



## An Internship Report of Production (Pastry, Bakery & Biscuit)

### **Submitted to**

Prof. Dr. Md. Bellal Hossain

Head of Department

### **Supervised by**

Dr. Amir Ahmed

Associate Head

Department of Nutrition and Food Engineering (NFE)

Daffodil International University

### **Submitted by**

Md. Saiful Islam

ID: 161-34-509

Department of Nutrition and Food Engineering (NFE)

Daffodil International University

**Content:**

| <b>No.</b> | <b>Subject</b>                              | <b>Page</b> |
|------------|---|-------------|
| 1          | Summary of work Description                 | 2.....16    |
| 2          | .Report of the Practical Training Received: | 17....18    |
|            | Expression of Gratitude:                    | 18          |
| 4          | Aim/Objective of the Training:              | 19          |
| 5          | Work description List:                      | 20          |
| 6          | Works Description (In Details):             | 21.....22   |
|            | Conclusion:                                 | 23          |

**Particulars of the Trainee:**

- Name of the Trainee** : Md saiful islam
- Course of the Study** : Industrial Attachment
- Registration No.** : **Batch No** 20th
- Identification No.** : 161-34-509
- Name of the Institute** : Daffodil International University
- Period of the Training** : 05-09-2018 to 28-07-2018
- Letter of Reference.** :
- Nominated Teacher**  
Name : Prof. Bellal Hossain  
Designation : HEAD Department of Nutrition and Food Engineering(DIU)

**Particulars of the Training Industry:**

- Name of the Industry** : Navana Food limited.
- Letter of Reference** :
- Nominated Person as Trainer**  
Name : Rafiqul Haque  
Designation: Head Chef( Pastry&Bakery)

## Summary of work Description

### Daily Activities Record of the Trainee in Following Performa:

| Date & Day   | Time        |           |                  | Name of Work |
|--|-------------|-----------|------------------|--------------|
| 01-10-2018<br>Monday   | <b>From</b> | <b>to</b> | <b>Total Hrs</b> | Introduction |
|  | 10:00       | 3:00      | 5                |              |
| <p><b>Activities:</b> On the first day of my training I was very excited &amp; somewhat nervous because of new environment &amp; new people surrounding me. I hadn't any idea of what kind of people they are &amp; it made me adjust myself with their personalities &amp; attitudes.<br/>                     Before I introduced to our designated dept. Md.Maynul Islam (Section Manager of production ) oriented me about the company rules &amp; regulation.</p> |             |           |                  |              |
| <p><b>Name the Types of Works:</b> it was an amazing day at factory. Staffs are very friendly and well mannered.</p>   |             |           |                  |              |

| Date & Day   | Time        |           |                  | Name of Work      | Name of Dept.     |
|--|-------------|-----------|------------------|-------------------|-------------------|
| 03-10-2018<br>Wednesday  | <b>From</b> | <b>to</b> | <b>Total Hrs</b> | Production Bakery |                   |
|  | 10:00       | 3:00      | 5                |                   |                   |
| <p><b>Used Equipment's &amp; Plants:</b><br/>                     Mixture machine, Stream machine, Oven ,Tray, Bared Mould etc.<br/>                     Production bakery</p> |             |           |                  |                   | <b>Production</b> |

**Name the Types of Works:** Check the proper Bared item Maintain the standard of products, the Bared Temperature, Proper packaging

.....  
 Sign. of Trainee

.....  
 Sign. of Trainer

| Date & Day  | Time         |             |           | Name of Work          |
|---|--------------|-------------|-----------|-----------------------|
|   | From         | to          | Total Hrs |                       |
| 06-10-2018<br>Saturday  | <b>10:00</b> | <b>3:00</b> | 5         | Production Monitoring |
|   |              |             |           |                       |
| <b>Used Equipment's &amp; Plants:</b>   |              |             |           |                       |
| Mixture machine, Stream machine, Oven ,Tray, Bared Mould etc. Production bakery                           |              |             |           |                       |
| <b>Name the Types of Works:</b>   |              |             |           |                       |
| : Check the proper bared item, Maintain the standard of products, the Bared temperature, Proper packaging |              |             |           |                       |

| Date & Day   | Time         |             |           | Name of Work          |
|--|--------------|-------------|-----------|-----------------------|
|  | From         | to          | Total Hrs |                       |
| 08-10-2018<br>Monday   | <b>10:00</b> | <b>3:00</b> | 5         | Production monitoring |
|  |              |             |           |                       |
| <b>Used Equipment's &amp; Plants:</b>  |              |             |           |                       |
| Mixture machine, Stream machine, Oven ,Tray, Bun trolley. Bun divider machine. Sealing machine.<br>Production bakery |              |             |           |                       |
| <b>Name the Types of Works:</b>  |              |             |           |                       |
| Check the Hardening of products, Check the Product Test .  |              |             |           |                       |

.....  
Sign. of Trainee

.....  
Sign. of Trainer

| Date & Day   | Time  |      |           | Name of Work          |
|--|-------|------|-----------|-----------------------|
|  | From  | to   | Total Hrs |                       |
| 10-10-2018<br>Wednesday  | 10.00 | 3.00 | 5         | Production Monitoring |
|  |       |      |           |                       |
| <b>Used Equipment's &amp; Plants:</b><br>Mixture machine, Stream machine, Oven ,Tray, Bared Mould ,Bared slice machine.<br>Production bakery |       |      |           |                       |
| <b>Name the Types of Works:</b><br>Check the dough , check the Proofing dough, check the temperature , check the packaging                   |       |      |           |                       |

| Date & Day  | Time  |      |           | Name of Work          |
|---|-------|------|-----------|-----------------------|
|   | From  | to   | Total Hrs |                       |
| 13-10-2018<br>Saturday  | 10.00 | 3.00 | 5         | Production Monitoring |
|   |       |      |           |                       |
| <b>Used Equipment's &amp; Plants:</b><br>Mixture machine, Stream machine, Oven ,Tray , Weight Machine Production bakery                           |       |      |           |                       |
| <b>Name the Types of Works:</b><br>Check the dough , check the Proofing dough, check the Measurement check the temperature , check the packaging. |       |      |           |                       |

.....  
 Sign. of Trainee

.....  
 Sign. of Trainer

| Date & Day  | Time  |      |           | Name of Work          |
|---|-------|------|-----------|-----------------------|
|   | From  | to   | Total Hrs |                       |
| 15-10-2018<br>Monday  | 10.00 | 3.00 | 5         | Production Monitoring |
| <b>Used Equipment's &amp; Plants:</b><br>Mixture machine, Stream machine, Oven ,Tray ,Fry pan, oven . Weight Machine<br><br>Production bakery                           |       |      |           |                       |
| <b>Name the Types of Works:</b> Check the proper, check the Measurement, Maintain the standard of products, check the fry , check the oil temperature ,Proper packaging |       |      |           |                       |

| Date & Day  | Time  |      |           | Name of Work          |
|---|-------|------|-----------|-----------------------|
|   | From  | to   | Total Hrs |                       |
| 17-10-2018<br>Wednesday   | 10.00 | 3.00 | 5         | Production Monitoring |
| <b>Used Equipment's &amp; Plants:</b><br>, Mixture machine, Stream machine, Oven ,Tray Weight Machine,<br><br>Production bakery   |       |      |           |                       |
| <b>Name the Types of Works:</b> Check the proper, check the Measurement, Maintain the standard of products, check the fry , check the oil temperature ,Proper packaging |       |      |           |                       |

.....  
 Sign. of Trainee

.....  
 Sign. of Trainer

| Date & Day  | Time  |      |           | Name of Work                    |
|---|-------|------|-----------|---------------------------------|
|   | From  | to   | Total Hrs |                                 |
| 20-10-2018<br>Saturday  | 10.00 | 3.00 | 5         | Production plan cake Monitoring |
| <b>Used Equipment's &amp; Plants:</b><br>Mixture machine, Oven, Tray, Cake mould , Weight Machine, brush , Proper packaging.<br><br>Production pastry |       |      |           |                                 |
| <b>Name the Types of Works:</b><br>Check the Hardening of products, Check the Mix, check the cook ,check the temperature ,                            |       |      |           |                                 |

| Date & Day   | Time  |      |           | Name of Work               |
|--|-------|------|-----------|----------------------------|
|  | From  | to   | Total Hrs |                            |
| 22-10-2018<br>Monday   | 10.00 | 3.00 | 5         | Production cake Monitoring |
| <b>Used Equipment's &amp; Plants:</b><br>Mixture machine, Oven, Tray, Weight Machine, butter paper.<br><br>Production pastry |       |      |           |                            |
| <b>Name the Types of Works:</b><br>Check the mix , check the weight ,check the temperature , check the plan cake .           |       |      |           |                            |

.....  
 Sign. of Trainee

.....  
 Sign. of Trainer



| Date & Day   | Time        |           |                  | Name of Work                  |
|--|-------------|-----------|------------------|-------------------------------|
| 24-10-2018<br>Wednesday  | <b>From</b> | <b>to</b> | <b>Total Hrs</b> | Production cake Vanilla spong |
|  | 10.00       | 3.00      | 5                |                               |
| <p><b>Used Equipment's &amp; Plants:</b><br/>Mixture machine, Oven, Tray, Weight Machine, butter paper.</p> <p>Production pastry</p> |             |           |                  |                               |
| <p><b>Name the Types of Works:</b><br/>Check the mix , check the weight ,check the temperature, check the color ,</p>                |             |           |                  |                               |

| Date & Day   | Time        |           |                  | Name of Work                          |
|--|-------------|-----------|------------------|---------------------------------------|
| 27-10-2018<br>Saturday   | <b>From</b> | <b>to</b> | <b>Total Hrs</b> | Processing of Vanilla cake Decuration |
|  | 10.00       | 3.00      | 5                |                                       |
| <p><b>Used Equipment's &amp; Plants:</b><br/>           Cake bord , plan knife ,piping bag ,cake stand ,Caesar , butter cream .</p> <p>Production pastry</p> |             |           |                  |                                       |
| <p><b>Name the Types of Works:</b><br/>           Check the cake size , check the Decuration, check the weight ,etc</p>                                      |             |           |                  |                                       |

.....

Sign. of Trainee

.....

Sign. of Trainer

| Date & Day   | Time  |      |           | Name of Work                           |
|--|-------|------|-----------|--|
|  | From  | to   | Total Hrs |  |
| 29-10-2018<br>Monday   |       |      |           | Production of the tia maria cake spong |
|  | 10.00 | 3.00 | 5         |  |
| <b>Used Equipment's &amp; Plants:</b><br>Mixture machine, Oven, Tray, Weight Machine, butter papar.<br><br>Production pastry               |       |      |           |  |
| <b>Name the Types of Works:</b><br>Check the mix , check the weight ,check the temperature, check the color, Maintain the oven temperature |       |      |           |  |

| Date & Day   | Time  |      |           | Name of Work                       |
|--|-------|------|-----------|------------------------------------|
|  | From  | to   | Total Hrs |                                    |
| 31-10-2018<br>Wednesday  |       |      |           | Processing of tia maria Decuration |
|  | 10.00 | 3.00 | 5         |                                    |
| <b>Used Equipment's &amp; Plants:</b><br>Cake bord , plan knife ,piping bag ,cake stand ,Caesar ,<br><br>Production pastry |       |      |           |                                    |

**Name the Types of Works:**

Check standard weight of ingredients , Check mixing,

,

.....

Sign. of Trainee

.....

Sign. of Trainer

| Date & Day             | Time  |      |           | Name of Work                          |
|------------------------|-------|------|-----------|---------------------------------------|
|                        | From  | to   | Total Hrs |                                       |
| 03-11-2018<br>Saturday |       |      |           | Production chochoate fudge cake spong |
|                        | 10.00 | 3.00 | 5         |                                       |

**Used Equipment's & Plants:**

Mixture machine, Oven, Tray, Weight Machine, butter ,chochoate

Production pastry

**Name the Types of Works:**

Check standard weight of ingredients , Check mixing, Check mix, Check the temperature

| Date & Day | Time |    |           | Name of Work                             |
|------------|------|----|-----------|--|
|            | From | to | Total Hrs |  |
| 05-11-2018 |      |    |           | Processing of chochoate fudge Decuration |

|  |       |      |   |
|--|-------|------|---|
| Moday  | 10.00 | 3.00 | 5 |
| <b>Used Equipment's &amp; Plants:</b><br>Cake bord , plan knife ,piping bag ,cake stand ,Caesar ,<br><br>Production pastry                               |       |      |   |
| <b>Name the Types of Works:</b><br>Check standard weight of ingredients , Check mixing, Check the filling the mixing tank, Maintain the oven temperature |       |      |   |

.....

Sign. of Trainee

.....

Sign. of Trainer

| Date & Day  | Time  |      |           | Name of Work                |
|---|-------|------|-----------|-----------------------------|
|   | From  | to   | Total Hrs |                             |
| 07-11-201<br>Wednesday  | 10.00 | 3.00 | 5         | Biscuit Production Dry cake |
|   |       |      |           |                             |
| <b>Used Equipment's &amp; Plants:</b><br>Mixture machine, Oven, Tray, Weight Machine,<br><br>Biscuit Production                               |       |      |           |                             |
| <b>Name the Types of Works:</b><br>Check standard weight of ingredients , Check mixing,Check Proper Boiling of mix, Maintain the temperature. |       |      |           |                             |

| Date & Day             | Time  |      |           | Name of Work                       |
|------------------------|-------|------|-----------|------------------------------------|
|                        | From  | to   | Total Hrs |                                    |
| 10-11-2018<br>Saturday | 10.00 | 3.00 | 5         | Biscuit Production<br>Salt Biscuit |
|                        |       |      |           |                                    |

|  |
|--|
| <p><b>Used Equipment's &amp; Plants:</b><br/>Mixture machine, Oven, Tray, Weight Machine ,etc</p> <p><b>Biscuit Production</b></p> |
| <p><b>Name the Types of Works:</b><br/>Check standard weight of ingredients</p>  |

.....

Sign. of Trainee

.....

Sign. of Trainer

| Date & Day           | Time  |      |           | Name of Work                       |
|----------------------|-------|------|-----------|------------------------------------|
|                      | From  | to   | Total Hrs |                                    |
| 12-11-2018<br>Monday | 10.00 | 3.00 | 5         | Biscuit Production<br>Ishis Biscui |

|  |
|--|
| <p><b>Used Equipment's &amp; Plants:</b><br/>Mixture machine, Oven, Tray, Weight Machine, katar knife ,sesame</p> <p><b>Biscuit Production</b></p> |
| <p><b>Name the Types of Works:</b><br/>Check standard weight of ingredients,check the mesurarmnt,</p>  |

| Date & Day            | Time  |      |           | Name of Work             |
|-----------------------|-------|------|-----------|--------------------------|
|                       | From  | to   | Total Hrs |                          |
| 14-11-20<br>Wednesday | 10.00 | 3.00 | 5         | Desset Production browni |

|   |
|---|
| <p><b>Used Equipment's &amp; Plants:</b><br/>Mixture machine, Oven, Tray, Weight Machine</p>  |
| <p><b>Name the Types of Works:</b><br/>Check the test , check the color , check the soft ,check the oven<br/><br/>Desset Production</p> |

.....  
Sign. of Trainee

.....  
Sign. of Trainer

| Date & Day           | Time  |      |           | Name of Work              |
|----------------------|-------|------|-----------|---------------------------|
|                      | From  | to   | Total Hrs |                           |
| 16-11-2018<br>Friday | 10.00 | 3.00 | 5         | Dessert Production Muffen |

|  |
|--|
| <p><b>Used Equipment's &amp; Plants:</b><br/>Weight Machine, ingredients mixer, Mix tank , oven, Conveyor<br/><br/>Desset Production</p> |
|--|

|  |
|--|
| <p><b>Name the Types of Works:</b><br/>. Check standard weight of ingredients , Check mixing, Check the filling the mixing tank, Maintain the oven temperature</p> |
|--|

| Date & Day             | Time  |      |           | Name of Work      |
|------------------------|-------|------|-----------|-------------------|
|                        | From  | to   | Total Hrs |                   |
| 17-11-2018<br>Saturday | 10.00 | 3.00 | 5         | Desset Production |

**Used Equipment's & Plants:**

Same As the previous day

**Name the Types of Works:**

Same As the previous day

.....

Sign. of Trainee

.....

Sign. of Trainer

| Date & Day           | Time  |      |           | Name of Work      |
|----------------------|-------|------|-----------|-------------------|
|                      | From  | to   | Total Hrs |                   |
| 19-11-2018<br>Monday | 10.00 | 3.00 | 5         | Production bakery |
|                      |       |      |           |                   |

**Used Equipment's & Plants:**

Mixture machine, Stream machine, Oven ,Tray, . machine

Production bakery

**Name the Types of Works:**

| Date & Day | Time |    |           | Name of Work      |
|------------|------|----|-----------|-------------------|
|            | From | to | Total Hrs |                   |
|            |      |    |           | Production bakery |



|                                       |       |      |   |
|---------------------------------------|-------|------|---|
| 21-11-2018<br>Wednesday               | 10.00 | 3.00 | 5 |
| <b>Used Equipment's &amp; Plants:</b> |       |      |   |
| <b>Name the Types of Works:</b>       |       |      |   |

.....

Sign. of Trainee

.....

Sign. of Trainer

| Date & Day                            | Time  |      |           | Name of Work |
|---------------------------------------|-------|------|-----------|--------------|
|                                       | From  | to   | Total Hrs |              |
| 24-11-2018<br>Saturday                | 10.00 | 3.00 | 5         |              |
| <b>Used Equipment's &amp; Plants:</b> |       |      |           |              |
| <b>Name the Types of Works:</b>       |       |      |           |              |

| Date & Day | Time |    |           | Name of Work |
|------------|------|----|-----------|--------------|
|            | From | to | Total Hrs | Date Coding  |
|            |      |    |           |              |

|   |       |      |   |
|---|-------|------|---|
| 26-11-2018<br>Monday  | 10.00 | 3.00 | 5 |
| <b>Used Equipment's &amp; Plants:</b><br>Coding Machine,Busket,Rubber<br><br>Coding Plant   |       |      |   |
| <b>Name the Types of Works:</b> s<br>Monitoring the coding on the lid or packaging material |       |      |   |

.....

Sign. of Trainee

.....

Sign. of Trainer

| Date & Day  | Time  |      |           | Name of Work |
|---|-------|------|-----------|--------------|
|   | From  | to   | Total Hrs |              |
| 28-11-2018<br>Wednesday   | 10.00 | 3.00 | 5         | Stickers     |
| <b>Used Equipment's &amp; Plants:</b><br>Hand Sanitizer, Hand Gloves,<br><br>Stickers plant |       |      |           |              |
| <b>Name the Types of Works:</b> s.<br>Check the manual stickers on the packaging material   |       |      |           |              |

| Date & Day | Time |    |           | Name of Work |
|------------|------|----|-----------|--------------|
|            | From | to | Total Hrs |              |
|            |      |    |           | Discussion   |

|  |       |      |   |
|--|-------|------|---|
| 01-12-2018<br>Saturday   | 10.00 | 3.00 | 5 |
| <b>Used Equipment's &amp; Plants:</b> QC office                                    |       |      |   |
| <b>Name the Types of Works</b> Revision & Discuss with trainer through whole works |       |      |   |

.....

Sign. of Trainee

.....

Sign. of Trainer

**Report of the Practical Training Received:**

Name of the Training Industry : Navana Food limited.  
Name of the Trainee : Md saiful ialam  
Course of the Study : B.Sc in Nutrition and Food Engineering (NFE)  
Registration No : Batch No: 30(A)  
Identification No : 161-34-509  
Name of the Department : B.Sc in Nutrition and Food Engineering (NFE)  
Name of the Institute : Daffodil International University

(Not applicable for the Trainee)

### Evaluation of the work

Full Marks – 100

Pass Marks – 60

| Activities<br>No. | Attendance | Work | Day to day<br>work record | Report<br>writing | Total |
|-------------------|------------|------|---------------------------|-------------------|-------|
|                   | 1          | 2    | 3                         | 4                 | 5     |
| Fixed Marks       | 25         | 40   | 10                        | 25                | 100   |
| Pass Marks        | 15         | 24   | 6                         | 15                | 60    |
| Marks<br>Obtained |            |      |                           |                   |       |

Sign of the Examiner : Sign

of nominated Teacher:

## 2 Expression of Gratitude:

All praises are due to “Almighty Allah” who enables me pursue high education in Food Engineering & Technology and to complete the endeavor successfully.

It is also a proud privilege to express my heartiest appreciation and gratitude to my teachers and lecturers department B.Sc in Nutrition and Food Engineering (NFE) of Daffodil International University. For their hearty guidance, valuable suggestion, affection encouragement, helpful comment, constructive criticize and continuous supervision throughout the whole period of the work.

I gratefully admires to honorable Rafiqul Haque . Navana Food limited. They are very helpful & friendly.

### **.3 . Aim/Objective of the Training:**

The specific objectives of this study are as following:

- To have an idea of system & activities of bakery, dairy, Bake & other processing unit.
- To know different rules & methods of the organization.
- To identify the hazard during the processing & production of products in the plant & finding how to take necessary steps.
- To identify different critical control point in dairy & aseptic products.
- To describe the processing of all products.
- To maintain standard quality parameters.
- To give an overview of Navana Food limited.

#### 4. Work Description:

##### 4.1 1 List:

| Department         | Training Period |          |            | Name of the Work               |
|--------------------|-----------------|----------|------------|--------------------------------|
|                    | From            | To       | Total Days |                                |
| Production bakery  | 01-10-18        | 17-10-18 | 08         | Production bakery              |
| Production pastry  | 19-10-18        | 05-11-18 | 08         | Production pastry              |
| Biscuit Production | 07-11-16        | 12-11-18 | 5          | Biscuit Production             |
| Desset Production  | 14-11-18        | 17-11-18 | 3          | Desset Production              |
| Production bakery  | 17-11-18        | 19-11-18 | 2          | Production bakery              |
| Production         | 21-11-16        | 01-12-18 | 5          | Production, Stickers, Stickers |

## 4.2 Works Description (In Details):

(Processing details including description, Raw materials used Process Control. If needed extra sheets can be added)

### General Processing Steps

Blend Ingredients

Add Liquid Flavors and Colors

Freeze

Add Fruits, Nuts, and Bulky Flavorings

Package

Harden

#### 1. Blend the Ice Cream Mixture

The milk complete mixing of liquid and dry ingredients.

#### 2. Add Liquid Flavors and Colors

Liquid flavors and colors may be added to the mix before freezing. Only ingredients that are liquid can be added before the freezing, to make sure the mix flows properly through the freezing equipment.

#### 3 Freeze

The process involves freezing the mix and incorporating air. Ice cream mix can be frozen in batch or continuous freezers and the conditions used will depend on the type of freezer. The continuous freezing process is much faster than the batch freezing process.

The addition of air is called overrun and Up to 50% of the volume of the finished ice cream (100% overrun) can be air that is incorporated during freezing. Premium ice creams have less overrun (approximately 80%) and are denser than regular ice cream.

#### 4 Add Fruits, Nuts and Bulky Flavorings (candy pieces, etc.)

Fruits, swirls, and any bulky type of flavorings (nuts, candy pieces, etc.) are added at this point. These ingredients cannot be added before freezing or they would interfere with the smooth flow of

the mix through the freezer. The ice cream at this point is soft and it is easy to mix in the bulky flavorings so they are uniformly distributed throughout the ice cream. Mixing in bulky flavorings after freezing also prevents damage to the pieces and allows them to remain whole or in large chunks.

#### 8. Package

As desired, depending on the product.

#### 9. Harden

The ice cream is cooled as quickly as possible down to a holding temperature of less than  $-25^{\circ}\text{C}$ . The temperatures and times of cooling will depend on the type of storage freezer. Storage at  $25^{\circ}\text{C}$  will help to stabilize the ice crystals and maintain product quality.

#### **Raw materials used :**

\*Full cream milk

\*Sugar

\*Glucose

\*Flavors & colors

\* oil,palm oil

\*Chocolate coating

\*Cocoa powder

#### **Package materials :**

\* Bared stick

\*Wrapper

\*Cartoon

\*Litre box



# Conclusion:

This study shows how to maintain the hygiene production and quality control of food & Icecream. The industrial attachment program has covered both hygiene production and quality control of food products. To ensure hygiene production and quality control different types of test parameter including Physical, Chemical, Microbiological has been taken. Actually a BSTI standard maintains or regulates its quality parameter. Physical and chemical tests are done routinely in the lab. Microbiological test is also important especially for final product.