## Making Bread from Kaukau

Kaukau is one of the most popular vegetables in PNG. It provides many essential nutrients, including vitamin B6, beta-carotene, calcium and iron, making it one of the healthiest vegetables in PNG. It has been suggested that beta-carotene helps prevent cancer.

Papua New Guinea kaukau is available in white, yellow and orange and purple flesh, each with a different skin colours ranging from white to purple, with unique taste. The purple skin kaukau, called the Northern Star, has a creamy white flesh, mellow taste and a firm texture. The white kaukau, called the Waghi Besta, has a creamy yellow flesh, slightly sweeter and a firm texture. The orange kaukau, called the Karot kaukau, is the sweetest kaukau and has a soft texture

The kaukau we eat today was brought to PNG from South America in the early 1700's and was adopted by local people because of its superior size and taste. Over the years, it has changed in shape, size and colour. Kaukau in most other countries is called Sweet Potato.

## Making bread from kaukau

Bread can be made from kaukau, either in mashed or flour form. Kaukau alone does not give perfect bread because it does not have high protein content or gluten. Wheat flour makes a difference in the quality of the final product because wheat flour is higher in protein and gluten that gives bread its unique texture. Acceptable bread that resembles wheat bread can be obtained with up to 30% substitution of wheat flour with kaukau flour, and 40% substitution with mashed kaukau, provided that the right amount of water is used.

Fats like oil, butter and shortening add tenderness and flavor to bread. Breads made with these ingredients are also moist. Make sure you don't use whipped butter or margarine, or low fat products, since they contain water. Sugar is the fuel that feeds yeast and makes it ferment; producing carbon dioxide that makes the bread rise, at the same time utilizes sugars present in the flour to provide food for the yeast. Salt is essential in every bread recipe. It helps control yeast development, and prevents the bread from over rising. This contributes to good texture. Salt also adds flavor to the bread.

To make kaukau bread these ingredients need to be mixed well.

• Mashed karot kaukau 1,525 g (6 cups)

• Plain Wheat Flour 2,250 g (20 cups)

• Salt 25 g (2 tablespoonful)

• Canola oil 25 g ( 2 tablespoonful)

• Dry Yeast 20 g (2 tablespoons)

• Warm Water 1,150 ml (depends)

## Method

Boil the kaukau. Drain and allow them to cool.

Once the kaukau is cool enough to handle, mash them coarsely in a bowl. Add wheat flour, premix, and yeast, and mix together. Add warm water into mixture slowly and, make sure the mixture is not too wet. Stir until the dough is form. Weigh the right dough for each bread, shape the dough and place into baking pans. Put the pan in the warm place and allow to rise until the dough is ready. Remove from warm place and put in oven at 180°C for 25 minutes or cook over fire until done. Take the kaukau bread out and allow to cool.

If you glaze with egg yolk before or after baking, it makes surface look better. Brushing the baked dough with egg yellow will also make the crust golden crisp.





Photo from PNG University of Technology http://www.unitech.ac.pg/research/community-outreach/spisard

For further information, please contact:

NARI Postharvest & Processing Projects - Bubia

P. O. Box 1639 Lae 411, Morobe Province Papua New Guinea

Phone: (675) 478 4000 Fax: (675) 475 1449Email: <a href="mailto:narils@nari.org.pg">narils@nari.org.pg</a>

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