Food Preparation

# MAKE SURE YOU KEEP THE GOODNESS IN

Fresh fruit and vegetables have lots of vitamins and minerals in them. But these vitamins and minerals can disappear very quickly if you are not careful about how the food is prepared and cooked. Here are some tips to help you keep the goodness in:

Eat raw fruit and vegetables whenever it is possible.

Eat as much of the fruit or vegetable as possible – including the skin.

Most of the vitamins are in the outside parts of the fruit and vegetables. Try not to peel.

Try to buy and eat fruit and vegetables as fresh as possible.

Cook the vegetables in big pieces. Small pieces will lose more vitamins.

It is best to steam vegetables.

Cook vegetables very slowly over a low heat until they are just cooked.

Use the vegetable cooking water to cook other foods in or to make soup or gravy.

Eat the vegetables as soon as they are cooked.

## Food safety tip

You must eat meat on the day that you buy it if you cannot keep it in a fridge. You can only keep meat in the fridge for two days. After two days it must be frozen.

Cook all types of meat well. Don’t ever eat raw eggs, meat, chicken or fish. Don’t use eggs that are cracked.

## Herbs, spices and medicinal plants

Spices, especially sweet spices like cinnamon, can help to make food taste better. You can buy cinnamon sticks which you add to food while it is cooking.

Eating parsley after you have eaten will help to freshen your mouth and it is good for you. It’s easy to grow at home too.

Ginger helps if you are feeling nauseous and for colds. You can make a ginger tea.

Garlic helps to fight infections. Make a tea or add garlic while you are cooking.

Thyme helps with digestion. You can add thyme leaves to food.

Other good herbs to eat are sweet basil, coriander, oregano and fennel. They are all easy to grow and can be added to your food.

# http://www.nda.agric.za/docs/solar/pack.JPGFOOD HYGIENE

It’s important to practice good hygiene in food processing to avoid food poisoning. Wash your hands thoroughly before handling food and after using the toilet or handling kitchen waste (especially raw meet). Ensure that cutting boards, knives, jars, and bowls have all been properly cleaned. Make sure the water you are using to clean your kitchen equipment and fruits or vegetables is clean. If not, boil it for 10 minutes or add a bit of bleach (1 : 50 mixture).

# DRYING FRUITS AND VEGETABLES

Some vegetables need to be blanched before being dried. This means they are dropped into boiling water for a certain amount of time.

Drying requires a warm temperature, low humidity and a flow of air.

Drying is a slow process and can take from 6 hours to 5 days. Drying time is influenced by the moisture content of the vegetable or fruit as well as the method of drying used.

Always use fresh healthy produce to ensure a good quality dried product.



## Methods of Drying

### Sun Drying:

Produce is placed on drying racks, covered with netting to prevent contamination from insects and dust, and placed in direct sun or shade.

Drying time: 3-5 days

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| --- | --- |
| Disadvantages | Advantages |
| Produce must be removed when weather changes (wind or rain). If produce isn’t protected, produce may be contaminated with dirt. | Drying frames are cheap and easy to make. |

### [Image:Solardrying03.gif](http://www.howtopedia.org/en/File:Solardrying03.gif)Tent Drying:

Produce is placed in a wooden frame, covered with plastic and placed in direct sunlight.

Drying time: 3-5 days

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| --- | --- |
| Disadvantages | Advantages |
| Requires some supplies and labour to construct. | Protects crops from rain and wind. |

### Oven Drying:

Produce is placed on oven racks and baked at 140° C.

Drying time: 8 hours or more

|  |  |
| --- | --- |
| Disadvantages | Advantages |
| Very expensive and should therefore only be used as experimentation. | Very fast drying time. |

## The Drying Process

### Cleaning

Use only good quality, ripe produce

Clean all working surfaces, containers, and equipment. Use a solution of 1 part bleach to 50 parts water (20L water + 400ml bleach)

Use fresh cleaning solution every day.

Do not break the skin of the produce during this process!!

Place produce in a clean container after washing.

Stops ripening

Prevents change in flavour

Enables produce to rehydrate better

### Peeling

Peeling should not take place in the space where raw produce is washed.

Peel carefully to remove as little flesh as possible.

Dispose of peels immediately.

### Cutting and slicing

The type of produce determines the thickness of the slice.

Thick slices take longer to dry.

Thin slices stick to drying trays.

If you intend to sell, make sure all slices are the same thickness.

### Blanching (necessary for vegetables and recommended for fruits as well)



What does blanching do?

• Destroys enzymes and thus sets the colour

• Shortens the drying time

The following should be blanched before bottling:

• All greens should be blanched about 5 minutes to reduce the bulk.

• In order to prevent loss of the milk, maize should be blanched on the cob until it is firm to the touch and until the milk does not ooze out when it is pricked with a fork.

• Beets, carrots and parsnips should be blanched until the skins will slip off easily.

Boil just enough water to cover the produce.

Place cut produce in a steamer basket.

Immerse in boiling water (required time varies).

Remove from boiling water and drain with a sieve.

### Keeping the colour

Now place vegetables into a bath of warm water into which the juice of one lemon has been squeezed

Allow to cool for about 10 minutes, before removing the vegetables and draining them.

This will ensure that vegetables do not lose their colour or become discoloured during drying.

### Loading the tray

Drying trays must be brushed clean and washed beforehand.

Load trays while slicing -- produce muse be placed close, but not overlap.

Trays should be placed on a level area out of the wind either directly in the sun or in the shade.

### Drying

If moisture forms on the inside of your Tent Dryer, open the door slightly.

If possible, place the tray/dryer inside overnight to protect from dew.

### Packaging and Storage

Proper packaging and storage prevents moisture from re-entering. Pack carefully to avoid bruising. Packaging needs to be done immediately after totally dry.

* Store in airtight glass jars, boxes, or metal cans with tight fitting lids or sealed in plastic bags.
* Store in small quantities to avoid major losses due to mould.
* Store only one type of food in each container.
* Store in a cool, dry, and clean area.
* It is best to store the glass containers should be kept in a dark environment.

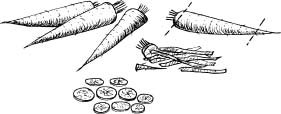
*Right: Bottles with dried sweet potato, ground chillies and brinjal.*

Containers must be marked with the date. They can be stored for 1-2 years.

A high quality product will be properly dried with no mould. It should have a good colour, but some browning is normal. It should taste like the fresh produce. Dried vegetables must be dry and brittle.

How to dry pumpkin leaves: How to dry carrots:

Select fresh, tender leaves Choose crisp, tender carrots without woodiness

Peel off the hairy outer skin Steam until cooked through but not mushy

Wash in clean water Remove whiskers, tails and crowns

Steam blanch for 3 to 5 min Cut into rings (2-3 mm) or shred

Place on trays ready for drying Arrange on trays for drying

Test for dryness: crumble easily Test for dryness: slices very tough, but can be bent.

# PREPARATION METHODS FOR TRADITIONAL FOODS

## Germination/malting

Malting entails germinating of grain (and some legumes) and then drying this germinated grain again before further preparation into porridge or fermented foods.

This malting helps to release a number of different nutrients in the food, including protein, sugars, zinc and iron. It makes the nutrients more avilable. It also ensure a thinner porridge, which is still nutrinet rich for young children.

### How to germinate grains.

* The grain to be malted is soaked in water until they swell up.
* The grain is then places on racks or spread out in shallow containers and but kept moist and cool for 3-5 days until the seeds germinate and the roots start to grow out.

*Right: A flat woven basket that is perfect to use for germinating/malting grains*

* At this point they are transferred ot a hot, dry envrionment and the seeds are once again dried. They can be kept like this for a number of months.
* The grain can now be ground into a meal and used for porridge. This porridge is MUCH more mutritious than watered down maize porridge.

*Right: A traditional grinder for making course wholegrain meals.*

* These malted grains are also used to make fermented drinks such as awmahewu and umqombhoti (sorghum beer). To ferment, yeast cna be added, or you can rely on the natural yeasts present in the grains. If you use traditional pots (inkhamba), then the yeast culutre will reamin in that pot and can be sued over and over.

*Right: Sorghum beer, being brewed in a tradtional pot.*

### Making porridge and a fermented drink

#### Sour Porridge (Imbila)??? What name can we give this?

500 ml mealie meal   
250 ml sorghum or millet  (malted)  
1 l water   
  
Soak mielie meal and sorghum in water overnight. Cook as porridge and serve. The porridge can also be cooled and allowed to rest for four hours, so that the fermentation process can take place. Add sugar to taste before drinking

# MORE RECIPES TO TRY



### Ingredients

1 handful amaranthus

1 handful kale

1 handful wild mustard

1 handful spinach

200g cheese

1 litre milk

1 cup flour

100g margarine

## Creamed wild vegetables

### Method

Wash and cut vegetables. Cook vegetables for 5 minutes. Melt margarine. Slowly add flour while stirring to avoid lumps. Once the paste is complete slowly add milk while stirring continuously. Mix with cooked spinach. This is a side dish

## Sweetpotato bites



### Ingredients

2 Spring onions

1 cup flour

2 cups sweet potato, mashed

3 teaspoons baking powder

1 ml sugar

1 ml pepper

Oil for frying

### Method

Finely cut onion. Mix egg and fresh cream together. Sift flour and salt and mix with all ingredients in a bowl. Make small rolls with a teaspoon and fry in oil till golden brown.

**Ref**: Department of Agriculture and Environmental Affairs (Undated). **Sweetpotato processing**. Cedara: Department of Agriculture and Environmental Affairs Development