

A Comparative Study on the Quality of Available Brand Fluid Milk in Chattogram City of Bangladesh



By:

Md. Emon Hossain

Roll No: 17/30; Reg No: 01857

Intern ID: 23

Session: 2016-2017

A production report submitted in partial satisfaction of the requirements for the Degree of Doctor of Veterinary Medicine (DVM)

Faculty of Veterinary Medicine

Chattogram Veterinary and Animal Sciences University

Khulshi, Chattogram-4225, Bangladesh

August, 2022

A Comparative Study on the Quality of Available Brand Fluid Milk in Chattogram City of Bangladesh



Approved By:

Dr. A.K.M Humayun Kober, PhD

Professor

Department of Dairy and Poultry Science

Faculty of Veterinary Medicine

Chattogram Veterinary and Animal Sciences University

Khulshi, Chattogram-4225, Bangladesh

August, 2022

Table of CONTENTS

| Chapter | Contents | Page No |
|------------------|--|----------------|
| | Acknowledgement..... | iv |
| | Abstract..... | v |
| Chapter 1 | Introduction..... | 01 |
| Chapter 2 | Materials and Method..... | 02 |
| | Place of Study and Collection of samples..... | 02 |
| | Selected Brands..... | 03 |
| Chapter 3 | Results and Discussion..... | 04-07 |
| | Specific gravity | 04 |
| | Fat % | 05 |
| | SNF % | 05 |
| | Total solid (TS) % | 06 |
| | Pictorial Comparison of nutrient content..... | 07 |
| Chapter 4 | Conclusion..... | 08 |
| | Limitations..... | 08 |
| | Recommendations..... | 08 |
| Chapter 5 | References..... | 09-10 |
| | Biography..... | 11 |

Acknowledgment

All the praises go to the Almighty Allah, the creator and supreme ruler of the universe, who enabled the author to complete the work successfully.

The author expresses his sincere gratitude, humble respect and immense indebtedness to his supervisor Professor Dr. A.K.M Humayun Kober, Department of Dairy and Poultry science, Chattogram Veterinary & Animal Sciences University for her guidance, kind co-operation, sincere help, valuable suggestions, constructive criticism and for her active involvement with this study from its inception. The author also expresses his gratitude and deep sense of respect to all of his friends and well-wishers for their support and inspiration throughout the study period and for preparing this report.

Last but not least, the author extended his appreciation to all of his teachers and his parents for their unforgettable support, suggestion, criticism and cordial help from its inception to the last of his study.

Author

August, 2022

Abstract

The current study was carried out to have a comparative investigation on the quality of available brand fluid milk consumed by the inhabitants of Chattogram city (CC). A total of 25 Samples, with 5 samples from each, five major consumed brand milk was procured and analyzed for different quality tests. Milk samples were collected from city super-shops, departmental stores. Quality analysis was carried out with different standard methods. The study showed a significant ($P < 0.01$) variation in the nutritional parameters of the collected major consumed brand milk. The available consumed milk brands showed irregularity in supplying standard nutrients. Out of 5 Major consumed brands not a single brand milk have average 3.5 % Fat within the standard mark, while two brand are close to the standard mark 3.5%, the other three brands are too far than the standard limit. But, in case of SNF % of the brand milk, most brand were within the standard limit leaving only one brand (PRAN) below the standard 8.5% SNF, The Total solid (TS%) of the brands revealed two brand (Canvas, Nahar) within the standard mark and the other three brand (Pran, Aarong, MilkVita) below the standard 12% TS. So based on the parameters studied, this study concluded that all of the brand milk samples available in the selected areas possessed not satisfactory quality.

Key words: Brand milk, quality analysis, comparative study, Chattogram.