

INTERNSHIP REPORT ON

QUALITY CONTROL OF MILK AT MILK-VITA

Submitted To:

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Date of Submission: 22 Dec 2018

<u>LETTER OF TRANSMITTAL</u>

Date: 22 Dec 2018

To

Professor Dr. Md. Bellal Hossain

Head

Department of Nutrition & Food Engineering

Daffodil International University.

Subject: Submission of Internship Report

Dear Sir,

I would like to take this opportunity to thank you for the guidance and support you have

provided me during the course of this report. Without your help, this report would have been

impossible to complete. Daffodil International University has many more respective persons, for

providing me all most supervision during my thesis in the organization.

To prepare the report I collected what I believe to be most relevant information to make my

report as analytical and reliable as possible. I have concentrated my best effort to achieve the

objectives of the report and hope that my endeavor will serve the purpose. The practical

knowledge and experience gathered during report preparation will immeasurably help in my

future professional life. I request you to excuse me for any mistake that may occur in the report

despite of my best effort.

I would really appreciate it you enlighten me with your thoughts and views regarding the report.

Also, if you wish to enquire about an aspect of my report, I would gladly answer your queries.

Thank you again for your support and patience.

Sincerely Yours,

Md. Shawakh Ahmed

ID: 143-34-331

Department of Nutrition and Food Engineering

Daffodil International University

LETTER OF AUTHORIZATION

Date: 22 Dec 2018

To

Professor Dr. Md. Bellal Hossain

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 a copy any Thesis Report previously made any other students.

I also express my honestly confirmation in support to the fact that the said thesis report has neither been used before to fulfill my other course related not it will be submitted to any other person a authority in future.

Yours Sincerely,

Md. Shawakh Ahmed

ID: 143-34-331

Department of Nutrition and Food Engineering

Daffodil International University

CERTIFICATION OF APPROVAL

I am pleased to certify that the internship report on the Quality Control of Milk at Milk-Vita

conducted by Md. Shawakh Ahmed bearing ID: 143-34-331 of the department of Nutrition and

Food Engineering has been approved for presentation and defense/viva-voice. I am pleased to

hereby certify that the data and finding presented in the report are the authentic work of. Md.

Shawakh Ahmed. I strongly recommended the report presented by Md. Shawakh Ahmed for

further academic recommendations and defense/viva-voice Md. Shawakh Ahmed bears a strong

moral character and a very pleasant personality. It has indeed a great pleasure working with him.

I wish him all success in life.

Belleve

Professor Dr. Md. Bellal Hossain

Head

Department of Nutrition and Food Engineering

Faculty of Allied Health Sciences

Daffodil International University

Acknowledgement

In the preparation of this report, I would like to acknowledge the encouragement and assistance give to me by a number of people. At first, I would like to express my gratitude to almighty Allah for enabling me the strength and opportunity to complete the report in the schedule times successfully. I am taking this 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 cannot be 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. Md. Bellal Hossain** for this kind cooperation and to accept this Degree. I am encouragement taking this privilege to deliver my gratefulness to each and every people who are involved with me in every phase of my lives

I have taken effort in this project. However, it would not have been possible without the kind support and help many individuals. I would like to extend my since thanks to all of them.

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

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CHAPTER ONE

1.1 Introduction

Milk-vita Bangladesh Limited is a milk and dairy products producer company. It is a conjugative company. Bangladesh Government& Bangladesh Milk Producers Co-operative Union Limited works together for this company. It ensure quality products for consumers. Milk-vita's dairy products are much more safe and pure than any other company's dairy products.

Milk-vita produces dairy products such as:

Pasteurized milk, Chocolate milk, Butter, Gee, Laban, Sweet Yoghurt, Sour Yoghurt, Rosh-malai, Ice-cream, Powder milk etc.

1.2 History of Milk-Vita:

It was first introduce when Bangladesh wasn't born. In 1946 it starts its running in the East Pakistan. It was a private company until 1973 when Bangobondhu Sheikh Mujibur Rahman takes the decisionto make it government Company. Now it runs by 60/40% percent partnership. 60% Government and 40 percent by Bangladesh Milk-producers Co-operative Union Limited. Now it has different plant in different place. It has plant in Madaripur, Bogra, and Dhaka.

1.3 Quality control assurance Department:

This department ensure quality products as well as raw milk. They ensure quality products by some quality control check of raw milk. But they also check final products quality. This department also ensure proper CIP.

Ouality control check of raw milk such as:

- -Platform test/ Alcohol test,
- -CLR test
- -Fat test
- -Soda test
- -Salt test
- -Sugar test.

Quality control check of final products:

- -Peroxide test of pasteurized milk,
- -Microbial test &
- -Sensory evaluation check.

1.4 Platform test & Fat Test

Platform test:

Platform test is also known as alcohol test. 68% ethanol is used for this test. This test is done for find out milk acidity. Normally it done by the ratio of 1:1 but in milk-vita it done by the ratio of 2:1, ethanol: sample (milk).

Apparatus & equipment:

- 1. Test tube
- 2. Pipette
- 3. Ethanol
- 4. Sample (Milk)

Procedure:

- 1. 1st 2ml 68% ethanol is taken into a test tube by a pipette
- 2. Then 1ml milk is added into the test tube
- 3. Shake the sample for while
- 4. If milk coagulate and stable with the test tube's body then alcohol positive, so this milk is not perfect for further process as pasteurized milk.
- 5. If milk not coagulate then alcohol negative and this milk this good for further process.
- 6. Remember that have to be careful about the use of apparatus.

Fat test:

Fat test is another quality control test parameters of milk. It also important for pricing the milk. Because milk-vita fixed price of milk by fat percentage. Different animal have different fat percentage in their milk.

Apparatus & equipment:

- 1. Butyrometer, Nockstop, & pin
- 2. Sulfuric acid
- 3. Amyl alcohol
- 4. Centrifuge machine
- 5. Sample (Milk)
- 6. Centrifuge machine

Procedure:

- 1. 1st 10ml sulfuric acid are taken into butyrometer
- 2. Then 10.47ml milk is added into it
- 3. Then 1ml amyl-alcohol also added into the mixer
- 4. Some water has been added to adjust the mixer
- 5. Then nock-stop and pin is used to lock the butyrometer
- 6. Then shake the mixer for some times
- 7. Then put the butyrometer in the centrifuge machine for 5mintues with 110RPM at 60^{0} C.
- 8. Then measure the fat percentage by open eyes.
- 9. Normally 3.5 is expected but it can be 3.2 to 4.2
- 10. Need to be careful in time of using centrifuge machine.

Purpose of Fat test:

- 1. To know the fat percentage
- 2. To extract extra fat from milk
- 3. Extracted extra fat can be useful for making other dairy products
- 4. To minimize cost
- 5. To know how much skim milk should use
- 6. To fixed the price of milk.

1.5 CLR test:

CLR is the short form of Corrected Lactometer Reading. It also known as specific gravity test or density test. In this test lactometer and temperature reading is important. If temperature found below 20°C then for per 1°C, 0.2 will be deducted from lactometer reading. Similarly temperature found greater than 20°C then for per 1°C, 0.2 will be added with lactometer reading. This test is used to know the density of milk. Normal specific gravity of milk is 1.026 to 1.028.

Apparatus & Equipment:

- 1. Sample (milk)
- 2. Lactometer with thermometer
- 3. Lactometer jar

Procedure:

- 1. Clean the lactometer and jar finely
- 2. Then put the lactometer into the jar
- 3. Then then put the milk into the jar
- 4. To adjust temperature flow the water on the jar
- 5. Then measure the lactometer reading and temperature.
- 6. Then calculate the CLR.

Calculation:

```
CLR =Here,

=Temperature = 180C

=LR = 29

= 1.0286

CLR = ?
```

1.6 Result

Here we can see CLR is 1.028.6 which means density 28.6. Milk-vita provides 28.68 as density for the consumers.

1.7 Peroxidase test:

This test is conducted to verify the effectiveness of pasteurization of milk. It is another quality control parameters of pasteurized milk

Apparatus & Equipment:

- 1. Test tubes
- 2. Pipette
- 3. NaOH
- 4. H₂O₂
- 5. Paraphenylenediamine

Procedure:

- 1. Take 5ml milk in a test tube
- 2. Add 1 drop Sodium Hydroxide and shake it
- 3. Add 1 drop Hydrogen Peroxide and shake it
- 4. Add 2 drops paraphenylenediamine and shake the mixer for a few seconds
- 5. Wait 30 seconds
- 6. If any color change seen in the mixer then peroxidase positive that means pasteurization has not been done properly
- 7. If seen no color change then peroxide negative that means pasteurization done properly.

Purpose of this test:

- 1. To check the pasteurization is done properly or not
- 2. To check the quality of pasteurized milk.

1.8 Soda test & Salt Test & Sugar Test

Soda Test:

It is one type of adulteration test.

Apparatus & Equipment:

- 1. Test tube
- 2. 100% Ethanol
- 3. Rosalic acid
- 4. Sample milk

Procedure:

- 1. Take 2ml 100% alcohol in a test tube
- 2. Add 2ml milk in it
- 3. Add 2ml rosalic acid
- 4. If pink color seen then soda positive
- 5. If orange color seen soda negative.

Salt test:

It is another adulteration test. People add salt to increase SNF of milk. Apparatus & Equipment:

- 1, Test tube
- 2. Silver Nitrate (AgNO₃)
- 3. K₂CrO₄
- 4. Sample milk

Procedure:

- 1. Take 5ml Silver Nitrate in a test tube
- 2. Add 4 to 5 drops K2CrO4 in it

- 3. Then finally take 1ml milk
- 4. If brown color seen in the mixer it means salt negative
- 5. If color turns into slightly yellowish color that means salt positive

1.9 Sugar test

Sugar Test:

Sugar test is one kind of adulteration test. Because some bad peoples are intentionally add some sugar in milk to increase the density of milk. So to find out this officials do this test.

Apparatus & Equipment:

- 1. Test tube
- 2. Test tube holder
- 3. Bunsen burner
- 4. Resorcinol solution
- 5. Sample milk

Procedure:

- 1. 1st 5ml resorcinol solution are taken into a test tube
- 2. Then add 1ml milk into the test tube
- 3. After added milk it become coagulate
- 4. Then use holder to hold the test tube to put it into the Bunsen burner's flam
- 5. Keep it until boiling
- 6. Then take away from flam and gives time to cool the mixer
- 7. Then within few minutes if mixer turns brick red color which means sugar test positive
- 8. If mixer shows slightly red color then it is sugar test negative
- 9. Sugar test positive milk are not acceptable

Purpose of sugar test:

- 1. To check adulteration
- 2. To ensure there is no added sugar in milk

1.10 Peroxidase Test

Peroxidase test:

This test is conducted to verify the effectiveness of pasteurization of milk. It is another quality control parameters of pasteurized milk

Apparatus & Equipment:

- 1. Test tubes
- 2. Pipette
- 3. NaOH
- 4. H₂O₂
- 5. Paraphenylenediamine

Procedure:

- 1. Take 5ml milk in a test tube
- 2. Add 1 drop Sodium Hydroxide and shake it
- 3. Add 1 drop Hydrogen Peroxide and shake it
- 4. Add 2 drops paraphenylenediamine and shake the mixer for a few seconds
- 5. Wait 30 seconds
- 6. If any color change seen in the mixer then peroxidase positive that means pasteurization has not been done properly
- 7. If seen no color change then peroxide negative that means pasteurization done properly.

Purpose of this test:

- 1. To check the pasteurization is done properly or not
- 2. To check the quality of pasteurized milk.

CHAPTER TWO

2.1 Soda test & Salt Test & Sugar Test

Soda Test:

It is one type of adulteration test.

Apparatus & Equipment:

- 1. Test tube
- 2. 100% Ethanol
- 3. Rosalic acid
- 4. Sample milk

Procedure:

- 1. Take 2ml 100% alcohol in a test tube
- 2. Add 2ml milk in it
- 3. Add 2ml rosalic acid
- 4. If pink color seen then soda positive
- 5. If orange color seen soda negative.

Salt test:

It is another adulteration test. People add salt to increase SNF of milk. Apparatus & Equipment:

- 1, Test tube
- 2. Silver Nitrate (AgNO₃)
- 3. K₂CrO₄
- 4. Sample milk

Procedure:

- 1. Take 5ml Silver Nitrate in a test tube
- 2. Add 4 to 5 drops K₂CrO₄ in it
- 3. Then finally take 1ml milk
- 4. If brown color seen in the mixer it means salt negative
- 5. If color turns into slightly yellowish color that means salt positive

2.2 Sugar test

Sugar Test:

Sugar test is one kind of adulteration test. Because some bad peoples are intentionally add some sugar in milk to increase the density of milk. So to find out this officials do this test.

Apparatus & Equipment:

- 1. Test tube
- 2. Test tube holder
- 3. Bunsen burner
- 4. Resorcinol solution
- 5. Sample milk

Procedure:

- 1. 1st 5ml resorcinol solution are taken into a test tube
- 2. Then add 1ml milk into the test tube
- 3. After added milk it become coagulate
- 4. Then use holder to hold the test tube to put it into the Bunsen burner's flam
- 5. Keep it until boiling
- 6. Then take away from flam and gives time to cool the mixer
- 7. Then within few minutes if mixer turns brick red color which means sugar test positive
- 8. If mixer shows slightly red color then it is sugar test negative
- 9. Sugar test positive milk are not acceptable

Purpose of sugar test:

- 1. To check adulteration
- 2. To ensure there is no added sugar in milk
- 3. To ensure safety

2.3 Laban Manufacturing Process

Laban:

Laban is a dairy products. It is a yoghurt drink. Laban is a Arab word. Laban found all over the world. But it mostly seen in South-Asian country such as India. Now-a-days in Bangladesh it becomes popular. Many company produce this product. But among all of them milk-vita's laban is the best. Because they provide 80% yoghurt in it.

Ingredients:

- 1. Yoghurt
- 2. Salt
- 3. Stabilizer
- 4. Sugar

Procedure:

- 1. 1st yoghurt are pour into the mixer machine
- 2. Then salt and sugar are added into the yoghurt
- 3. Then stabilizer are used in the mixer
- 4. Then start the mixer machine and mixed it properly for an hour with heat
- 5. Then pour them into the packaging bottle
- 6. Then seal and level them
- 7. After Labelling they kept into the storage room
- 8. They kept in the freezing room for 24hours
- 9. Then bottles are taken outside and make them dry
- 10. Finally wrapping them in cartoon
- 11. Then transported them to distribute to the seller

2.4 Chocolate Milk Manufacturing Processing

Chocolate milk:

Chocolate milk is another dairy product made by milk-vita. It is popular in Bangladesh especially in among the children.

Ingredients/Recipe: (For 400kg)

- 1. SMP- 12kg
- 2. FCMP-30kg
- 3. Sugar- 33kg
- 4. Stabilizer- 0.60kg
- 5. Cocoa powder- 2.80kg
- 6. Color- 0.032kg
- 7. Water- 321.568kg

Procedure:

- 1. At first some hot water (approximately 60^{0} C) is added into the blending vat. Then full cream milk powder (FCMP), skim milk powder, (SMP), sugar, stabilizer and finally remaining water are added. The mixing operation is blended at 80^{0} C in the mixing vat so that the warm mix which dissolve them.
- 2. Then the mixture is pasteurized by a continuous heating process. The liquid mixture is heated in a vat to at 81⁰C for 15 seconds and subsequently cooled by the chilled water which helps to destroy pathogenic bacteria present in the mixture.
- 3. Then homogenize the mixer
- 4. Then chocolate milk are packaged by foil paper packaging
- 5. Then they are stored in the storage room at 4° C temperature

2.5 Sweet Yoghurt & Sour Yoghurt

Sweet Yoghurt Manufacturing Process

Sweet yoghurt:

Sweet yoghurt is a popular dairy product. It is popular in both young and children. Particularly in all aged people. Sweet yoghurt is another product made by milk-vita.

Ingredients/Recipe:

- 1. Milk
- 2. Sugar
- 3. Culture

Procedure:

- 1. 1st milk are taken in a cleaned vessels
- 2. Then boil them at boiling temperature until 40% reduced by weight, Milk-vita wants to serve good product to people so they do this.
- 3. Then add 15% sugar in the milk
- 4. Then heat the mixer
- 5. Remove from the heat and cooled until 40° C
- 6. Then add starter culture in the mixer
- 7. Then keep it 6hours to make curd
- 8. Then keep them at 4^oC temperature
- 9. Then they are ready for packaging
- 10. Then marketing them for selling

Benefits of using Sweet Yoghurt:

- 1. Good for digestion
- 2. Easy to eat
- 3. Not much expensive

2.6 Sour Yoghurt manufacturing process

Sour Yoghurt:

Milk-vita produce sour yoghurt. It is popular for using it in cooking specially in roast-making.

Ingredients/Recipe:

- 1. Whole milk
- 2. Skim milk
- 3. Culture

Procedure:

- 1. 1st whole milk are taken in a cleaned vessels
- 2. Then add skim milk into it
- 3. Then boil them at boiling temperature
- 4. Then cool as soon as possible to 40 to 45° C
- 5. Add starter culture in it
- 6. Then wait for 4 hours to coagulate the mixer
- 7. Then packaged in plastic box
- 8. Then they kept them in the refrigeration
- 9. Then they are marketing for selling

2.7 Rash-malai manufacturing process

Rash-malai:

It is one of the sweet dairy products made by milk-vita. It is also a popular sweet desserts in South-Asian country.

Ingredients/Recipe:

- 1. Curd
- 2. Flour
- 3. Baking powder
- 4. Green Cardamom
- 5. Syrup

Procedure:

- 1. 1st some baking powder and curd without water are mixed together to make dough
- 2. Some flour are used in the dough to make easier handle and make good shapes of sweet.
- 3. Then small sweet balls are kept in the syrup for few hours
- 4. Then then syrup are separated from sweet balls
- 5. In then mean time milk are heated until they become half by volume
- 6. Then hot milk are added into the sweet balls
- 7. Some green cardamom are used for flavor.
- 8. Then they kept for being cool
- 9. Then cool rash-malai are packed in 1kg box container
- 10. After packaging they kept in the storage room
- 11. Then they distribute to the seller

2.8 Ice-Manufacturing Process cream

Ingredients/Recipe: (For 100kg)

- 1. Sugar-16%
- 2. Butter-8%
- 3. Stabilizer-0.5%
- 4. FCMP- 13.5%
- 5. Flavor- 0.21%
- 6. SMP- 1.1%
- 7. Water- All the rest

Procedure:

- 1. At first some hot water (approximately 60°C) is added into the blending vat. Then full cream milk powder (FCMP), skim milk powder,(SMP), sugar, stabilizer and finally remaining water are added. The mixing operation is blended at 80°C in the mixing vat so that the warm mix which dissolve them.
- 2. Then the mixture is pasteurized by a continuous heating process. The liquid mixture is heated in a vat to at 81°C for 15 seconds and subsequently cooled by the chilled water which helps to destroy pathogenic bacteria present in the mixture.
- 3. Homogenization helps largely to the smoothness of Ice-Cream which gives fine dispersion of butterfat globules in the mixture. The function of homogenizer is to break downs the fat globules
- 4. After the homogenization the mix is cooled down to 4° C. This is known as aging. The mix held in vat from 3 to 24 hours at a temperature of 5° C.
- 5. Then fill them in the ice-cream container
- 6. Then freezing them in at freezing temperature
- 7. Then ice-cream are kept at hardening room for 1 hour at -20^oC where semi-solid become solid ice-cream.

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3.1 Microbiological test of milk Microbiological

Bacteriological test:

Bacteriological test is important to know the bacterial count in milk and milk products. Because bacteria such as E. coli can cause contamination in milk. And E. coli can cause many problems in consumers if there number is high in the milk. Normally total count of bacteria range is 30 to 35 thousand. E. coli cause dysentery. More than this is not acceptable. Also Coliform bacteria are concern to count. If found more coliform then have to do C.I.P again in production channels.

Characteristic of Coliform:

- 1. Gram negative bacteria
- 2. Group of bacteria
- 3. Rod Shape
- 4. Gas producer (CO₂)
- 5. Their production mainly occurs in soil
- 6. 10/ml

Apparatus:

- 1. Bunsen burner
- 2. Pipettes
- 3. Dilution tubes
- 4. Petri dishes
- 5. Incubator
- 6. Autoclave
- 7. Refrigerator
- 8. Spirit lamp

Procedure:

- 1. 1st make a ringer solution by water and salt (Such as sodium chloride, potassium chloride, calcium chloride etc.)
- 2. Then pour them in the dilution tube
- 3. Then heat them until boil and remove from heat & let them cool
- 4. Spirit lamp is used to sterilize the pipette every-time before when use taken sample into the petridish.
- 5. For coliform take 0.5ml and for total count take 1ml milk into the ringer solution and shake it to dilution the solution
- 6. Then take 1ml from the dilution solution into another ringer solution and dilute them
- 7. Then take 1ml from it and transfer it into petri dish.
- 8. Then transfer red agar into the sample containing petri dish for coliform but transfer white agar into the sample containing petri dish for total count
- 9. Adding red agar 2 times is good for growth of bacteria
- 10. Then keep them in the incubator at 40 to 42° C for 18 hours.
- 11. After 18 hours count the bacteria by open eyes.
- 12. For total count calculate the bacteria by divided the petri dish into 4 parts and count
- 1 parts bacteria and multiply with 4 and multiply the digit by 100.
- 13. But for coliform count the colony and write them in the note.
- 14. If any unexpected result found then warn the operators to make sure proper C.I.P next time.

Purpose of Microbiological test:

- 1. To ensure proper C.I.P
- 2. To ensure there is no contamination
- 3. To ensure safety of consumers health

3.2 Milk composition & Receive

Composition of milk:

- 1. Water-87.3%
- 2. Total solid- 12.7% ----
 - a. Fat- 3.7%
- b. SNF- 9%-----

-Lactose
$$-4.5\%$$

-Albumin & Gluten- 0.5%

Procedure of Raw Milk Receive & Pasteurized milk:

- 1. Raw milk are collects from farm and from co-operative union office
- 2. Then they passing through chilling and transfer into tanker to supply in different plant
- 3. Then when tanker are reached in the dairy plant first sample taken from tanker for platform test to ensure quality of milk
- 4. If milk passed platform test then they are transfer for chilling
- 5. Then chilled milk are stored in storage vat
- 6. Storage milk are recombined with skim milk for maintaining fat percentage
- 7. Then these recombined milk are pasteurized at 80 to 83⁰C for 6seconds
- 8. Then cooling them at 4° C
- 9. Then they stored in storage vat (4 vat)
- 10. Then they takes place in the packaging machine
- 11. In the packaging they packaged in different amount such as 250ml, 500ml, 1kg etc.
- 12. If found any fault in pasteurized packaged milk then they are taken always and follow the procedure again

13. Well packaged pasteurized milk are stored in the freezing room at 0 to 4° C

C.I.P:

Full meaning of C.I.P is Cleaning-in-Place. C.I.P is use to ensure safety and to avoid contamination. Use caustic soda as a chemical for ensure C.I.P

Procedure:

- 1. 1st cold water is used to wash the pipe/vat/tanker
- 2. Then use hot water to wash the pipe/vat/tanker
- 3. Then use sodium Hydroxide (caustic soda) 0.5 to 2% / Volume of water to wash again
- 4. Then use hot water to clean the sodium hydroxide
- 5. Finally takes last water as a sample to ensure C.I.P
- 6. Use Phenolphthalein indicator with the water if no color change found that means C.I.P has been done perfectly.
- 7. But if water turns into pink color with Phenolphthalein indicator that means C.I.P has not been done perfectly
- 8. Then again have to follow the C.I.P procedure

Purpose of C.I.P:

- 1. To ensure safety
- 2. To avoid contamination
- 3. To maintain the reputation

Use:

- 1. Use for transport tanker
- 2. Use for storage vat & pipes
- 3. Use for transport tanker.

4.0 Conclusions

In case of my study production and Quality Control of MILK VITA Food Products Ltd. was selected and permitted by my honorable supervisor, **Professor Dr. Md. Bellal Hossain**, Head Department of Nutrition and Food Engineering, Daffodil International University.

This report has been prepared through extensive discussion with internal processing, quality assurance of final product. The main intention of this study is the Production and Quality Control of Custard Cake under Hygienic Condition, compositional standard and quality processing of Custard Cakes. The report covers details about the Production and Quality Control of Custard Cakes under Hygienic Condition. However the study is related to the hygienic production area and quality control department (Laboratory& Production area) and this section I got an opportunity to only work in this area.