



Daffodil
International
University

INTERNSHIP REPORT ON

**Production Process and Quality Control Assurance At
Elson Consumer Product Ltd.**

Supervised By

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Lecturer

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Submitted By

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Date of Submission: 31-7-2022

Daffodil International University

LETTER OF TRANSMITAL

Date:

Ms. Fouzia Akter
Assistant Professor and Head
Department of Nutrition and Food Engineering
Faculty of Allied Health Sciences
Daffodil International University

Subject: Submission of Internship Report

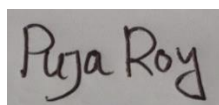
Dear Sir,

I am honored to have the opportunity to submit an internship report on “**Production Process and Quality Control Assurance At Elson Consumer Product Ltd**” as part of the B.Sc. in Nutrition and Food Engineering (NFE) program curriculum.

This report is based on the knowledge gained during my internship at Elson Food Products Limited. Working under your active supervision has been a great achievement and experience for me. This report is based on “**Quality Control Assurance and Production**” by **Elson Food Products Limited** for 30days from 20th December,2021 to 20th January,2022 under the supervision of Mr. Asaduzzaman (General Manager).

This internship give me academic and practical exposure. During this time I have gained knowledge about the organizational culture and behavior of a leading consumer goods manufacturing company in the country.

Sincerely Yours

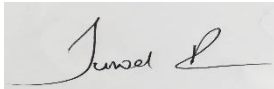


Puja Rani Roy
181-34-755
Department of Nutrition and Food Engineering
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CERTIFICATE OF APPROVAL

I am pleased to certify that the internship report on “Production Process and Quality Control Assurance at Elson Consumer Product Ltd” conducted by Puja Rani Roy bearing respectively ID NO: 181-34-755, department of Nutrition and Food Engineering has been approved for presentation, defense and viva-voce.

I am satisfied to certify that the data and the findings in this report are authentic work of Puja Rani Roy. I am strongly recommended the report presented by Puja Rani Roy for further academic recommendations and defense and viva-voce. Puja Rani Roy bears a strong moral character and well personality. The experience of working with her has been wonderful. As she pursues her future endeavors, I wish her all the best.



.....
Mr. Md. Juwel Rana
Lecturer
Department of Nutrition and Food
Engineering
Faculty of Allied Health Science
Daffodil International University

.....
Ms. Fouzia Akter
Assistant professor and Head
Department of Nutrition and Food
Engineering
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Daffodil International University

INTERNSHIP CERTIFICATE



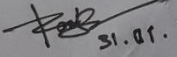
31st January, 2022

TO WHOM IT MAY CONCERN

This to certify that Ms. Puja Rani Roy, D/O:Rajendra Nath Barman, Village:Gorai Bamon Para, Post:PanchPir, Thana: Ulipur, District: Kurigram, a student of Daffodil International University has successfully completed from 20th December, 2021 to 20th January, 2022 internship programme at this company Elson Consumer Products Limited. During the period of her internship programme with us she was found punctual, hardworking and inquisitive.

We wish her every success in life.

With best wishes,


31.01.22
Md. Razib Hossain
Manager
HR & Administration
01709991210



ACKNOWLEDGEMENTS

First of all I would like to express my heartiest gratitude to almighty God for his mercy extended to completing my internship report on “Quality Control Assurance and Production” in “Elson Consumer Product Limited”. Practical experiences are also needed in parallel with the academic knowledge to fill the gap of theoretical knowledge.

I am deeply indebted to my Supervisor Mr. Md. Jewel Rana Lecturer, Faculty of Allied Health Science, Daffodil International University, for his whole-hearted supervision during my organizational attachment period.

My Deep gratitude and sincere thanks to the honorable Dean, Faculty of Allied Health Science, Professor Dr Md. Bellal Hossain for this kind cooperation and to accept this, degree. I am encouraged to take this privilege to deliver my gratitude to each people who are involved with me in every phase of my lives. I am very grateful to, Ms. Fouzia Akter Associate Professor and Head, Department of Nutrition and Food Engineering, Daffodil International University.

During my student life, I would like to express my warmest thanks to NFE faculty members for their countless inspiration and encouragement.

I am expressing my deep gratitude to Mr. Asaduzzaman General Manager Factory at ECPL Ltd, Kanchpur Basic Nagari Narayangonj, Dhaka Bangladesh also expressing to Mr. Razib Hossain HR at Elson Consumer Product Ltd. and others Assistant quality control officer of “ECPL” because they give me great opportunity.

ABSTRACT

The Internship was held on ELSON CONSUMER PRODUCT LTD from 20 December to 20 January. This factory mainly manufactures different type of Quality product such as Chocolate item, Candies item, Snacks item, Cereal Bar item, Wafer item, Gum item, Lychee etc.

This report is prepared by the practical knowledge during the internship period Elson Consumer Product Limited.”. It is a great achievement and experience for me to work in Elson Consumer Product Ltd. The objective of this internship is to review the principles of manufacturing process which is to selection of ingredients, preparation, processing steps and to maintain quality standards also microbiological lab testing along with product development.

My report is mainly over all section. In my report i include manufacturing procedure, quality control parameter, QC inspection, QC lab testing, and also microbiological testing. In this report also include Raw material and Packaging material testing and storage.

In this report I applied my academic and practical knowledge that i aquaria in my university life and internship period.

TABLE OF CONTENTS

CONTENT	PAGE
Cover Page	i
Letter of Transmittal	ii
Certificate of Approval	iii
Internship Certificate	iv
Acknowledgment	v
Abstract	vi
Table of Content	vii-viii
Chapter – One	1-7
Introduction	2
1.1 Origin of the report	3
1.2 Objective of the report	4-5
1.3 Overview of the organization	
1.4 Product of ECPL	6-7
Chapter – Two	8-9
2. Processing of common ingredient preparation	9
Chapter – Three	10-23
Manufacturing process and flow diagram	
3.1 Manufacturing process and flow diagram section Chocolates	11
3.2 Manufacturing process and flow diagram section Wafer	12-13
3.3 Manufacturing process and flow diagram section Hard Candy	14
3.4 Manufacturing process and flow diagram section Soft Candy	15
3.5 Manufacturing process and flow diagram section Toste	16-17

3.6 Manufacturing process and flow diagram section Dry Cake	18-19
3.7 Manufacturing process and flow diagram section Cereal Bar	20
3.8 Manufacturing process and flow diagram section Bubble Gum	21
3.9 Manufacturing process and flow diagram section Lychee – Edible Jelly	22
3.10 Manufacturing process and flow diagram section Lychee – Jelly Belly	23
Chapter– Four	24-27
Quality Control and Quality Assurances	
4.1 Quality Control	25
4.2 Quality Assurances	
4.3 Quality Test Parameter for ECPL	
4.4 Quality Test for Chocolate, Wafer, Candy, Bakery, Lychee	26
4.5 Observation of LCPL	27
Chapter – Five	28-29
Conclusion	29

Chapter –One

Introduction

CHAPTER -1

INTRODUCTION

INTRODUCTION

Food industry is determined of various components, some of which are raw material production, processing, distribution, marketing etc.

In Bangladesh, the food industry is developing day by day. This happens due to the competition between various foods industries as improving the better quality of product and maintaining the better hygienic condition in the food industry. The environmental condition of our country is favorable for the development of food industry.

The raw materials used in the food industry have better possibility to grow in our country because our environmental condition supports their growing. Since the labor cost and raw materials production cost is comparatively low, the authority of food industry are able to market/sell their product comparatively at low price. This report is based on similar type of food industry named Elson Consumer Product Limited.

Elson Consumer Products Limited is one of the great brands of quality confectionery in Bangladesh. Our central business focuses on candy and chocolate manufacturing, with an aim to produce finer products at inexpensive prices. We have also present in more than 20 brands in the local market and enlarge our presence beyond borders.

1.1 ORIGIN OF THE REPORT

Internship Program of Daffodil International University is a BSC requirement for the Nutrition and Food Engineering students. This study is a partial requirement of the Internship program of Nutrition and Food Engineering curriculum at the Daffodil International University.

The main purpose of internship is to get the student exposed to the practical knowledge and successful job world. Being an intern, the main challenge was to translate the theoretical notion into real life experience.

The internship program and the study have following to the point:

- To know the working environment of factory.
- To have a practical experience on chocolates Processing, Packaging and Storage
- It is an objective to observe and assess the implementation of a HACCP-based Quality Assurance System
- Assessing different food products for total quality management (TQM).
- NFE Program Requirement of comparing real scenario with lessons learned from DIU.

This report is the result of 1-month long internship program conducted in Elson Consumer Product Limited and is prepared as a requirement for the completion of the NFE program of Daffodil International University.

As a result, I need to submit this report based on the “Internship Report on Elson Consumer Product Limited”. This report also includes information on the products and services of Bangladesh.

1.2 OBJECTIVE OF THE REPORT

Several approaches can be taken to understanding the report's objective:

- General Objective
- Specific Objective

General Objective:

An Internship at Elson Consumer Food Ltd. focusing on chocolate manufacturing and quality control.

Specific Objectives:

More notably, this study entails the following aspects:

- The purpose of the course is to learn about the processing, packaging, storage and hygiene of chocolate
- To assess the QA system according to HACCP in QC Hygiene, safety and sanitation
- To achieve a practical experience on Quality Control Analysis of raw materials, in process food and finish products of different Food.

1.3 OVERVIEW OF THE ORGANIZATION

The Company was founded in 2001, with the intention to cater for the mass population. The schema was to bring international standards of excellence and taste to the local communities. Serving such products within the buying power of our human being was a challenge that Md. Nurul Islam was willing to explore. Having 30 years of experience in importation and trading, and a passion for food and confectionery industry, Mr. Islam begins to acquire knowledge on the production and engineering of food technology. He observed a great quantity import of jelly candies and an ever-increasing demand of such products.

Then in 2001, the journey of Elson Foods began. The production center was set up under a technical assistance and overseeing of a company based in Taiwan, producing first ever in Bangladesh “Lychee - Mini Cup Edible Gel” which is very favorite to children.

Elson Foods has achieved ISO 9001:2015 and Halal Certification for its quality management systems for complying with Bangladesh Standards Testing Institution (BSTI).

The main objective was to manufacture import-substitute quality food products in Bangladesh, saving foreign currency and reducing import dependency. Later, the company reached other confectionery lines, and created value for consumers with other expansions in chocolates, candies, cereal bars, and wafer biscuits.

Now a days, Elson is a valued name for great excellence in confectionery products among its stakeholders, dealers, retailers and consumers.

MISSION

To creation and market international standard confectionery and various food products and support to local community by creating job opportunity.

VISSION

To become a globally illustrious brand for superiority in quality and diversity in food product range.

1.4 PRODUCTS OF ELSON FOOD LTD

CHOCOLATES

Basic products.

- Milkee Milk Bar
- Love Bar
- Sweet Valentine
- Gold Coin
- Dream Fill



WAFER

Basic products.

- Hello Kitty
- Perky
- Nik-Nut
- 3 Cheers



CANDY

Basic products

- Love Candy (Hard Candy)
- Chew-Chew Candy (Soft Candy)



CEREAL BARS

Basic Products

- Peanut Bar
- Sun Bake Toast
- Dry Cake



GUM

Basic Product

- Bubble Gum



LYCHEE

Basic products

- Jelly-Belly
- Edible Jell



Chapter – Two

“Processing of some common ingredient preparation”

CHAPTER – 2

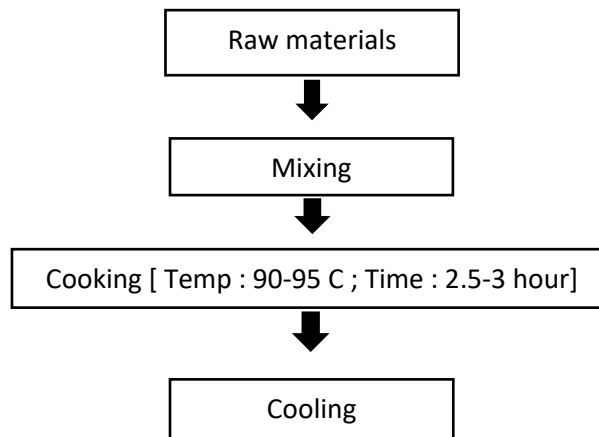
PROCESSING OF SOME COMMON INGREDIENT PREPARATION- LYCHEE

2.1 Nata De Cocco Preparation

Ingredient:

- Raw Materials –Nata De Cocco
- water

Process Flow Chart-

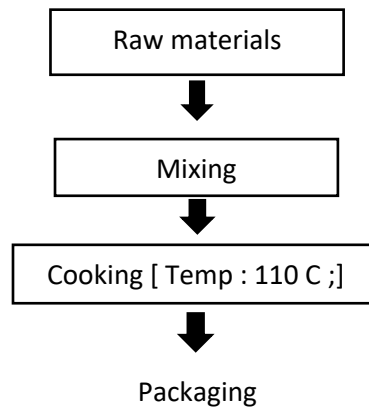


2.2 Hard Candy Syrup

Ingredient

- Raw Materials – Sugar, Liquid Glucose

Process Flow Chart-



Chapter – Three

**“Manufacturing process and
flow diagram”**

CHAPTER – 3

MANUFACTURING PROCESS AND FLOW DIAGRAM SECTION: CHOCOLATE PRODUCT

3.1 Manufacturing Process Chocolate

Ingredients

- SMP
- Fat
- Cocoa-Powder
- Whey Powder
- Soya-Lecithin
- Flavor

Process Flow Chart-

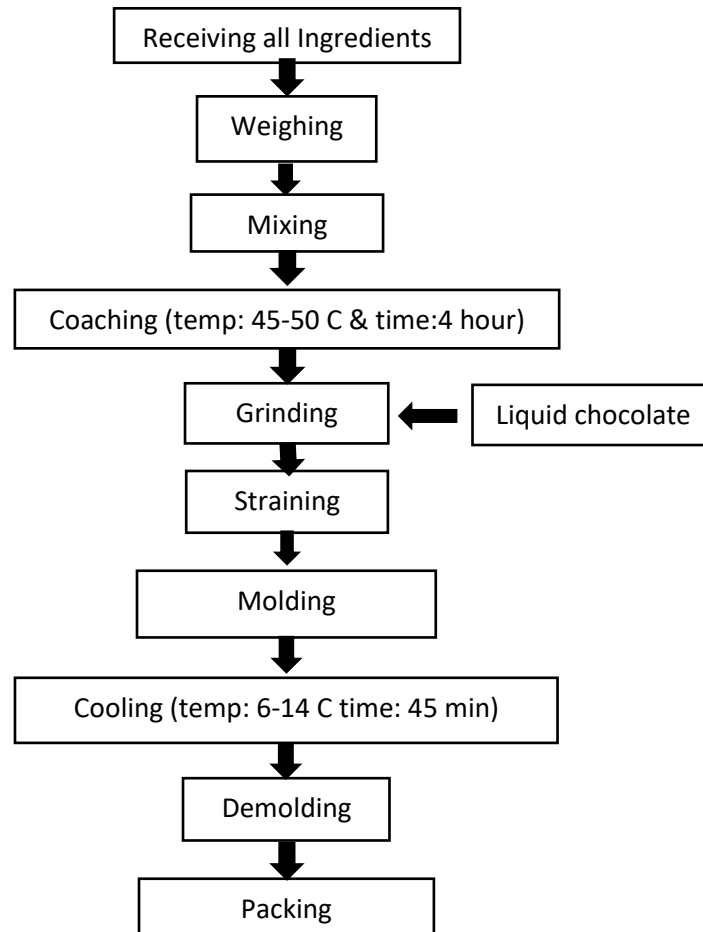


Fig: Flow Diagram of Chocolate Manufacturing Process

3.2 MANUFACTURING PROCESS WAFER

Ingredients

- Flour
- Starch
- Lecithin
- Palm oil
- Salt
- Icing Sugar
- Water

Process Flow Chart-

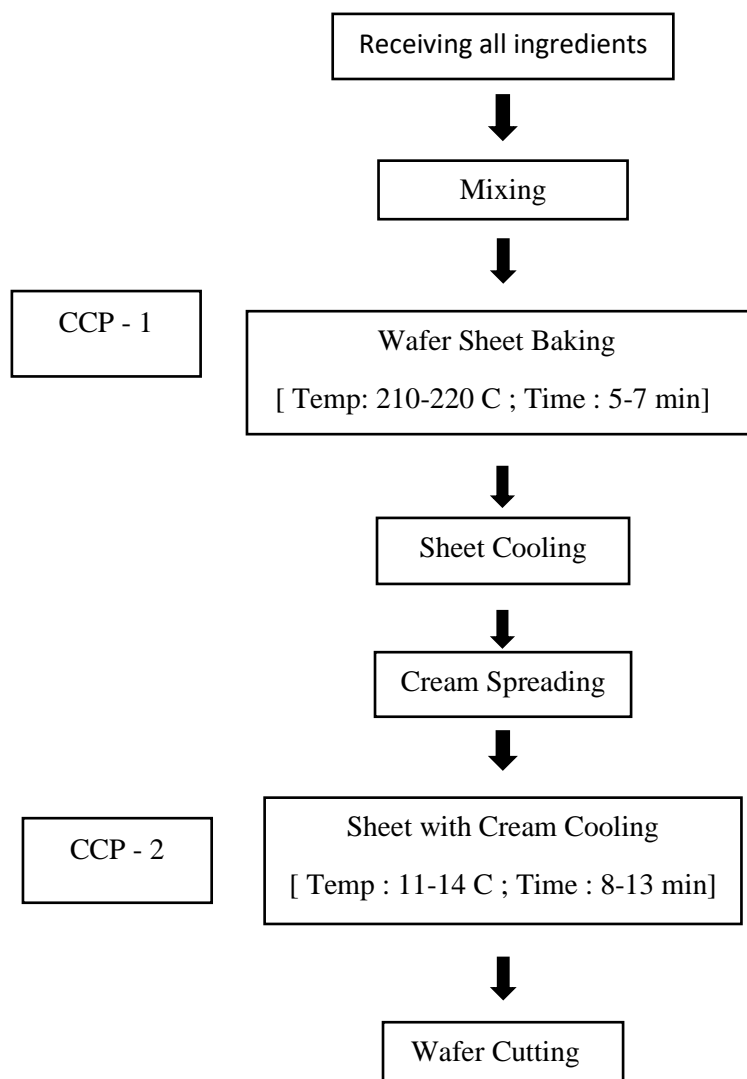


Fig: Flow Diagram of Wafer Manufacturing Process

Manufacturing Process Wafer Step 2:

Process Flow Chart-

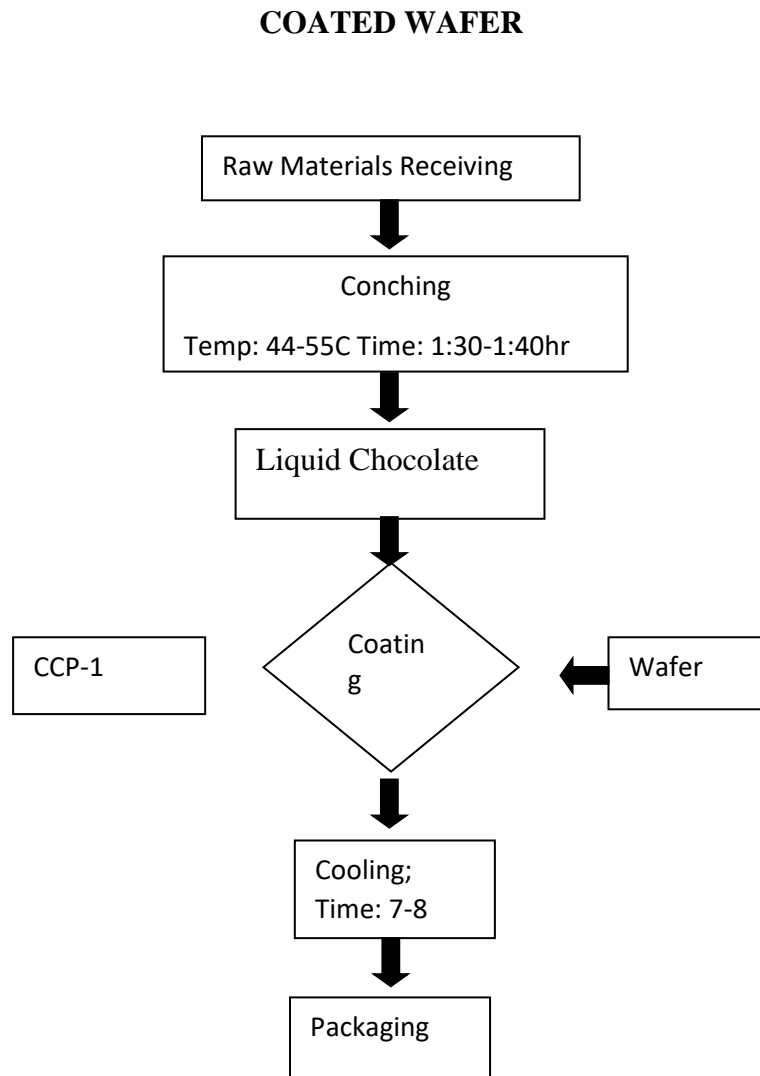


Fig: Flow Diagram of Wafer Manufacturing Process

3.3 Manufacturing Process of Candy

Ingredients for Hard Candy

- Sugar
- Liquid glucose
- Color
- GMS
- Flavor

Process Flow Chart-

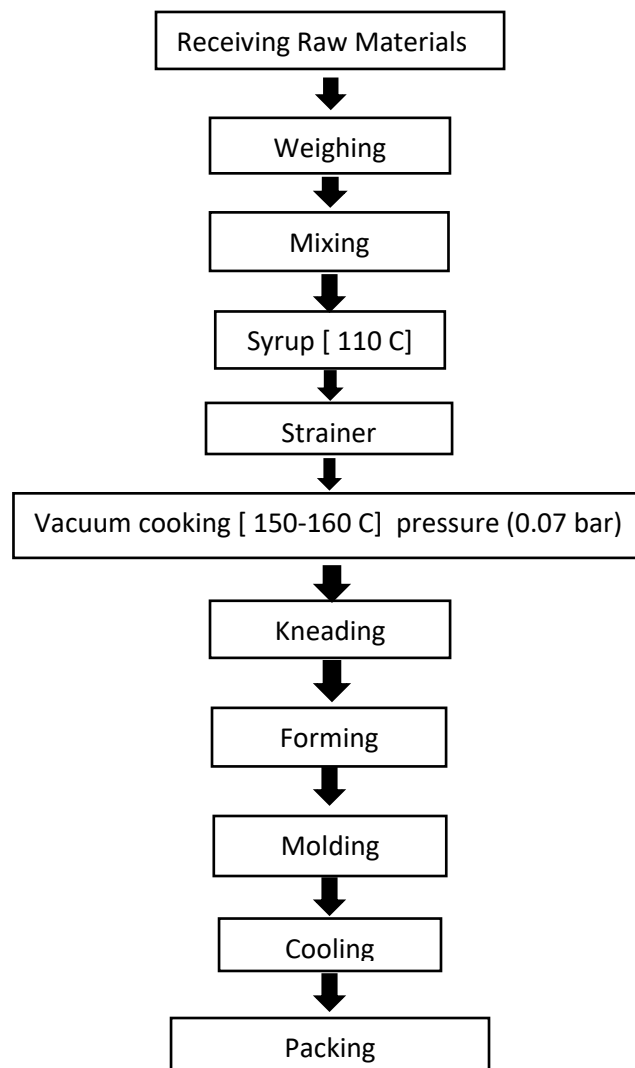


Fig: Flow Diagram of Hard Candies Manufacturing Process

3.4 Manufacturing Process of Soft Candy (Chew-Chew)

Ingredients for Chew-Chew

- Jelly
- Liquide Glucose
- Color
- Flavor

Process Flow Chart-

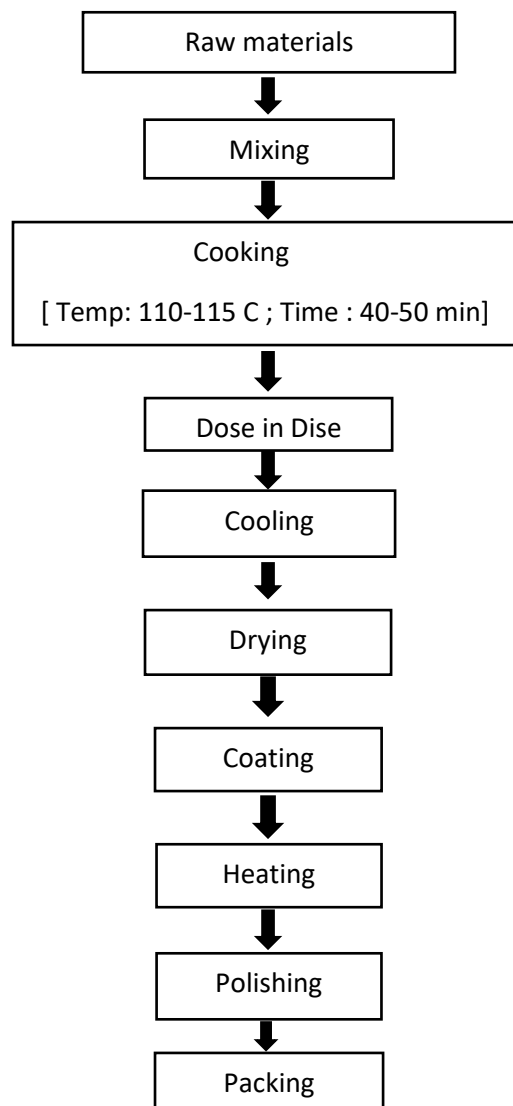


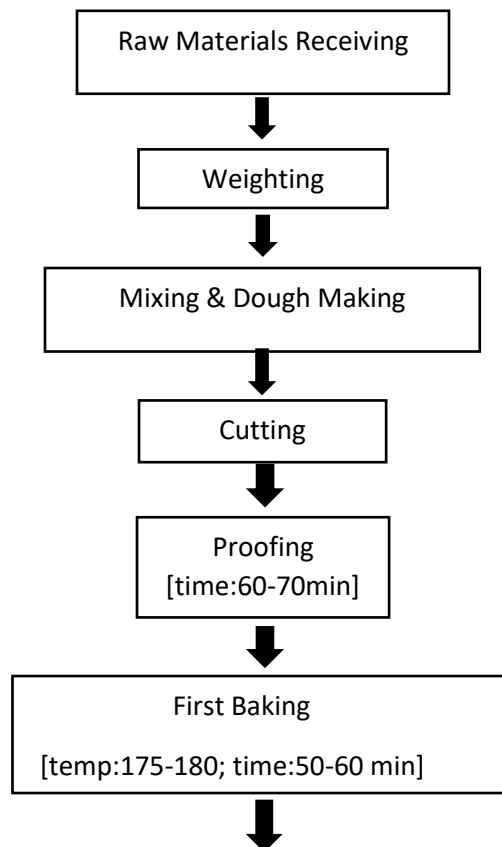
Fig: Flow Diagram of Soft Candies Manufacturing Process

3.5 Manufacturing Process of Bakery

Ingredients for Toast

- Flour
- Yeast
- Sugar
- Salt
- Palm oil
- Dalda
- Margarine
- Milk

Process Flow Chart-



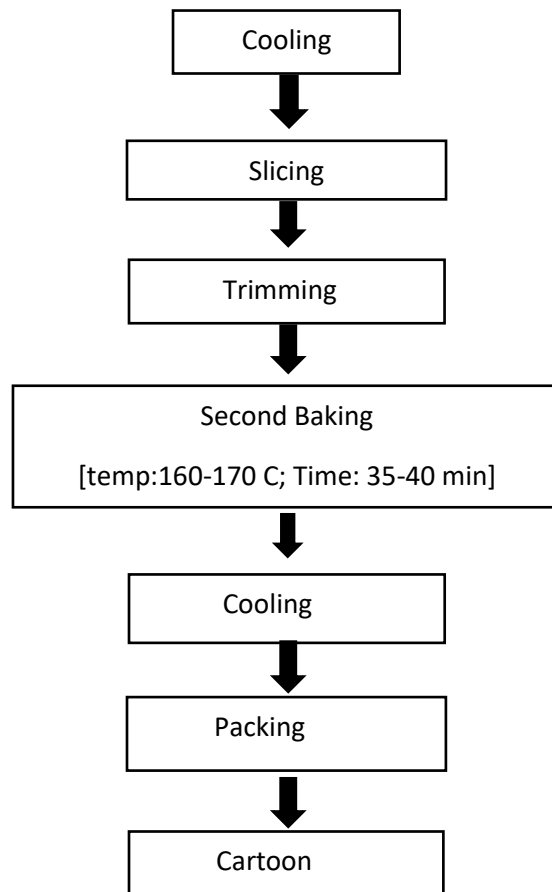


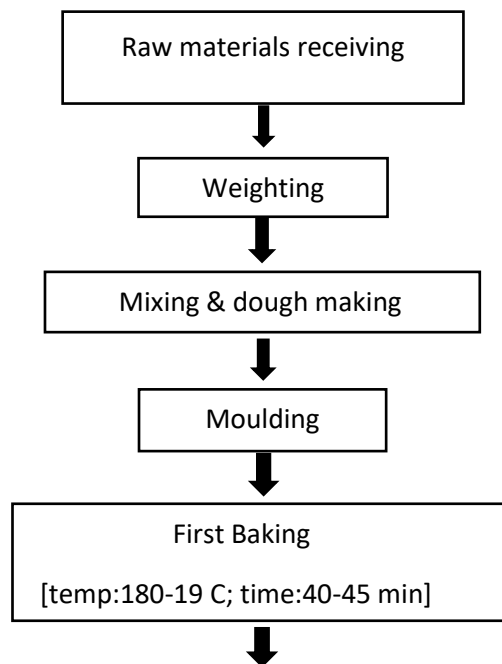
Fig: Flow Diagram of Bakery Manufacturing Process

3.6 Manufacturing Process of Dry Cake

Ingredients

- Flour
- Dalda
- Sugar
- Palm oil
- Baking powder
- Salt
- Milk
- Egg
- Water
- Powder milk

Process Flow Chart-



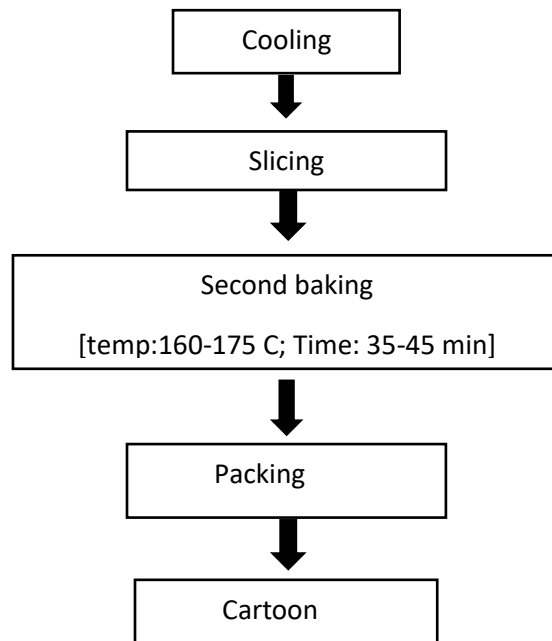


Fig: Flow Diagram of Bakery Manufacturing Process

3.7 Manufacturing Process of Cereal Bar

Ingredients

- Sugar
- Nut
- Liquid glucose
- Water
- Salt
- Margarine

Process Flow Chart-

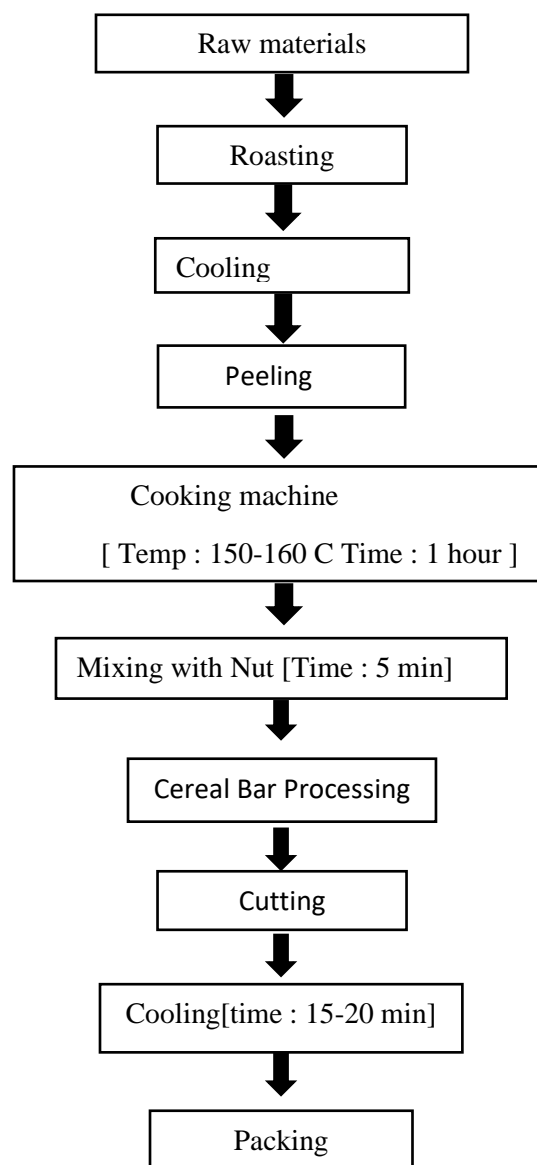


Fig: Flow Diagram of Cereal bar Manufacturing Process

3.8 Manufacturing Process of Bubble Gum

Ingredients

- Icing Sugar
- Liquid Glucose
- Gum Base
- Soya Lecithin
- Glycerin
- Flavor

Process Flow Chart-

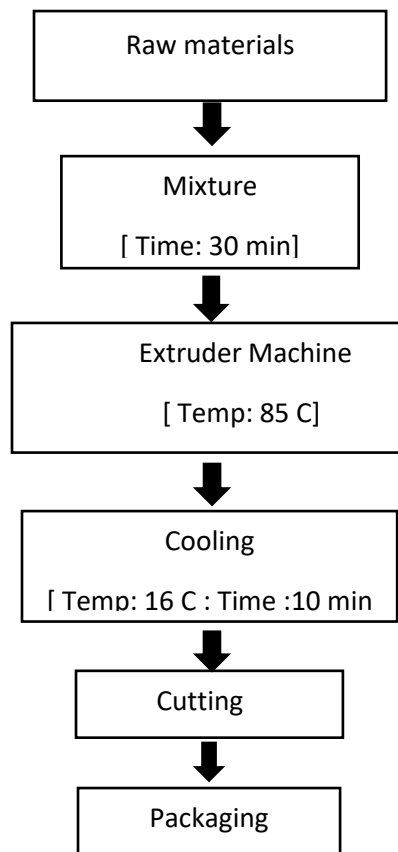


Fig: Flow Diagram of Bubble Gum Manufacturing Process

3.9 Manufacturing Process of lychee (Edible - Jelly)

Ingredients

- Jelly Powder
- Sugar
- Lychee flavor
- Jelling Agent
- Sorbate
- Nata de Cocco
- Water

Process Flow Chart-

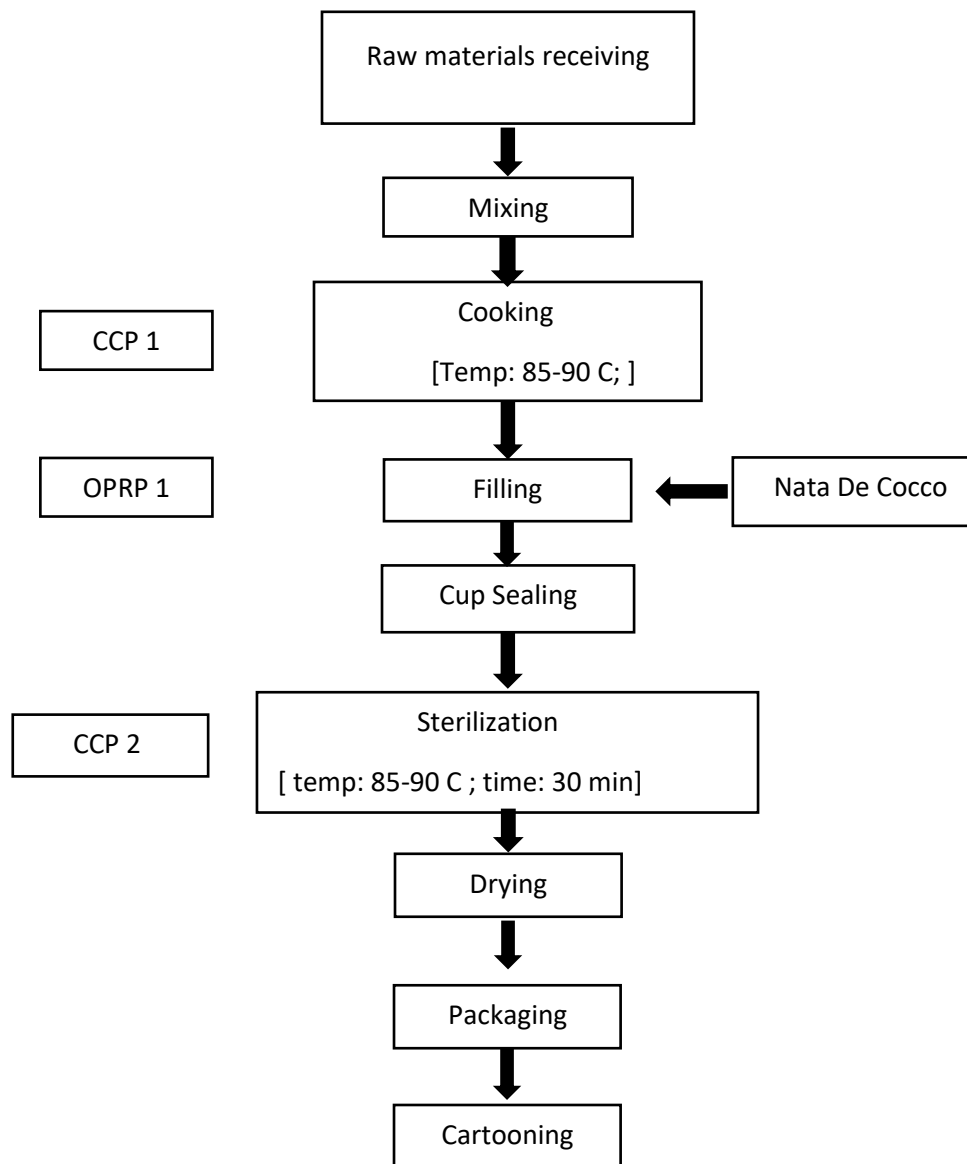


Fig: Flow Diagram of Edible Jell Manufacturing Process

3.10 Manufacturing Process of lychee (Jelly-Belly)

Ingredients

- Jelly Powder
- Sugar
- Lychee flavor
- Jelling Agent
- Sorbate
- Water

Process Flow Chart-

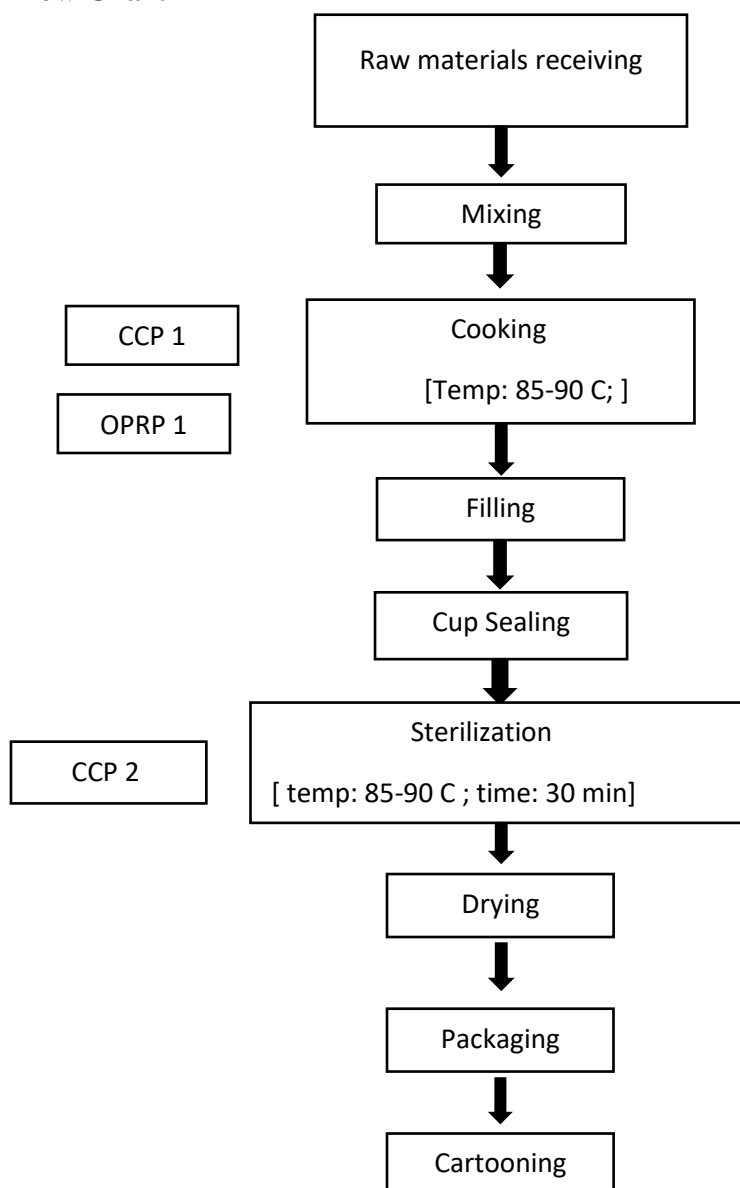


Fig: Flow Diagram of Jelly – Belly Manufacturing Process

Chapter – Four
**“Quality control & quality
Assurance”**

CHAPTER – IV

QUALITY CONTROL AND QUALITY ASSURANCE

4.1 Quality Control

Quality development quality maintenance and quality improvement in the various departments of design and manufacturing, for achieving the twin objectives of: Economical production and customer satisfaction.

4.2 Quality Assurance

- Critical control point identification/sampling program.
- In-process analysis, records and reporting packaging specifications.
- Label specifications.
- Cleaning and sanitizing program.
- Good manufacturing practices (GMP) requirements.
- Recall program.
- Warehousing, shipping and receiving program.
- Laboratory analysis.
- Gross level inspection Farm to Fork like Field / land visiting,
- Third party production area visiting

As part of quality control, a four-stage process is followed-

RM (RawMaterial); PM (PackagingMaterial); In Process Product; Finished product

4.3 Quality Test Parameter for Elson Product

RM Test Parameter:

- Appearance
- Color
- Odor
- Moisture
- Broken or small size
- Extraneous matter
- Rotten
- Worm eaten
- Insect
- Husk
- Immature
- Aflatoxin
- Fineness

Finished Product Test Parameter:

- MFG Date
- Expiry date
- Batch no
- MRP
- Leakage
- Weight check

4.4 Quality Test for Chocolate, Wafer, Candy, Bakery, Lychee

Moisture Test:

Take 5 grams of sample in moisture analyzer then start the analyzer and wait for 5 minutes. After that moisture analyzer, show the result on the screen.

Standard Moisture of

- i. Chocolates –1-2%
- ii. Wafer sheet – 2%
- iii. Candies – soft 0.5-1.5%; hard 1-2%
- iv. Bakery – dry cake 1.01%

Standard Degree Brix of -

- i. Lychee – (25-27)

Standard Ph of –

- i. Lychee – 4.5

Standard Acidity of –

- i. Lychee – 0.35

4.5 OBSERVATION OF LCPL

In my short time internship periods i observe few of things about ECPL. My observation is given below:

Strong sides:

- Ensure food is of the highest quality and safe to consume
- Management system that is strong
- Use of RM and PM of good quality
- Make sure that every section maintains proper quality control
- Employees should be given high-quality facilities
- The ability to work honestly and cooperatively.
- For female employees, there is special security.
- Sanitation, cleanliness and tidiness are brilliant

Improvement –Area

- May Increase variation of food items (like chocolate (three in one) item or Confectionary item)
- May increase Nutritious food (like vitamin, instant energy drinks)
- Products of LCPL should be also available both rural area & urban.

Chapter – Five

Conclusion

CHAPTER – FIVE

CONCLUSION

Conclusion

It is a great opportunity and experience for me to complete my internship in Elson Consumer Product Ltd. “**Elson Consumer Product Ltd**” is now a growing food industry in Bangladesh. It is a pleasure for me to work with them. This internship gave me both academic and practical exposure. In this time, I have gained knowledge about the organizational culture and behavior of a prominent consumer product producing organization of the country. This internship also gave me the opportunity to develop a network with the corporate environment.

Finally, I am very thankful to Department of Nutrition and Food Engineering of Daffodil International University to create such an opportunity for me to gain knowledge and experience.