



Daffodil *International* **University**

An internship Report On

Studies of production and quality control Dhaka Dairy product (Milk Vita)

Submitted To:

Sheikh Mahatabuddin, Ph. D.

Associate professor and Head

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Submitted By:

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Date Of Submission :- 8th August ,2021

LETTER OF TRANSMITTAL

Date: 8th August, 2021

To

Sheikh Mahatabuddin, Ph. D.

Associate professor and Head

Department of Nutrition and Food Engineering

Faculty of Allied Health sciences

Daffodil International University

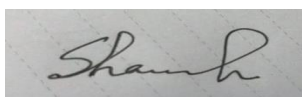
Subject : Submission of internship report

Dear Sir,

I am submitting my internship report that is a part of the Nutrition and Food Engineering program . I am very glad to achievement the work which is under your active supervision. The report that I made on “Quality Control and Production of Raw and Processed Milk Products” at Dhaka Dairy Plant. I had work on this field for sixty days, under the supervision of Dr. Khondokar Aminul Islam, Addition General Manager of Dhaka Dairy Plant. This project gave me knowledge about both side like academic and practical purposes. First of all, I learned organizational culture of Raw and pasteurized milk producing the milk product. Secondly of all, I learned the delivery process which is a opportunity to develop a strong network with the corporate environment .

I therefore, request you if you kind enough to receive my report and provide me your valuable advice that will encourage me to better performance.

Sincerely Yours,



Shahporan Hossain

Department of Nutrition and Food Engineering

Daffodil International University

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LETTER OF AUTHORIZATION

Date: 8th August, 2021

To

Sheikh Mahatabuddin, Ph. D.

Associate professor and Head

Department of Nutrition and Food Engineering

Faculty of Allied Health Science

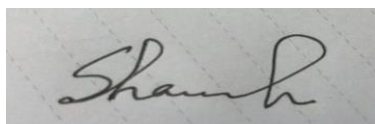
Daffodil International University

Subject: Declaration regarding the validity of the internship report.

Dear sir,

This internship report entitled Knowledge and extent the practice of Studies on Production and Quality Control of Dhaka dairy product of milk vita. was submitted to the Department of Nutrition and Food Engineering, Faculty of Allied Health Science, Daffodil International University, Dhaka, Bangladesh. This study was fully concerned with the department and faculty members.

Sincerely yours,



Shahporan Hossain

ID: 171-34-628

Department of Nutrition and Food Engineering

Faculty of Allied Health Science

Daffodil International University

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Letter of Recommendation

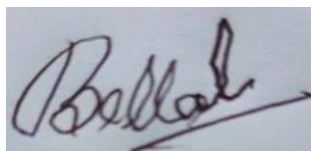
This certified the internship report “**Training quality control and production at Dhaka dairy plant (Milk Vita)**” at sector 7 Mirpur. Which is submission for assessment of Examination committee by **Shahporan Hossain** being my id **171-34-628**, Department of nutrition and food engineering (NFE) Faculty of allied health science Daffodil International University.

I am pleased to declare that this report is entirely written by the author and all the works have been conducted by Intern under my supervision and observation. This is a piece of original work and not has been submitted or published anywhere for any other purpose.

I strongly recommended the approval of the report by the authority and also pursue a positive and fair evaluation of work.

I wish him all the success in life.

Sincerely yours



Prof. Dr. Md. Bellal Hossain

Associate Dean

Faculty of Allied health sciences

Daffodil International University

CERTIFICATION APPROVAL

I am very pleased to certify that the internship report on “**Quality Control and Production of Raw and Processed milk products**” done by **Shahporan Hossain** Bearing respectively **ID No: 171-34-628** of the department of Nutrition and Food Engineering has been approved for presentation and defense under my supervision.

We are glad to certify that the data and Information for internship report are good as well and Authentic done by Shahporan Hossain. We are recommending the report which is done by shahporan hossain for her academic recommendations and defense/viva-board. It has a great pleasure to working with her. We wish her good luck for her future success.


22/07/2021

Sheikh Mahatabuddin, Ph. D.

Associate professor and Head

Department of Nutrition and Food Engineering

Faculty of Allied Health Sciences

Daffodil International University

Memo No:DD/Admin-01/2021/

Date :27/1/2021

Certificate of Internship

This is to certify that **Shahporan Hossain, ID No: 171-34-628**, a student of Bachelor of science (Nutrition And Food Engineering) at Daffodil International University ,Dhaka ,Bangladesh ,has successfully completed 2 months Internship program on Food processing and Quality Control at Dhaka Dairy Plant (Milk Vita,BMPUL),Mirpur ,Section 7,Dhaka 1216.During this period of Internship program with us he was **found Punctual, Hardworking and inquisitive.**

We wish his every success in life

For, Bangladesh Milk Producer Co-Operative Union Ltd.

(Dr. Khandaker Md. Aminul Islam)

(Addl. General Manager-Additional charge)

(Technical & Production) DDP

Phone: 9013917, E-mail: ddpinfo1973@gmail.com

ACKNOWLEDGEMENTS

I'd like to thank a number of people for their support and assistance in the preparation of this study. First and foremost, I'd like to thank Almighty Allah for providing me with the strength and opportunity to successfully complete the report within the allotted timeframe. I'd like to take this opportunity to express my gratitude to everyone who has been a part of my life at some point. I owe my life to my parents, without whom I would not be alive. I would not be able to accomplish my ambitions and aspirations without the support of my parents. My Deep gratitude and sincere thanks to the honorable Head, **Nutrition and Food Engineering department, Sheikh Mahatabuddin, Ph. D.** 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 am deeply indebted to my Supervisor **Professor Dr. Md. Bellal Hossain, Associate Dean,** Faculty of Allied Health Sciences, and Daffodil International University for his wholehearted supervision during my organizational attachment period. I am very grateful to Addl.GM (technical& production) **Dr. Khandaker Md. Aminul Islam,** Dhaka Dairy plant. For giving us permission to carry out this internship in his organization. I am also grateful to **Mr. Md Mukbol Hossain.**(production manager).

Production manager as my organizational supervisor to conduct. It would have been very difficult to prepare this report up to this mark without their guidance.

I would like to express my warmest thanks to **Nutrition and Food Engineering Faculty members and all the stuff of NFE office** for their countless inspiration and encouragement during the student life.

Finally I wish to express immense gratitude & humbly convey my heart- felt respect to Addl.GM (technical& production) **Dr. Khandaker Md. Aminul Islam.**

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INTRODUCTION

Milk is popular food in our country, Adult child everyone most favorite food in milk , Milk is mainly come mammary glands of mammals. Basically raw milk collect Cow, Goat, Buffalo etc, animals . some people farm cows, goat, buffaloes and he collect the ray milk and sell from local market, we buy the milk in local market . some years ago some of company now bring packaged milk are basically found of grocery shop. Day by day many food company now bring packaged milk in market . Bangladesh milk producer co-operative union limited (BMPCUL) milk vita one of them. This companies are main target they provide best quality of packaged milk. 1stly this company collect the raw milk in her won farm , some time this company collect the milk village market by co-operative union. Then this company cheek the raw milk her quality control manager. Then collect the milk reserve tank, milk vita focus for customer satisfaction. they don't want to make as much profit as other company.

1.1 Definition of Milk

Nutrient-rich liquid food procedure of milk the mammary glands of mammals. Milk have many others nutrients they have lactose , protein and so many nutrient. Use of interspace milk is not uncommon ,especially in humans many of whom receive milk from other mammals.

1.2 Origin of the report

This is a internship report, I am student of nutrition and food engineering at daffodil international university . I am final year student and I am complete my 11nt semester this is our last semester this semester our internship semester, our department provide internship opportunity some food company. I am internship at Dhaka Dairy Product at milk vita

1.3 The internship program have following purpose:

- Learn about practical site
- To help student professionalism
- To know different type of dairy product
- To fulfil actual requirement of NFE department
- Feet their job environment
- Learn about quality control and production

1.4 scope of the study:

Main focus of the study of her processed milk production and their quality control this report are mainly coverage how to prepared processed milk pasteurization milk prepared and packaging milk vita company . and we great opportunity to build up a job of this Milk vita organization

1.5 limitation of the report :

- ✚ Some information I can't collect because their company restricted their quality control department . they have limited information their QC department.
- ✚ They are no answer their quality control related question

CHAPTER 02

OVERVIEW OF ORGANIZATION

2.1 History of the company :-

At first 1946 (late) M. Mukhlesur Rahman pioneer established dairy plant in Lahirimohanpur Bangladesh ,at first the plant have 2,000 litter milk production per day established . this time the organization name Eastern milk production limited , 1952 a private company purchased this organization for the original owner. In 1977 keeping the change brand name Eastern milk production limited to “MILK VITA”.

Bangladesh milk producers co-operative union limited are brand name milk vita in 1973 are the Bangladesh Government established this organization. Then 1977 milk vita are established in Sirajgong. And cow plan , milk vita raw milk collection for her won cow plant.

2.2 Background of this company :

Milk vita are one of the mostly well know company around the country . Bangladesh milk producer co-operative union limited is the owner of this company. (late) M Mukhlesur Rahman pioneer established the company in 1946 at Lahirmohanpur (Siraigong). It had 2000 liters capacity per day. Then 1952 a private company purchased it from the owner in 1973 Bangladesh government taken this company under there supervision in 1977they changed the named of the company as Milk-vita before that is was know as eastern milk company. After that they had established different plant in different area or sector. Their head quarter are situated in Dhaka at Mirpur sector 07 . milk vita has 70% market share of liquid milk in Bangladesh. In 2016 a government report found private milk producer in Bangladesh where imitating the packaging milk vita .

2.3 Objective of the company :

- ✚ There main aim is to supply there product among rural people or make their product available to the rural people
- ✚ Development of the nutrition quality
- ✚ Development of the packaging quality
- ✚ Development of the over all quality of their product
- ✚ To get the consumer satisfaction
- ✚ To removed the unemployment problem
- ✚ Try to maintain the morality of the business
- ✚ To dominate the adulteration

CHAPTER 03

DESING OF STUDFY

3.1 STUDY AREA:-

- The study area are divided into tow sector they are ,
 1. Production area
 2. And laboratory area

3.2 Production Area:-

- Production area are raw ingredients are processed for final products . they mean train be grain in this area are fully of various type od machine this area are also divided into different sector they are blew:-
 - I. Storage area:- This are basically use for product storage , making the product and storage the room.
 - II. Mixing area :- This area basically used for product mixing , as like LABANG MATHA etc. mixing the mixing room.
 - III. Processing area:- This are basically use for product processing time as like pasteurization milk processing.
 - IV. Freezing area :- All kind of product are storage the freezing room.

3.3 laboratory area:-

- Laboratory is a place where finally various types of tests are done, they are divided into two types: test of product 1st test are raw product tests such as raw product fat test, CLR test, SNF test, platform test, and 2nd test are when the product is ready for production the 2nd time are fat test, CLR test, platform test, are BSTI standard.
- The tests are applicable for both ingredients and final products, they have a very well finished laboratory with full of equipment when various types of tests are done with the product to check the quality and ensure the safety for the consumer that they can take the product without any harm their laboratory are also used for the development of the products some examples of the laboratory tests which are done by their given below :-
 - i. Organoleptic test
 - ii. Alcohol test
 - iii. Fat test
 - iv. CLR test
 - v. SNF test
 - vi. Platform test / Alcohol test

CHAPTER 04

PROCESSING SECTOR

4.1 Pasteurization Milk :-

Pasteurization milk :- pasteurization is a one kind of heating process that kill pathogenic micro-organism are injurious for health.

Pasteurization Milk Processing step :-

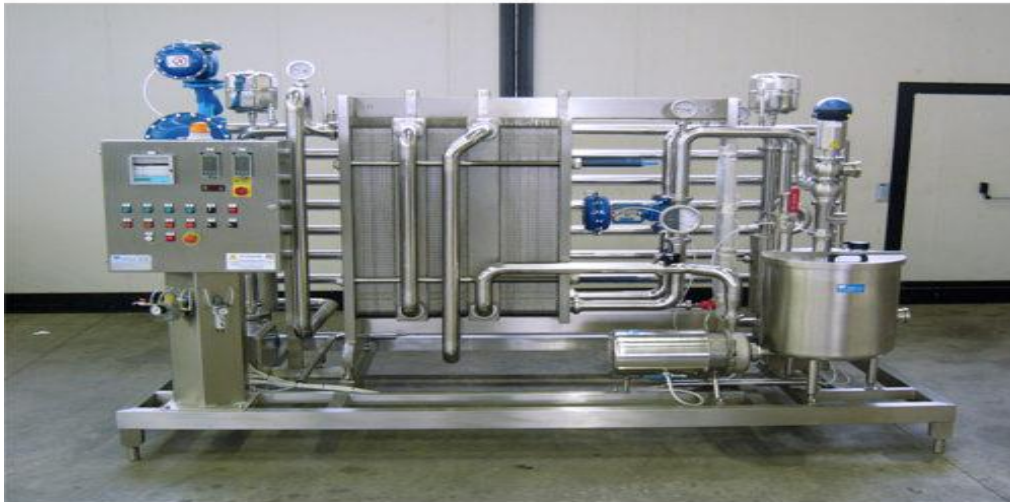
- ✚ All the beginning of the process first raw milk are collected .
- ✚ After the collection of raw milk are reserve tank , then sample are deliver to the laboratory for the platform test , fat test, alcohol test ,homogenization test and other test .
- ✚ Then all test are ok then milk are transfer to the chilled are for storage (40°C)
- ✚ Then the milk are recombined to maintaining the fat (at least 3.5%) according to the BSTI.
- ✚ Sometime raw milk have over fat according to the BSTI , then standard rate of fat % 3.5% then added water ,added water then fall the fat percentage .
- ✚ After the recombination the milk are pasteurized (80-850°C at 15 second)
- ✚ If the collected raw milk contain lower protein of fat then they added milk or the raw milk contain lower protein of fat then added full cream milk to maintain the balance.



Picture4.1 Reserve tank

Milk Homogenization:

- ✚ After the pasteurization , pasteurize milk are homogenized due through homogenizer .
- ✚ The milk are cooled at 40°C .
- ✚ After being cooled the milk are kept for the storage .
- ✚ Homogenization are simply the process backing dose fat molecules , milk are smooth and even consistency.
- ✚ Homogenization doesn't involved additives or chemical and doesn't alter the nutritional of milk .
- ✚ Then milk are send for the packaging machine from storage vat.



Picture4.1: Milk homogenization processing machines

Milk Packaging :-

- ✚ After being pasteurized homogenized are send to the packaging sector for the packaging.
- ✚ Different quantity of milk are packaged, in the sector through milk packaging machine.
- ✚ If there is found anything wrong then the milk are take away from the packaging sector.
- ✚ After being the selected milk, I mean good quality full are storage.
- ✚ Then after packaging the milk are delivered storage room , the room temperature(0-4°C).



Picture:- Milk packaging machine



picture :- Milk storage room

4.2 Ingredients of chocolate milk

- ✚ Water
- ✚ Sugar
- ✚ Chocolate flavor
- ✚ Food color
- ✚ Cocoa powder
- ✚ Stabilizer
- ✚ SMP
- ✚ FCMP



Picture 4.2 chocolate milk








processing step of chocolate milk:-

- ✚ At first blending vat are filled with hot water (Approximately at 600 °c)
- ✚ Then added sugar ,FCMP, SMP, food color, chocolate flavor, cocoa powder, stabilizer , water and blend them , continuous heating process are applied during pasteurization.
- ✚ After pasteurization mixture in chilled with water the destruction of the pathogenic bacteria .
- ✚ And them homogenized through homogenized.
- ✚ After that the mixture are send to the packaging and there storage at(0- 4 °c)

4.3 Ice-cream



Ingredients of ice-cream:-

-  Sugar
-  Butter
-  Flavor
-  SMP
-  FCMP
-  Stabile
-  water



Processing step of ice-cream :-

- ✚ At first blending vat are filled with hot water (Approximately 600 °C)
- ✚ Then added FCMP, SMP, sugar, food color, cocoa powder, chocolate flavor, stabilizer, water, and then mixed them properly and the pasteurizer it at 81 °C for time is 15 second.
- ✚ After the pasteurization of the mixture are chilled with hot water for the destruction of the better and them homogenized it by using a homogenized machine.
- ✚ Then cooled the mixture at 4 °C (aging process) , this process are mainly done at 5 °C for 3 to 40 hours , over running of the process is called ice-cream.
- ✚ After that fill up the ice-cream container and then freez it at -50 °C.
- ✚ Then 1 hours later the temperature are kept at -20 °C here the mixture become at hardening room.
- ✚ After that the sold mixture or ice-cream are kept the storage room ta -4 °C to -20 °C.

4.4 Sweet yoghurt :-

Ingredients of sweet yoghurt:-

- ✚ Milk
- ✚ Sugar
- ✚ Culture



Fig:- sweet yoghurt

Processing step for sweet yoghurt :-

- ✦ At first milk is take for prepare sweet yoghurt in a clean vessels.
- ✦ Then milk is boiled, at boiling temperature until the reducing weight the 40%.
- ✦ then the boiling milk added in 15% of sugar.
- ✦ Then properly mixed the milk and when mixing this time temperature 80°C.
- ✦ Then cooled the milk. And fall the temperature at 40°C .
- ✦ Then temperature is 40°C then added culture in it.
- ✦ Then the mixture are kept for 8 hours to from liquid milk to curd.
- ✦ When the liquid are curd then the curd are storage , and the storage temperature is 4°C.
- ✦ And the curd are kept into the plastic jar. Then the curd are storage the storage room.



Fig:- YOGHURT storage room temperature 4°C

4.5 Sour Yoghurt :-

Ingredients of sour yoghurt:-

- ✚ Milk
- ✚ Sugar
- ✚ Culture



Fig :- Sour yoghurt

Processing Step Sour yoghurt :-

- ✚ At first clean vessels are filled with sour yoghurt ,and then milk added skim milk into it.
- ✚ Then mixed them all together at filling temperature.
- ✚ After then cool it, to 40°C to 45°C for few minutes.
- ✚ And after being cool the mixture added starter culture take it for 4 hours due to coagulation .
- ✚ Before getting 4 hours before coagulation the mixture should be poured into plastic container.
- ✚ After coagulation the yoghurt are kept into the refrigerator sot the storage.



Fig:- Sour Yoghurt fill in the plastic container

4.6 LABANG:-

Ingredients of 150 liters labang:-

- ✚ Sour curd -- 70%
- ✚ Salt – 7%
- ✚ Sugar – 10%
- ✚ Treated water – 17%
- ✚ Propagated culture – 2%
- ✚ Xanthan gum – 0.03%

Procedure step for labang:-

- ✚ Making for labang , firstly the sour yoghurt / curd into the mixture machine.
- ✚ Then added the sugar and salt.
- ✚ Then start the mixture, mixture and added stabilized.
- ✚ Then added the stabilized properly mixing the curd , mixing 1 hours in the heart.
- ✚ The curd is well mixed then prepare the labang.
- ✚ The labang into the jar, then labang are storage the freezing room for 24h.



Fig:- filling LABANG with jar

4.7 MATHA:-

Ingredient for 38 liter of MATHA :-

- ✚ Sour curd – 30 kg
- ✚ Water – 25%
- ✚ Sugar – 7%
- ✚ Salt – 0.6%
- ✚ Bit salt – 0.075%
- ✚ Propagated culture – 2%
- ✚ Xanthan gum – 0.03%

Processing step for MATHA :-

- ✚ At first sour curd into the mixture machine.
- ✚ Then added sugar and salt and added xyanthen gum then mixture the curd properly an 1 hours .
- ✚ Then added the bit salt and mixed properly , then added the propagated culture and water and mixed them properly an 1 hours.
- ✚ Then MATHA are storage freezing room for 24 hours
- ✚ Then ready the MATHA and filling the bottle , then storage the bottle



Fig:- fill the MATHA with bottle

4.8 ROSH GOLLA:-

Ingredient for ROSH GOLLA:-

- ✚ Curd / yoghurt
- ✚ Water
- ✚ Sugar
- ✚ Green cardamom

Processing step for ROSH GOLLA:-

- ✚ At first take a clean vessels, and take fill in with curd.
- ✚ After being fill in the vessels mold it's carefully.
- ✚ Then make a soft dough flour and give then into small ball shape.
- ✚ And for making a sugar syrup, take water into a cooker into then added sugar, and added green cardamom cook them until being proper sugar syrup. The consistency of this syrup should be thick.
- ✚ Then put the ball b one in the syrup and keep them for few hours.
- ✚ After that cool the ball .
- ✚ Then prepare the rosh golla and then packaged them and storage the freezing roomfor the rosh golla.



Fig:- packaged the ROSG GOLLA

CHAPTER 05

(PHYSICAL & CHEMICAL TEST)

MILK VITA

5.1 Alcohol test / Platform test:-

Apparatus:-

- i. Pipette
- ii. Test tube

Reagent:-

- Ethanol

Sample:-

- Milk.

Procedure fir milk platform test:-

- ✚ At first 2ml of ethanol , 68% consentience the ethanol. Take into the test tube at 5 ml pipette.
- ✚ Then added 1ml milk in the test tube .
- ✚ And then shake the test tube for few second.
- ✚ And see for coagulation.
- ✚ Coagulation of milk and stability of milk with the test tube body it's alcohol positive .
- ✚ And no coagulation see the test tube body, that's mean alcohol is negative.



Fig:- Platform test in milk

5.2 fat test :-

Apparatus:-

- i. Butyrometer
- ii. Pin
- iii. Knock stop
- iv. Centrifuge machine
- v. Pipette



fig:- Butyrometer

Reagent:-

- i. Amyl Alcohol
- ii. Sulfuric acid

Sample :-

- i. Milk

Procedure for fat test :-

1. At first take butyrometer , and take 10ml of sulfuric acid , the sulfuric acid are put into the butyrometer.
2. Then need the sample. 10.75 ml of milk sample are added into the butyrometer.
3. Then added 1 ml amyl – alcohol added the mixture , and start the mixing
4. Some amount of water added the mixture
5. Stop the knock, and use to pin lock the butyrometer .
6. Then the mixture is hand shake for a few second.
7. Shake the mixture, then put the butyrometer in centrifuge machine 60 °C with 1200 RPM FOR 5 minute.



Fig:- Centrifuge machine

8. After the 5 minute , open the butyrometer in centrifuge machine and see the butyrometer meter scale and reading the amount.
9. At stranded rate of fat % 3.5 but we see the butyrometer scale reading 3.2 to 4.2 % of fat.

5.3 CLR Test /Density Measurement

Apparatus :-

- I. Lactometer jar
- II. Lactometer with thermometer

Procedure of CLR test:-

- ✚ At first take a lactometer jar, and clean it .
- ✚ Then the lactometer put into the jar.
- ✚ Then fill in the water is poured on the jar and adjust for the temperature .
- ✚ Then wait for few minute, then see the lactometer and reading temperature are for calculation.
- ✚ Then calculate the CLR.



Fig :- CLR/ DENSITY MEASUREMENT TEST

CALCULATED THE CLR:-

Here,

Temperature = 18

LR = 29

CIP = ?

Now,

$CLR = LR \pm 0.2$

=29-0.4

=26.6

Speciation gravity,

$1 + CLR/1000$

=1 + 26.6/1000

= 1.0286

5.4 Clot on boiling test :-

Apparatus:-

- Water bath / Bunsen burner
- Test tube

Procedure of clot on boiling test :-

- ✚ At first need a test tube, then clean it. Then 2 ml of milk sample take in the test tube.
- ✚ Then need a Bunsen burner , then put in the test tube into the Bunsen burner / water bath.
- ✚ Then test tube are 4-5 minute into the Bunsen burner.
- ✚ After 4-5 minute latter test tube removed the Bunsen burner.
- ✚ And see the test tube and rotated the test tube and look the precipitation.

5.5 CIP Test:- Clean in place .

Procedure of clean in place :-

- ✚ At fist normal water used to clean the whole production area , as like Vat, Tanker, Pipe in 10-15 minute.
- ✚ Then need hot water, hot water to clean the whole production area, as like vat, tanker, pipe in again 10-15 minute.
- ✚ Then caustic soda mixed the hot water then clean the whole area and pipe , vat, tanker and again 15 minute.
- ✚ Then hot water used the clean sodium hydroxide (costic soda) in production area and pipe, vat, tanker.
- ✚ Then finally water collect for sample in tanker to test for CIP.
- ✚ In water test for used phenolphthalein indicator .
- ✚ To seen the pink color in the water that's mean CIP is positive
- ✚ And seen the no color that's mean CIP negative.

CHAPTER 06

RESULT AND DISCUSSION

6.1 Platform test / Alcohol test of milk :-

- ✚ when we see the coagulation on milk that's mean alcohol is positive , and no coagulation on milk that's mean alcohol is negative.

Alcohol positive (+) = Coagulation on milk

Alcohol negative (--) = No coagulation on milk

- ✓ At milk vitta are alcohol is always negative, because milk vitta when take the raw milk in her farm when milk vitta check the alcohol test the milk. Then collect the milk, that's why always are alcohol test is negative.

6.2 fat test of milk :-

- ✓ We test the fat test in milk vitta quality control room on sample of milk.
- ✓ We see the butyrometer scale reading percentage of fat at 3.4 %
- ✓ We know BSTI standard percentage of fat 3.5 %
- ✓ But some animal found fat percentage 3.2 to 4.2 %, but less than 2% of fat percentage are must be rejected the milk.

6.3 Clot on boiling test of milk :-

- ✓ Clot on boiling test result 0.22% of lactic acid present in milk that's mean test is positive.
- ✓ The result under down 0.22 % the milk are used to proceed milk. And the result less then 0.22 % the milk is not used the processing milk , the milk are rejected the milk vita.

6.4 CIP (Clean in place) :-

- ✓ When after the test we see the water color is pink, that's mean test is positive.
- ✓ When after the test we see the water color no change that's mean test is negative.

C. I. P Positive (+) = Pink color in water

C.I.P Negative (--) = No color in water

- ✓ The milk vita every time CIP is negative we see, because her employee are very carefully to clean the apparatus.

CHAPTER 07

STANDARIZATION

7.1 Standardization of liquid milk :-

- Convert liter to kg:-

5750 liter liquid milk standardization .

So,

$$5750 \times 1.02860$$

$$= 5914 \text{ kg}$$

Here, We know,

$$1.0 \text{ CLR}$$

$$= 1.02860$$

- Convert fat percentage into kg :-

Getting kg will multiply b fat percentage ,

$$5914 \times 3.6 \%$$

[fat = 3.5 %]

$$= 213 \text{ kg}$$

- Convert SNF percent into Kg :-

$$5914 \times 8.01 \%$$

We know,

$$\text{SNF percentage} = 8.1 \%$$

$$= 474 \text{ kg}$$

BSTI STANDARED PARCENTAGR :-

✚ SNF = 8.0 %

✚ FAT = 3.5 %

✚ CLR = 28.64 %

✚ MOIOSTURE = 3.0 %

7.2 BSTI STANDRED OF MARKETING LIQUID:-

Require (SMP) for standardization-

$$=213/3.5 = 487 - 474/96.5 \%$$

$$= 13.47 \text{ kg}$$

$$= 13\text{kg}$$

Fat:-

Fat percentage of SMP =0.05 %

SO,

$$13 \times 0.05$$

$$=0.07$$

$$\text{Total fat} = 213 + 0.07$$

$$=213.07$$

Total liquid in kg :-

Total fat / fat percentage

$$= 213.07 / 3.5\%$$

$$= 6088 \text{ kg}$$

CONCLUSION

This internship program is a great opportunity for me . through this program had learn a lot of things. I had also experienced a various thing about dairy product. As I got the opportunity to work in their production and quality control sector. Here I had lead pros and cons about production and quality control.

Here I had learn about adulteration test of dairy products , processing of pasteurized milk, ice-cream , labang, matha, yoghurt, etc. this program will be beneficial for me. Through this internship program , I had also experienced a lots of field work or practical work. The experienced which I gathered through this program will be helpful or beneficial for my future life or my career.

THE END