

DAFFODIL INTERNATIONAL UNIVERSITY

Internship Report

On

Food production process and Quality Control at Rani Food Industries Ltd.

Supervised by

Juwel Rana Lecturer

Department of Nutrition & Food Engineering Faculty of Allied Health Science (FAHS) Daffodil International University

Submitted by

Md: Saiful Islam ID: 181-34-106

Department of Nutrition & Food Engineering Faculty of Allied Health Science (FAHS) Daffodil International University

Date of Submission: February 19, 2022

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LETTER OF TRANSMITTAL

19 February, 2022

To

Fouzia Akter

Assistant professor & Head

Department of Nutrition & Food Engineering

Faculty of Allied Health Sciences

Daffodil International University

Subject: Submission of Internship Report.

Dear Sir,

It is a great pleasure and honor for me to have the opportunity to submit my internship report at **Food production process and quality control at Rani Food Industries Ltd.**" as a part of the Nutrition and Food Engineering (NFE) program curriculum.

This report was written based on the knowledge I gained throughout my internship. My internship provided me with both intellectual and practical experience. This internship provided me with invaluable practical information and experience that I will use in my future professional life. I please accept my apologies for any errors that may appear in the report despite my best efforts.

I would like to submit this report for your consideration and kind advice motivated me to do better planning in the future.

Sincerely Yours,

Md.Saiful Islam Id No:181-34-106

Saily

Department of Nutrition and Food Engineering

Daffodil International University.

LETTER OF AUTHORIZATION

19 February 2022

To

Fouzia Akter

Assistant professor & Head

Department of Nutrition and Food Engineering

Faculty of Allied Health Sciences

Daffodil International University

Subject: Declaration regarding the validity of the Internship report.

Dear Sir,

This is my truthful declaration that the "Internship Report" I have prepared is not completely copy of any Internship report previously made by any students. I also express my honestly confirmation in support to the fact that the said internship report has Neither been used before to fulfill my other course related not it will be submitted to any person a Authority in future.

Sincerely Yours,

Sailuf

Md. Saiful Islam ID No: 181-34-106

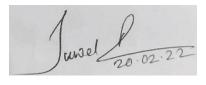
Department of Nutrition and Food Engineering

Daffodil International University.

CERTIFICATE OF APPROVEAL

We are pleased to certify that the internship report on "Food production process and quality control at Rani food industries ltd conducted by Md.Saiful Islam bearing ID No. 181-34-106 of the Department of Nutrition and Food Engineering, Faculty of Allied Health Sciences, DIU has been approved for presentation and defense. He had done this internship under our supervision. We are glad to guarantee that the information and findings contained in this paper are genuine Md.Saiful Islam effort. I strongly advise him to offer his report as a partial fulfillment of his undergrad requirements. He also has a high moral code character, as well as a kind personality. Working with him has been a real pleasure.

We wish him all success in life.



Juwel Rana

Lecturer (Project Supervisor)
Department of Nutrition and Food Engineering
Faculty of Allied Health Sciences
Daffodil International University

Fouzia Akter

Assistant professor & Head Department of Nutrition and Food Engineering Faculty of Allied Health Sciences Daffodil International University

ACKNOWLEDGEMENT

I feel immense pleasure to express my greatest and deepest gratitude to the almighty God for enable me to complete the project work successfully for the degree of Bachelor of Science in Nutrition and Food Engineering. I am grateful to my Parents without whom I cannot be here. Without the support of my parents, I could not be able to achieve my objectives and goals. I am very much grateful and feeling proud to acknowledge.

I wish to express my gratitude and appreciation to our honorable teacher and supervisor **Juwel Rana**, Lecturer, Department of Nutrition & Food Engineering, Daffodil International University under his guidance, perseverance throughout the progress of this project work and precious opinion.

I express greatest debt and sincere gratitude to my project work **Fouzia Akter**, Head, Department of Nutrition and Food Engineering, Daffodil International University. For his scholastic guidance, valuable suggestions, sincere behavior, and all sorts of helps in completion of this Project work.

I want to specially thanks to honorable **Md.Shariful Islam**(AGM- HR) because of giving me a chance to internship in Rani food Industries Ltd. I am personally grateful to our respected guide **Md.Abu Zinnahtul Islam**(Manager QC).

I would like to express my warmest thanks to NFE Faculty members for their countless inspiration and encouragement during the student life.

Finally, I wish to express my deep gratitude to the Office Stuff of the department of Nutrition & Food Engineering under faculty of Allied Health Sciences, Daffodil International University.

The Author 19 February 2022

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(Introduction)

1.1 Introduction

As part of my internship program, I worked at **Rani Food Industries Ltd**. in Bangladesh. My internship work has been done from January 1th until January 30th, 2022. **Rani food industries ltd**. is the leading and largest company in Bangladesh. **Rani food Industries Ltd**. includes a diverse range of departments. such as, The HR & Administration, Quality Control, Research & Development, and Production .

Accounts, Vat, Civil, Resource, Hygiene, Electrical, Mechanical, Store, Distribution, Accounts, Vat, Civil, Resource, Hygiene, and so on. My Concerns were raised about the quality control department and the production department, which included the activities listed below:

- 1. Maintain all quality control parameters in accordance with the specifications.
- 2.Ensure that the production is of high quality.
- 3. Product costing expertise.
- 4. Prepare and submit the essential reports as directed by management.
- 5. Make a report on daily basis and submit to the authority.

1.2 Objective of Internship

Internships allow students to connect theory to practice while also serving as a temporary labor pool for agencies that have agreed to participate in the internship program. The department accomplishes its goal of preparing students for significant careers. In all areas, professional and managerial roles are available. Professional growth that is relevant Weekly topics and seminars are discussed.

- 1. Provides students with hands-on experience in the public, private, or nonprofit sectors.
- 2. Enables a student to build key public administration abilities that cannot be learned in any other way taught in a classroom setting Working on special projects for the government, for example, is one of these experiences.
- 3. the internship agency for learning about human motivation in a complex environment organization.
- 4. Allows a student to compare theoretical concepts studied in the classroom with those found in the real world.
- 5. Provides a student with real-world experience in In terms, the world of work is vast. of public administration experience a public, private, or nonprofit organization prior to going on the job market This type of experience not only improves students' employment prospects, but it also improves their quality of life.not only educates prospects, but also what is expected in terms of professional behavior.
- 6. Allows a student to apply classroom technical skills to real-world situations.

1.3 Description of the Organization

Rani Food Industries Limited was founded in 2012. Rani Food Industries Limited which is producing high quality of biscuits, cookies and real potato chips. The company has launched two brands which are known as "Gold Mark" and "Ringo". Rani Food Industries Limited makes sure that it produce high quality and delicious products.

Goldmark has one of the most extensive sales and distribution networks in Bangladesh, with 2,000 sales representatives across all 64 districts of the country. Our products are available at over 5,00,000 retail outlets across Bangladesh.



1.4 Mission and Vision

Vision

Our vision is to be one of the leading Food manufacturers in the country through acquiring remarkable position to the World Food Market.

Mission

Our mission is to produce quality food products that ensure 100% hygiene for the consumer's health through state-of-the-art technology with dynamic and expertise management to serve all level consumers of home and abroad with the best quality products & services with reasonable price.

CHAPTER TWO (Work Description)

2.1 Popular food items of Rani Food Industries Ltd.

Rani Food Industries Ltd.



Figure 2: Food items picture

- 1.Goldmark pops biscuits
- 2.Lexus
- 3.Lexus Cream
- 4.Butter milk
- 5.Goldmark Pineapple
- 6.Milk Cookies
- 7.tuffy cap cake
- 8.Kidofer
- 9.Beakers Chocolate
- 10.Tea Toast
- 11. Yo-Yo
- 12.Ringo Chips
- 13. High choice
- 14.Spices

2.2 Working Hour List

Working Hour List

Department/product name	From Date	To Date	Total Days	Name of works	Name and Designation of trainee
Goldmark pops	01-01-2022	06-01-2022	6	Checking different types of Quality parameter	Production Supervisor
Milk butter	08-01-2022	13-01-2022	6	Checking different types of Quality parameter	Production Supervisor
Lexus	15-01-2022	20-01-2022	6	Checking different types of Quality parameter	Production Supervisor
Tuffy Cup Cake	22-01-2022	26-01-2022	4	Checking different types of Quality parameter	Production Supervisor
Proximate Analysis	27-01-2022	30-01-2022	4	Proximate Analysis of product	Md. Abu Zinnahtul Islam Manager(QC)

2.3 Responsibility of Quality Control Department

- 1. Supply and materials are inspected.
- 2. Inspection of raw materials All CCP are being tested on a regular basis.
- 3.Inspection of the shelf life.
- 4. Reporting on the product's quality.
- 5.It's all about research and development.
- 6.New and effective product quality control methods are being developed.
- 7. Everyone in the industry must maintain their personal hygiene.
- 8. Operational planning.
- 9. Control of the manufacturing process.
- 10.Controlling the mix.
- 11. Consumers/buyers acceptable appearance control.
- 12. Production efficiency is measured.
- 13. Equipment efficiency is measured.
- 14.Inspection of the completed product.
- 15. Control of warehousing.
- 16. Control of shipping and storage.
- 17. Preparation of a written handbook with specifications and processes.
- 18.Statistical processes and schedules are prepared.
- 19.Inspection of sanitary conditions.
- 20.Local and international regulations are followed.
- 21. Compliance with correct trash disposal procedures

2.4 Process flow chart of Goldmark pops Biscuits

Process Flow chart of Goldmark pops biscuits

Raw materials Weighing Mixing (5-7min) Dough hopper **Molding & forming** Water spraying Baking (temp.204°C for 4min) Oil spraying **Cooling Sorting Metal detection**

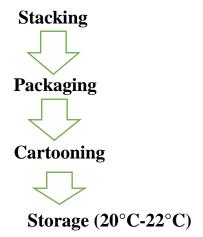




Figure 3: Goldmark pops Biscuits

2.5 Process flow Chart of Milk Cookies

Process flow Chart of Milk Cookies

Raw materials Weighing **Creaming & Mixing (8-10min) Cutting Tray decorating** Baking (temp.204°C for 5min) **Cooling Packaging Cartooning**

Storage (20°C)

2.6 Process flow chart of Lexus Biscuits

Process flow chart of Lexus Biscuits

Ingredients



Mixing and Aeration (4min)



Sheeting and Rolling



Cutting



Baking (172°C for 4 min)



Cooling



Scrap Separation



Weighing

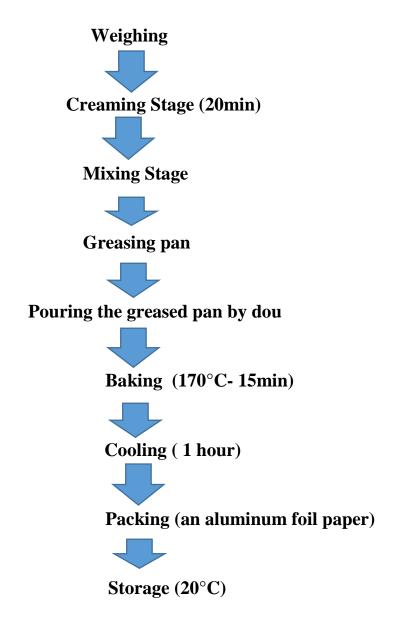


Packing



Figure 4: Lexus Biscuits

2.7 Process flow chart of Tuffy Cup Cake



2.8 Product Net weight and Price list

Product Net weight and price list

Product name	Net weight	price
Gold mark pops	28gm	5 Tk
Butter Milk	77gm	12Tk
Lexus	250gm	100Tk
Milk cookies	250gm	100Tk
Kidofer Milk Wafer	18gm	12Tk
Tuffy Cup cake	17gm	5Tk
Beakers chocolate	300gm	60Tk

CHAPTER Three (Proximate Analysis)

3.1 Determination of Gluten Content

Equipment

- 1. Measuring cylinder
- 2. Dish
- 3.Beaker
- 4. Balance Machine

Procedure:

- 1. In an appropriate dish, weigh 20g flour.
- 2. Mix in 10 mL of water and form a dough, being careful not to get any other materials into the dough.
- 3. To avoid water, the entire process must be completed within 8 minutes to make smooth dough loss.
- 4. Gently place the dough in a beaker filled with water and set aside for 30 minutes.
- 5. Remove the dough from the beaker and wash it until it is free of water.

wash. While discarding the wash water, take care to ensure that no gluten is wasted. the laundry are repeated until the gluten is starch-free.

- 6. Squeeze the gluten with your finger to remove any excess water until the gluten sticks to your finger.
- 7. Record the gluten

Calculation

Dry gluten,% by mass = $(W \times 5) / 3 = (5.785 \times 5) / 3 = 9.64\%$

Result

Dry Gluten 9.64%

3.2 Determination of Moisture Content

Method - Moisture Analyzer

- 1. First, remove the cover from the analyzer and insert an empty moisture dish on top.
- 2. Switch on the light. With time, temperature, and other data, the analyzer will display 0.000.
- 3. To set the temperature, press the select button.
- 4. In a dish, weigh 2.00 grams of sample accurately. Spread it out as evenly as you can.
- 5. Press the START button after closing the cover.
- 6. The moisture content of the sample will be calculated automatically and shown as a percentage.
- 7. When the determination analyzer is finished, it will automatically stop producing three beeps.
- 8. Make a note of the outcome.
- 9. Switch off the light.

Result

Wheat Flour moisture 13.25 %

3.3 Solubility Test

Equipment

Beaker

Procedure

1. To take few sample into beaker and add few water into same beaker. Then observe it.

Result

Water soluble or water not soluble.

3.4 Product Packing

Wrapper Checking ,Tray, HDPE,Carton:

Wrapper checking:

- 1. Length
- 2. Width
- 3. Weight
- 4. GSM
- 5. Thickness

Tray Checking:

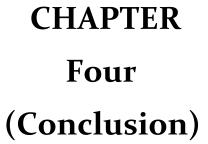
- 1. Length
- 2. Width
- 3. Height (Inside)
- 4. Weight

HDPE Checking

- 1. Length
- 2. Width
- 3. Thickness
- 4. Sealing condition

Carton Checking

- 1. Length
- 2. Width
- 3. Height
- 4. GSM
- 5. Corrugation
- 6. Registration



4.1 Conclusion

This internship at **Rani food industries Ltd**. was well-organized and provided me with valuable experience. I am confident that this reputable organization Ltd has provided me with a wealth of practical experience.

All of the officials, including the personnel, were quite helpful to me. All of the items and machinery systems are of high grade. Finally, I'd want to express my gratitude to the management of Rani food industries Ltd. for providing me with the opportunity to work for such a reputable firm.

4.2 References

Information of the Factory, **Rani food Industries Ltd** is one of the large Company in Bangladesh. https://ranifood.com.bd