

Analysis of Quality of milk in samples Collected from Different Regions of Dehradun G.Awasthi¹, Anuja¹, Sangeeta¹, Anchal¹ and D.K.Awasthi²

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Abstract

The present study is aimed to analyze the milk quality and microbial infection in milk sold at different regions of Dehradun. Thirty random raw milk samples were collected from dairy owners from 30 different regions of Dehradun. A total number of 30 samples were analyzed for physical appearance, quality and microbial infection. 90% of milk samples were white in appearance and 10% of the samples were yellow in appearance. The pH range varies from 6.7-6.9. Microbial Count was determined by Std.Plate Count (SPC) as per BIS Std and compared with the standard chart of microbiological quality of raw milk .Out of 30 samples 79% of raw milk were found in the Category of Good quality, 11% of milk were of average quality and 10% were of the Poor quality .Microbial Characterization by Gram's staining technique, motility test and biochemical test revealed that all the 30 sample were Containing E.coli, 26 samples were Containing Salmonella Species and Lactobacillus Species respectively, 21 were Containing S.aureus,15 were Containing Salmonella Species and 25 were containing other bacterial strains .The present study concludes that microbial contamination in raw milk is increasing very fast in Dehradun region and it is responsible for poor health of citizens. The measures should be adopted to reduce contamination which will cause positive impact on the health of individuals.

Keywords: Raw milk samples, Milk quality, Microbial contamination.

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