Uses of tomato juice Used as a ready to drink juice

Basic hygiene during processing

i. Processing premises: should be spacious to accommodate all required facilities.

a) Necessary facilities

- Sanitation area-toilets/ latrines, changing rooms, hand washing areas and lunch areas
- Proper flooring
- Cleaning stations
- A floor drainage system
- Packed and labelled tomato juice

b) Working rooms should

have:

- Room to accommodate all processing activities
- Easy to clean floors
- Walls painted white for easy detection of insects, dirt and any abnormalities
- Adequate lighting
- Temporary storage- stacked crates for raw materials, shelves for jars and black airtight containers for dried products
- Good ventilation to allow moderate temperature
- Windows with insect-proof screens

ii. Equipment

- Should be properly cleaned before and after use
- Hot water should be used for sterilizing the equipment
- Wooden equipment should be scrubbed



- All utensils should be kept dry by wiping with a clean cloth and stored in dust-free places
- Health certificates should be acquired (commercial purposes)
- Health status (Processing should not be done when one is sick or with open wounds)
- Illness and injuries (Processing should not be done when one has open wounds)
- Personal cleanliness; Maintaining personal cleanliness including body and clothes
- Personal behavior; Hands should be carefully washed with soap

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

Edited by: Nyabundi, K.W., Mukundi, K.T., Kinyua, Z.,M., Maina, P. and Wanyama, H.N.

Design and Layout: Nogrecia Mnene

For Further Information contact: The Centre Director, Food Crops Research Centre - KALRO. Muguga P.O Box 30148-00100 Nairobi

KALRO/NAVCDP/Tomato Brochure No...119/2024



READY TO DRINK TOMATO JUICE





Introduction

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

Tomato juice is obtained from tomato and mixed with water, sugar and lemon or citric acid. Production of tomato juice improves flavour and extends the shelf life. Tomato juice can maintain quality for six months. The market for tomato juice encompasses not only individual consumers looking to enhance their home cooking but also restaurants, catering businesses, and food manufacturers seeking premium ingredients for their products. Additionally, partnerships with local markets, restaurants, or supermarkets can be established to sell tomato juice products, fostering economic growth within the community while meeting the demand for high-quality, locally sourced ingredients.

Requirements for processing quality tomato juice Materials

Weighing scale

- Washing troughs
- Metal sieves
- Washing Basins
- Blender/Pulper
- Knives
- Stirring wooden stick
- Source of fire (Gas or Jiko)
- Sufuria (Pan)
- Packaging bottles
- Teaspoon
- Tablespoon

Ingredients

- I kg of ripe tomatoes
- 180 g of sugar
- 10 of lemon juice

Procedure

- I. Weigh and sort ripe
- 2. Wash the tomatoes with clean water
- 3. Blanch the tomatoes for two minutes and cool immediately



Blanching of tomatoes for ease removal of the peels

4. Remove the peels and cut into small pieces





Peeled tomatoes

Tomato cut into small pieces

- 5. Pulp the cut tomato pieces using a pulper machine or a blender
- 6.Weigh the pulp which will help in measuring the other ingredients
- 7. Put the pulp in a clean sufuria, add the water and stir
- 8. Place on fire and heat until the temperature reaches 45 degrees



Blending of tomato to pulp

9. Add sugar and citric acid and continue heating until it boils (100 degrees)

10. Sieve and cool it to 70 degrees

- Pack in sterilized juice bottles
- 12. Cool to room temperature and label



Pasteurization of tomato juice



Weighing of tomatoes for processing juice