**

90 grams black mustard seeds  
250g fresh ginger minced  
500 ml malt vinegar  
125g garlic minced  
60g green chilli minced  
250 ml sunflower oil  
30g turmeric  
90g cumin powder  
60g chilli powder  
250g brown sugar  
60 – 90g salt

2 kg chosen fruit – tomatoes, apricots, peaches and others, whatever is in excess.

Heat oil. Cook all spices for 5 minutes . Add ginger, garlic and chillies and cook for a further 5 minutes. Add all remaining ingredients and cook for 60 – 90 minutes. Store in sterilised jars.

### **BOTTLING**

#### **Fruit in microwave**

Microwaving achieves heating for sealing the bottles; it does *not* sterilize the fruit.

Rinse jars in hot water and onto a tray into the sun to dry off and sterilize.

Stew up fruit with sugar

Pour hot fruit into warmed jars and screw on lids lightly

Put into the microwave on a tray (otherwise jars are very hot to handle)

Cook on medium power for a few minutes.

The time depends on how many jars you are doing.

When the fruit begins to bubble, remove jar and tighten lid (use oven mitt!)

When cold leave upside down for about an hour to test for leaks. Jars will pop as they seal.