



Daffodil
International
University

THE INTERNSHIP REPORT

on

Production and Operation Management of Tasan food and Beverage

Submitted to:

Dr. Md. Bellal Hossain

Professor & Head

Department of Nutrition & Food Engineering

Daffodil International University

Supervised by:

Dr. Amir Ahmed

Associate Head

Department of Nutrition and Food Engineering

Daffodil International University

Submitted by:

Faisal Sardar

ID: 162-34-555

Department of Nutrition & Food Engineering

Daffodil International University

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LETTER OF TRANSMITTAL

Date 6th May, 2019

Prof. Dr. Md. Bellal Hossain

Department of Nutrition & Food Engineering

Daffodil International University

Subject: Submission of internship report.

Dear Sir,

I am here by submitting my internship report, which is a part of NFE program curriculum. It is a great achievement to work my active supervision. This report is based on different types of product making and analysis. This internship give me both academic & practical exposures. First of all learned how to increase product quality. This internship gives me the opportunity to develop a network with the processing field in Bangladesh.

Your sincerely

Faisal Sardar

D: 162-34-555

Department of Nutrition & Food Engineering

Faculty of Allied Health Science

Daffodil International University

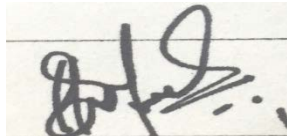
Letter of Recommendation

This is to certify that the internship report submitted for assessment to the examination committee by Faisal Sardar ID No: 162-34-555 of the Department of Nutrition and Food Engineering. I am pleased to declare that this report is entirely written by the author and all related research work has been conducted by the researcher under my strong supervision and observation. This is a piece of original work and has neither been submitted to nor been published anywhere before for any other purpose.

I strongly recommended the approval of the report by the authority and by the same token, I also recommended a positive and fare evaluation of the work.

I wish every success in his life.

Yours Sincerely

A handwritten signature in black ink, appearing to read 'Dr. Amir Ahmed', is written over a horizontal line on a light-colored background.

Dr. Amir Ahmed

Associate Head

Department of Nutrition and Food Engineering

Daffodil International University

ACKNOWLEDGEMENT

First of all I would like to express my gratitude to almighty Allah for giving me the strength and opportunity to complete the report in the schedule time successfully. In the preparation of this report, I would like to acknowledge the encouragement and assistance give to me by a number of people .I am taking the privilege to deliver my gratefulness to each and every people who are involved with me in every phase of my lives. I am grateful to my parents without whom I could not here. Without the support of my parents I could not be able to achieve my objectives and goals. My deep gratitude and sincere thanks to the honorable Head, Department of Nutrition and Food Engineering, Professor Dr. Bellal Hossain, for this kind cooperation and encouragement to accept this degree.

My deep gratitude and sincere thanks to my supervisor Dr. Amir Ahmed, Associated Head of Department Nutrition and food engineering, for his whole-hearted supervision during the research time. I am very glad to deliver my gratefulness to each and every person who involved with me in every phase of my life.

I am also thankful to my great teachers Dr. Md Rezaul Karim,Assistant Professor, Fouzia Akter, Senior Lecturer, Tasmae Tasneem, Senior Lecturer, Nasima Akter Mukta, Lecturer, Effat Ara Jahan, Lecturer and Najia Kamrul, Lecturer for their countless inspiration and encouragement during my student life.

I would like to express my warmest thanks MD Emran Hossain, Co-ordination Officer and lab technician Emdad Hossain. I express my deep gratitude to the office/labs stuff of the Department of Nutrition & Food Engineering under faculty of Allied Health Sciences, Daffodil International University.

EXECUTIVE SUMMARY

We saw significant opportunities in the biscuit and confectionery industries. Today, we are the largest manufacturer of biscuits in Bangladesh. Which is producing high quality Potato crackers, biscuits, cookies and real potato chips. The company has launched to brands which is known as “Tasty bite” and “Tasan”. Tasan Food & Beverage Makes sure that it produce high quality and delicious products.. There is a lot of product manufacture and marketing in different side in our country. In beverage sector there is a lots of product like lichi drinks, mango juice, mango lolly, etc. In drying section they have potato cheeps, chanachur, fried peas, biscuits etc.

Microbiology is the learning of the microorganisms which inhibit, create, and contaminate food, also including the research of microorganisms causing food spoilage, pathogen that may cause disease especially if food is inappropriately cooked or stored, those used to produce fermented foods such as cheese, yogurt, bread, beer, and wine, and those with other useful roles such as produce probiotics. Food safety is a major point of food microbiology. Several agents of disease, pathogens, are readily transmitted via food, including bacteria, and viruses. Microbial toxins are also possible contaminants of food. Though, microorganisms and their products can also be used to combat these pathogenic microbes. Probiotic bacteria, including those that produce bacteriocins, can kill and reduce pathogens. Most common bacteria those are found in foods are Salmonella, Listeria monocytogenes, Escherichia coli, Clostridium botulinum. Salmonella Bacteria found in some meat, poultry and eggs that, if undercooked, can cause illness.

This report is prepared on the basis of my One-month practical experience at the Tasan food and beverage which is a concern of “Hazi Amin Group”. This Factory is situated in savar.

This internship program helps me to learn about the practical knowledge of different types of product in Institute of Tasan food & beverage. This Institute plays an active role in transferring technologies developed by our Scientist to the commercial entrepreneurs of our country.

This report has been presented based on my observation and experience gathered from this industry. The organization has many divisions and departments but I only got the opportunity to gain experienced.

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List of ABBREVIATION

% = Percentage

: = Ratio

< = less than

> = greater than

/ = per

0C = degree Celsius Fig =

Figure

ml = milliliter

Gm = gram

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Chapter 1

Introduction

1.1 Objectives of the report

The objective of the report can be viewed in two types:

- General Objective
- Specific Objective

General Objective:

This internship report is done primarily to complete the Bachelor of Nutrition and FoodEngineering (NFE) degree requirement under the Faculty of Allied Health Science in daffodil International University.

Specific Objectives:

1. To give an overview of institute of Tasan food and beverage.
2. To focus on industrial activities.
3. To obtain real time practical work experience.

CHAPTER-2

Overview of the study

2.1 History of Institute

Tasan food & beverage was founded in June 1979 as Hazi Amin food products, a bread & biscuit manufacturer. This company is situated in Amin Bazar (savar) area.

2.2 Objectives of the institute

- Develop effective and environment friendly control measures of insect pests for protection and preservation of stored and field crops
- Monitor pesticide residues in food and environment for safeguarding human health
- Sterilize medical products, pharmaceuticals and food products by gamma radiation
- Process and product development for food preservation by radiation & combination treatment
- Conserve agro-wastes into food, feed and chemicals through the combination of nuclear and microbial biotechnology
- Apply plant tissue culture and biotechnology for clone propagation and improvement of plants of interest.

Chapter 3

Design of the study

3.1 Short description on the study

The experiment was done in Tasan food & beverage (A sister concern of Hazi Amin group). The study was to measure different types of product manufacture in the production. In the below discuss about different types of product in different section.

3.2 Mango pudding:

Ingredients of mango pudding:

1. Jelly powder
2. Citric acid
3. Sodium citrate
4. Sodium benzoate
5. Potassium sorbet
6. Cloudy
7. Lemon yellow color
8. Orange red
9. Aspartame
10. Sugar
11. Cloudy agent
12. water

1. Flow chart of mango pudding:

Wash the machine

Water fining a tank 1 (200leter)

Water in hot (85°C)

Pudding mixing (all the ingredients)

Put in the mixer vessel

Pasteurization

Filing the pudding

Capping

Cooling in pudding (15°C in water)

Labeling

Casing (24 pitch)

Storage (room temperature)



Figure: Mango pudding

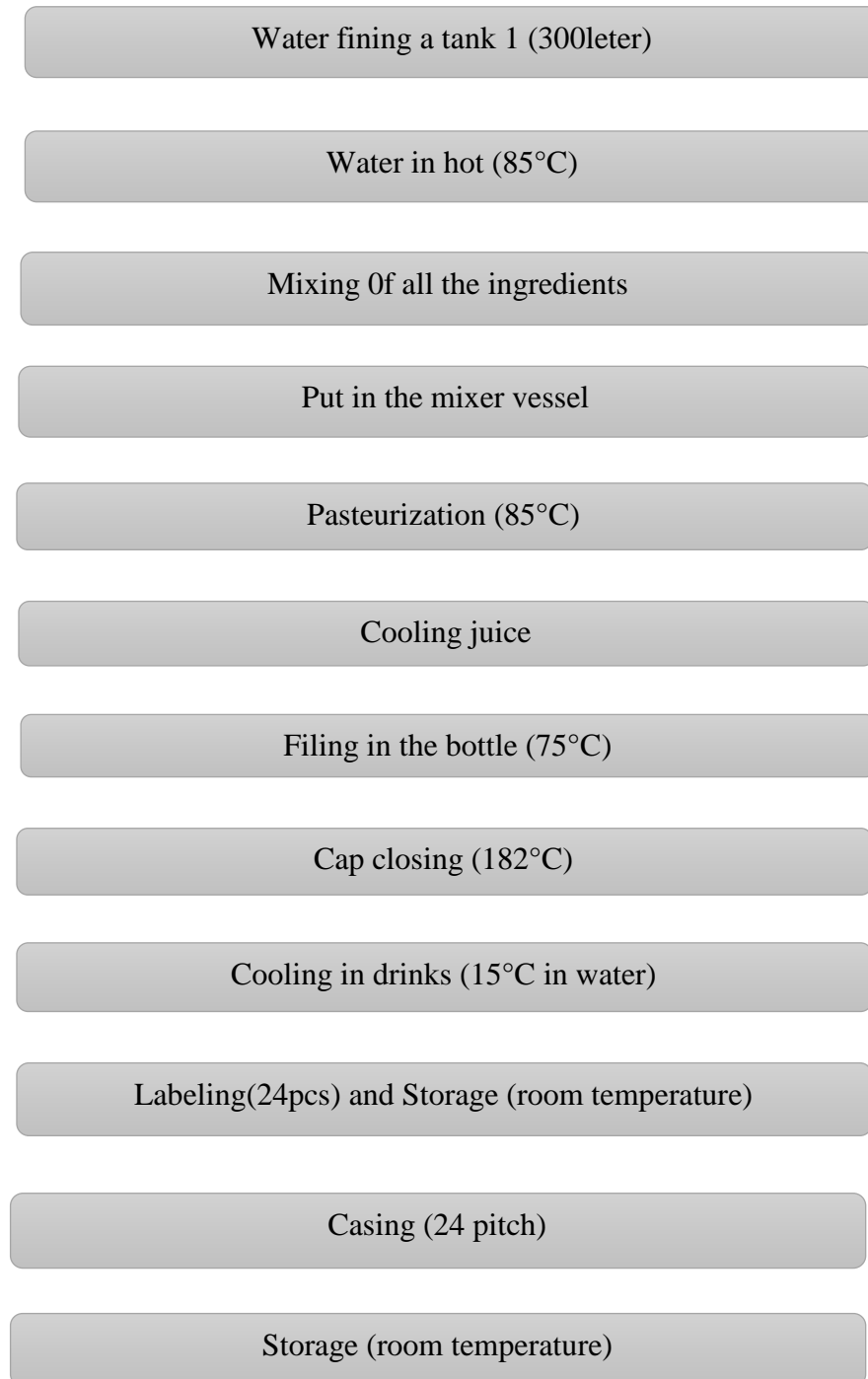
3.3 LICHI DRINKS

Lichi drinks is a types of beverage. This beverage is good for health. Good market in Bangladesh local market this types of drinks in summer vacation.

Ingredients:

1. Water
2. Sugar
3. Sodium benzoate
4. Potassium sorbet
5. Salt
6. Aspartame
7. Citric acid
8. Litchi flavor
9. Carboxymethyl cellulose (comic)

2. Flow chart of lichi drinks:



Procedure:

1. At first the all machine washing in hot water.
2. Than the fill the water in tank 300L and hot in 80-85°C.
3. Than all ingredients add in tank and mixing in a vessel.
4. Then emulsifier the orange drink in 40-45 min.
5. Then drinks pasteurization in 85°C.
6. Then the drinks cooling in tank of 30 min.
7. Then the drinks filling the bottle at 75°C.
8. After filling the bottle are cap closing in 182°C.

Then the orange drinks cooling in cool water spray.

10. After cooling the bottle are labeling
11. Then 36 drinks bottle in a casing.
12. Then storage of Litchi drinks at room temperature.
13. At last selling in market.

Self-life: 2-3month

Price: 10taka

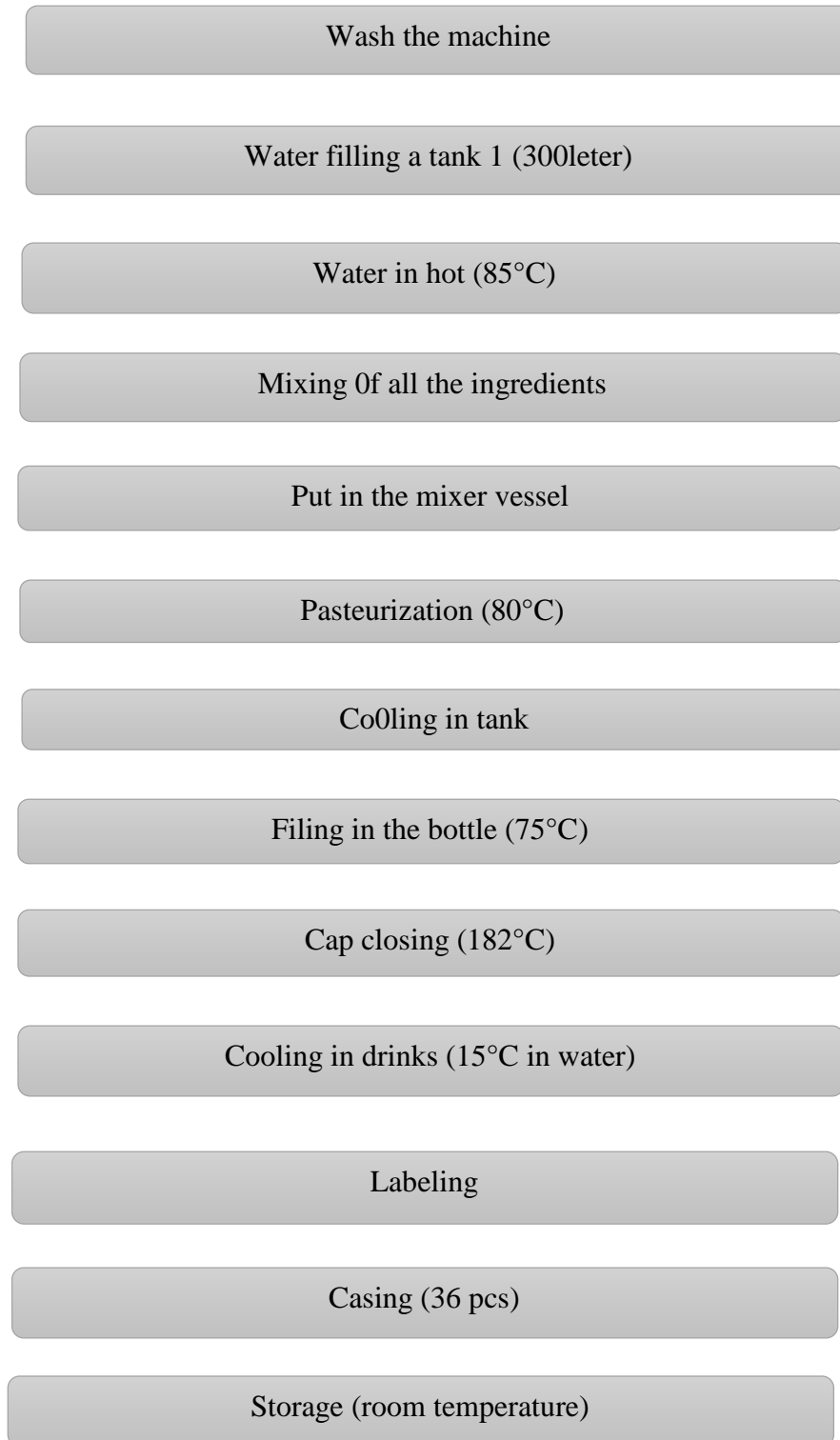
Net weight: 170ml

3.4 Orange Drinks

Ingredients:

1. Water
2. Sugar
3. Sodium benzoate
4. Potassium sorbet
5. Salt
6. Aspartame
7. Citric acid
8. Orange flavor
9. Carboxymethyl cellulose

3. Flow chart of orange drinks:



Marketing:

Procedure:

1. At first the all machine washing in hot water.
2. Then the fill the water in tank 300L and hot in 80-85°C.
3. Then all ingredients add in tank and mixing in a vessel.
4. Then emulsifier the orange drinks in 40-45 min.
5. Then drinks pasteurization in 85°C.
6. Then the juice cooling in tank.
6. Then the drinks filling the bottle at 75°C.
7. After filling the bottle are cap closing in 182°C.
8. Then the orange drinks cooling in cool water spray.
9. After cooling the bottle are labeling
10. Then 36 drinks bottle in a casing.
11. Then storage of orange drinks at room temperature.
12. At last selling in market.

3.5 Ice Lolly

Ingredients of Ice Lolly:

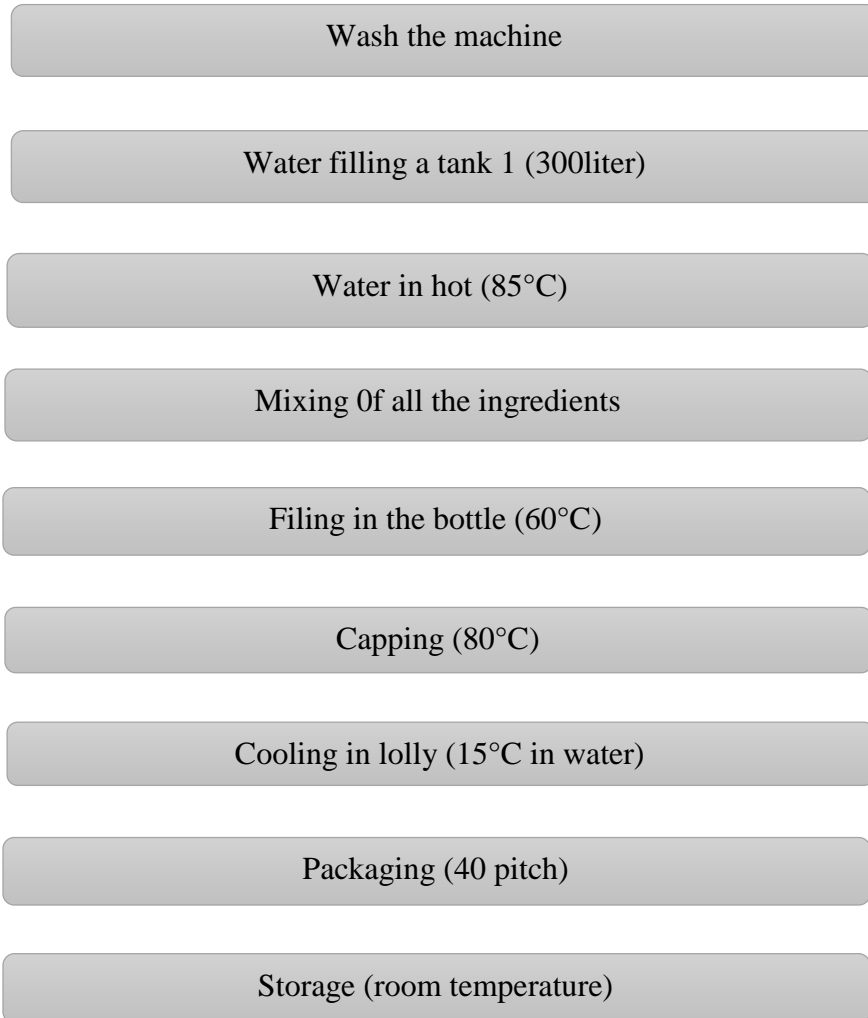
1. Jelly powder
2. Jam sorghum
3. Citric acid
4. Sodium citric
5. Salt

6. Ascorbic acid
7. Aspartame
8. Lemon yellow
9. Orange red
10. NDC
11. Sugar
12. Flavor (mango, Orange, strawberry)



Fig4: Ice Lolly

4. Flow chart of Ice Lolly



Marketing:

Procedure:

1. At first the all machine washing in hot water.
2. Than the fill the water in tank 400L and hot in 80-85°C.
3. Then all ingredients add in tank and mixing in a vessel.
4. Then the mixing drinks reserve in a tank in 30 minute
5. Then the drink filled in the ice port.
6. After fill cap closing in 80°C
7. Then the lolly cooling in cool water
8. After cooling the ice lowly dry in air
9. Then lolly was packaging in 40 pitches in 1 packet
10. Then storage in room temperature

3.6 Mango Juice

CIP: CIP is the very important part of juice production because the microorganism effect of juice.

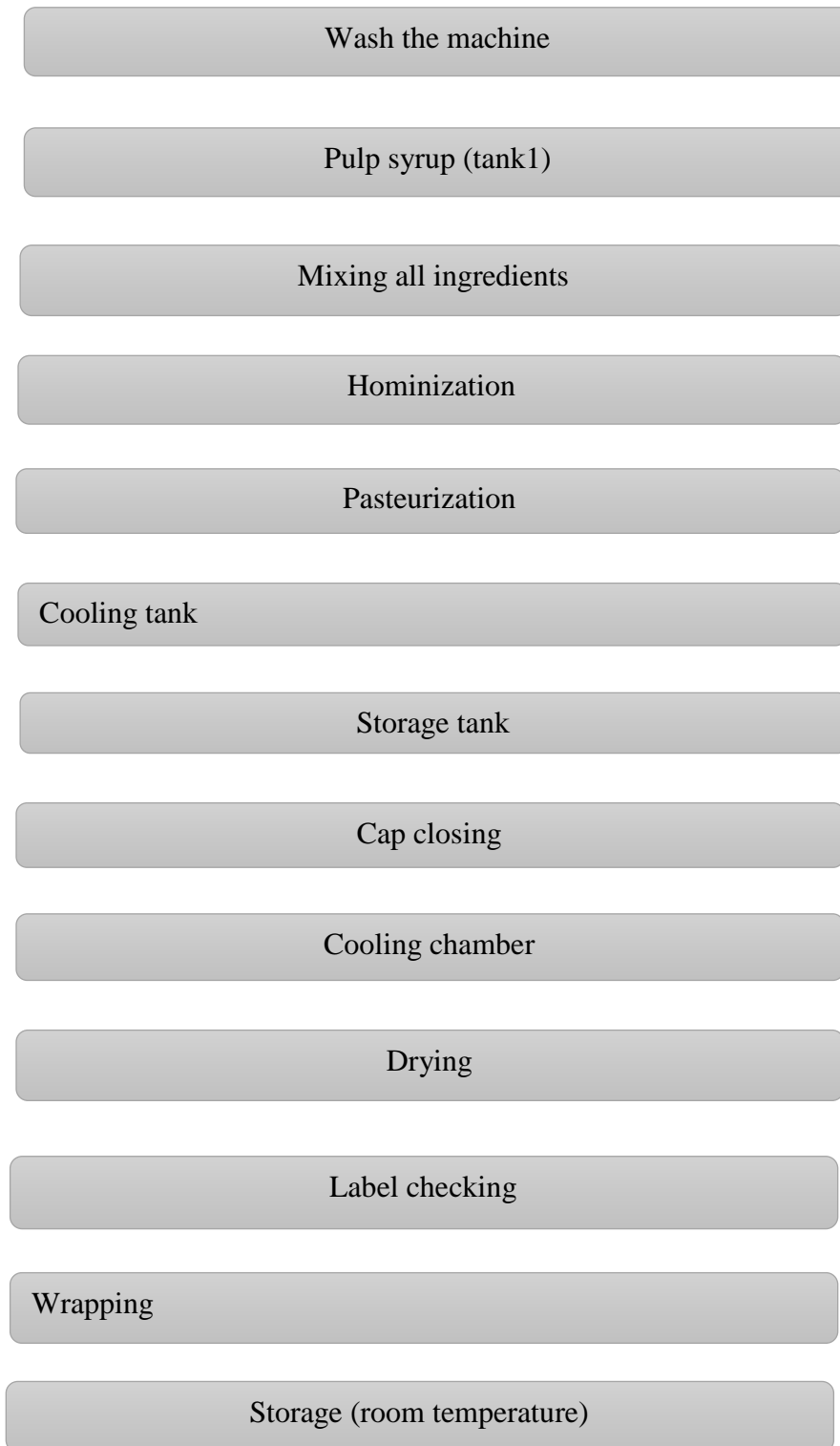
At first 100 liter water for 1 kg citric acid and 1.5 kg caustic soda do the cip.



Ingredients of mango juice:

1. Xanthene's gum
2. Citric acid
3. Sodium benzoate
4. Potassium sorbet
5. Ascorbic acid
6. Aspartame
7. Sodium citric
8. Salt
9. Water
10. Mango pulp
11. Sugar (60kg in 1000L)
12. Lemon yellow
13. Orange red
14. Beta carotene
15. Emulsion
16. Mango flavor

5. Flow chart of mango juice



Procedure:

1. First of all take the raw materials
2. Then mango pulp syrup making
3. Then all ingredients mixing in a tank
4. Then juice homogenization in 80c
5. Then pasteurization of juice
6. After pasteurization juice are cooling in tank
7. Then juice filling in bottle in 75 degree Celsius
8. Then cap closing of juice with bottle
9. Then cooling the juice in spray in water
10. After cooling the bottle with juice labeling the bottle
11. Then checking the labeling
12. Then wrapping the beverage in 24 pitch
13. Then the storage the beverage in freezing temperature
14. Then sell in local market.

BAKERY SECTION:

3.7 SWEET TOAST:

Sweet toast is the snacks food this snacks a good market in Bangladesh. Ss food limited making a good quality sweet toast. This product has a highly carbohydrate.

Ingredients:

1. Flour
2. Sugar
3. Batter
4. Yeast

5. Salt
6. Vegetable oil

Procedure:

1. At first all ingredients mix in mixer machine
2. Then the doo preparation and rolling the table
3. Then rolling doo in a oven at 85 degree Celsius of 30 min
4. Then cutting the doo of toast shape
5. Then again the toast in a oven at 140 degree Celsius
6. Then toast cooling in cool temperature
7. Then toast texture are crispy and mixing a melting sugar
8. Then packaging of toast in perfect weight.
9. At last sweet toast are storage.

Self-life: 3-4 month

Net weight: 400g

Price: 65 taka

3.8 COOKIES

Ingredients:

1. Flour
2. Sugar
3. Batter
4. Yeast
5. Salt
6. Vegetable oil

Procedure:

1. At first all the ingredients mixing in mixer machine
2. Then the doo of radix machine in perfect size cookies
3. Then the tree of cookies in a oven of 130 degree Celsius at 30 minute
4. Then cookies cooling in normal temperature
5. Then packaging the cookies
6. Then storage
7. Then selling in local market.

Self-life: 1-2 month

FRY SECTION:

3.9 Bombay Crackers:

Ingredients:

1. Chickpea flour
2. Peanuts
3. Green bears
4. Lentils
5. Split chickpea
6. Rice
7. Flakes

8. Vegetable oil
9. Spices
10. Salt
11. Citric acid
12. Red chili Powder
13. Turmeric powder

Shelf- life: six month

Net weight: 45g, 20g, 150g,

Sealing tem: 168°C.

Price: 10tk, 5tk, 30tk, 60tk

Cutting tem:165°C.



Figure: Potato Crackers

CHAPTER-4

CONCLUSION

In this short period of study I learned a lot. But after this study I know many things regarding production and quality. Though it was short period but I tried to acquire as much as possible. In this study I learned about water analysis regarding microbiology. To declare the cold drinks as safe to drink needs to maintain some requirements. Make sure it is not present in drinks. I studied to identify different types of machine and how to run. I can learn more of things like how can maintained worker, Production section, Time management, etc. End of the day it was enjoyable lesson.