



Mixed spices in a cheese cloth



Chips with tomato sauce

allow the bottles to cool.

Uses

Tomato sauce is widely used with snacks (e.g. French fries / chips; and ready-to-eat preparations.



Packed and labelled tomato sauce

Basic Hygiene During Processing

I. Processing Premises:

a) Necessary Facilities

- Sanitation area: toilets/latrines, changing rooms, handwashing areas, and lunch areas
- Proper flooring
- Cleaning stations
- A floor drainage system

b) Working Rooms Should Have:

- Sufficient space for all processing activities
- Easy-to-clean floors
- Walls painted white for easy detection of insects, dirt, and abnormalities
- Adequate lighting
- Temporary storage: stacked crates for raw materials, shelves for jars, and black airtight containers for dried products

- Good ventilation to maintain a moderate temperature
- Windows with insect-proof screens

II. Equipment

- Equipments should be properly cleaned before and after use
- Use hot water for sterilizing the equipment
- Scrub wooden equipment
- Keep all utensils dry by wiping with a clean cloth and store them in dust-free places

III. Personal Hygiene

- Acquire health certificates for commercial purposes
- Avoid processing when one is sick or has open wounds
- Ensure personal cleanliness, including body and clothes
- Wash hands carefully with soap

Compiled by: Ndambuki, J.M., Wayua, F.O., Ochieng, V. and Wasilwa, L.A.

Edited by: Nyabundi, K.W., Mukundi, K.T., Maina, P., Wanyama, H.N., Kedemi, R.M. and Biegon, A.C.

Design and Layout: Nogrecia N. Mnene

For Further Information contact:

The Centre Director
Foos Crops Research Centre - KALRO. Muguga
P.O Box 30148-00100 Nairobi

KALRO/NAVCDP Tomato VC Brochure No. 81//2024



TOMATO SAUCE



INTRODUCTION

Tomato is an important vegetable crop in Kenya, widely grown for home consumption and commercial purposes. However, the crop faces a number of challenges, including post-harvest losses, which are a major threat to harvested produce. The presence of losses in a crop indicates waste of resources that were put in place during production. Value addition can be a strategic approach to mitigate these losses and maximize the profitability of tomato cultivation.

Tomato sauce, made from tomatoes and spices, is usually served as a condiment for many dishes. The production of tomato sauce improves flavor and extends shelf life. Tomato sauce can maintain its quality for six months or more. The market for tomato sauce encompasses not only individual consumers looking to enhance their home cooking but also restaurants and catering businesses.

By processing surplus or lower-grade tomatoes into tomato sauce, farmers can add value to their produce and extend its shelf life, thereby reducing post-harvest losses, creating employment, and increasing income. Additionally, they can establish partnerships with local markets, restaurants, or supermarkets to sell their tomato sauce products, fostering economic growth within their community while meeting the demand for high-quality, locally sourced ingredients.



Requirements for processing of quality tomato sauce

Equipments

- Weighing scale
- Washing troughs
- Metal sieves
- Washing Basins
- Blender/Pulper
- Knives
- Stirring wooden stick
- Source of fire (Gas or Jiko)
- Sufuria (Pan)
- Packaging bottles
- Tea spoon
- Table spoon

Ingredients

- 4kg of ripe tomatoes
- ½ cup of freshly squeezed lemon juice
- 2 teaspoons of salt
- 400g of sugar
- 100g of coriander
- 2 pieces of garlic
- 25g of ginger
- 2g of turmeric
- 2g of cinnamon
- 1g of red flakes
- 10g of chilli
- 10g of parsley
- 15ml of white vinegar

Procedure

- Weigh, sort and wash tomatoes



Weighing tomatoes



Blanching of tomatoes

- Blanch for 2 minutes, cool in cold water and peel
- Cut the tomatoes into pieces
- Mix the tomato pieces, chopped onion, crushed ginger and garlic, and boil in covered pan to soft mix.



Sliced tomatoes

- Strain the mix through a pulper or soup strainer to obtain pulp



Straining of the mixture of tomatoes slices, onion, ginger and garlic

- Cook the pulp slowly and mix thoroughly to avoid lump formation.
- Add sugar, continue cooking till total soluble solids (TSS) increase to 28%.
- Add salt and mix well.
- Mix all the spices in a cheese cloth, to produce spice extract.
- Add spice extract and remove from stove.
- Add vinegar
- Fill into sterilised, dry bottles.
- Seal with crown corks and



Cooking while mixing the pulp