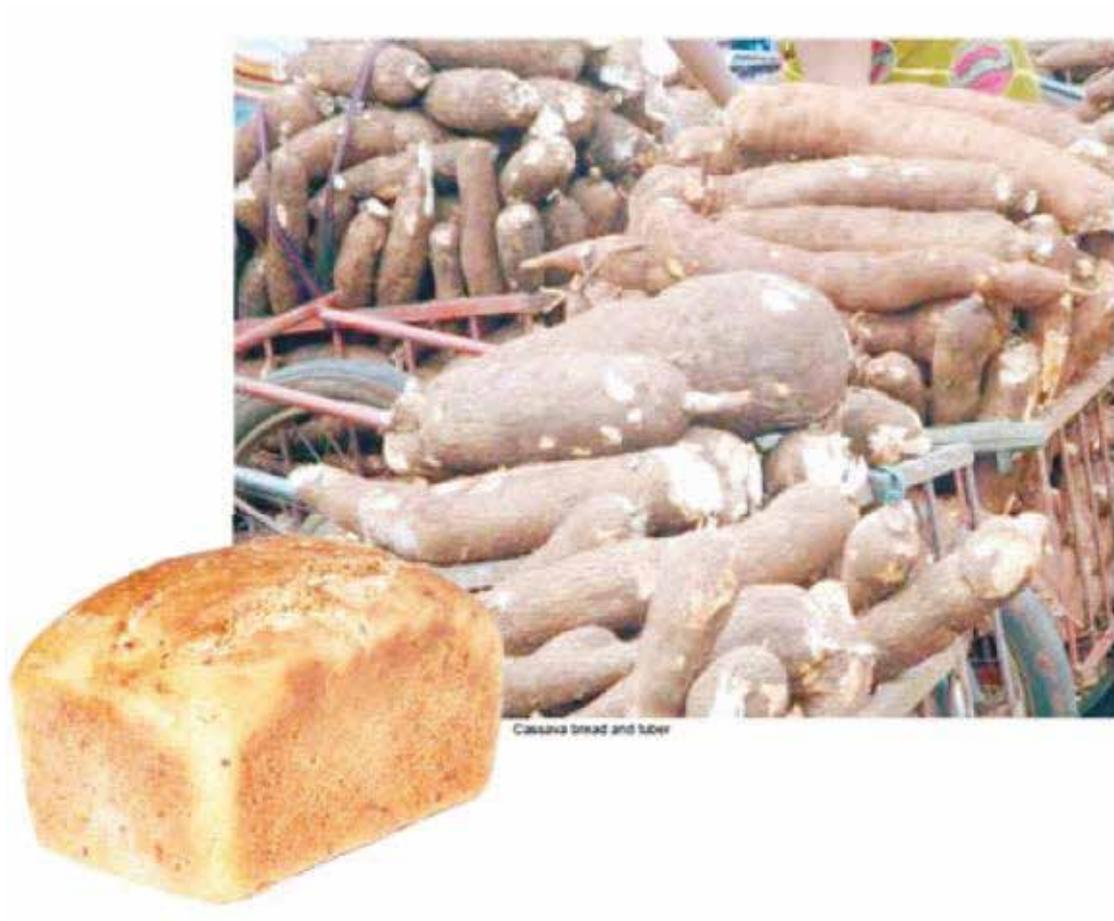


CASSAVA BREAD



Cassava bread and tuber



Roots and Tubers Processing Toolkit



CASSAVA BREAD

1.- Cassava bread:general information

Cassabe is a type of bread prepared from cassava. It is common to South America. Similar products are made in other cassava-growing regions. It is the staple diet of the Amazonian Indians.

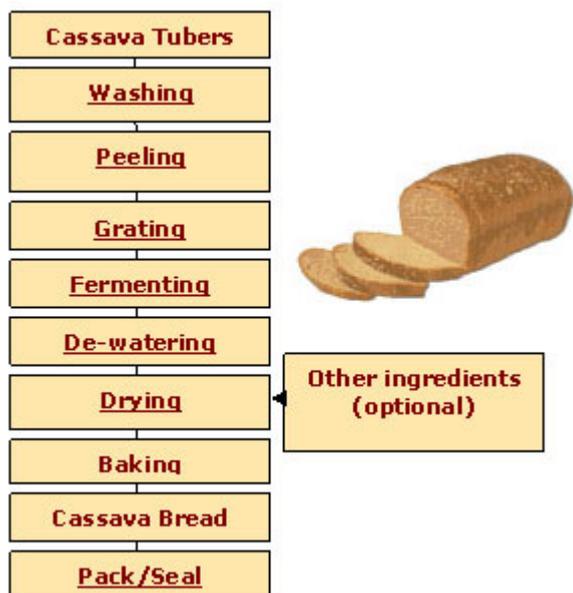
There are two different methods for making cassabe, depending upon whether the roots are soaked and fermented or if they are just peeled and grated.

The variety of cassava and the level of cyanide containing compounds within the tuber will determine whether fermentation is required.

Bitter cassava is preferred as it has a higher starch content which makes the product less brittle and better to store.

The production of cassabe is a laborious process which can take up to two days.

2.- Processing details for cassava bread production



2.1.-Washing

Preparation of raw material

Fresh cassava is a moist, low acid food that is susceptible to bacterial and fungal growth. Hygienic practice should be followed to prevent cross contamination and spoilage. All waste materials should be removed from the site to avoid cross contamination.

Fresh cassava should be free from microbial and insect damage. Bruised, damaged or mouldy roots should be discarded as they will reduce the quality of the gari.

Fresh roots should be processed within two days of harvest to prevent deterioration and loss of quality.

Tubers should be thoroughly washed to remove sand and dirt.

2.2.-Peeling

Tubers are peeled by hand. Woody pieces should be removed. Mechanical peelers are available. After peeling, the tubers are washed in clean water to remove any pieces of peel and dirt.

2.3.-Grating

Grating the root into fine shreds is a common step in the processing of many root crop products. It helps to facilitate later steps in the process, for example de-watering, drying, fermentation or pulping.

Grating alters the texture of the raw material. It is an essential step during cassava processing as it allows for fermentation of the material and the breakdown of cyanide containing compounds.

Grating is time consuming and hard work. A range of simple hand held and mechanical graters are available. Many graters are based on a rotating horizontal disc or a vertical drum grating surface against which the root crop is held.

Low-cost hand graters can be made from a sheet of tin or galvanised mild steel. The grating surface is made by puncturing the surface with holes. The grater can be held horizontally in a frame or downwards.



2.4.-Fermenting

This stage is optional and depends on the variety of cassava and the level of cyanide within the tubers. Pack the grated cassava into baskets made from cane, bark or palm branches. Leave for 24-48 hours at room temperature.

It is important to control the fermentation period. If the period is too short, the cassava will not be fully detoxified and will have a bland taste.

If the cassava is fermented for too long, the product will have a strong sour taste. Both over and under fermentation affect the texture of the final product.

2.5.-De-watering/Sieving

Fill the fermented paste into hessian or polypropylene sacks. Place the sacks in a manual screw press or weigh them down with rocks.

If the cassava is pressed with rocks, the fermentation and pressing can be carried out at the same time. Traditionally, a tipiti (which is a long type of basket in which the mashed cassava can be pressed) is used to squeeze out the juice. The press cake is left for several hours or overnight until it becomes solid. The pressed cake is broken up and rubbed or sifted through a coarse sieve to separate out the fibres.

2.6.-Baking

The press cake is either sun-baked or baked over a fire. Alternatively, the sifted pulp is spread into thin flat cakes and cooked on a hot griddle, turning to cook both sides and to make a hard cake. The cakes are then dried in the sun. The dried cakes can be anything from 60-90cm in diameter. Small pieces are broken off and dipped into soups and stews.

2.7.-Packaging

The hard dried cakes will store for several months, so long as they are kept in cool, dry conditions.

