

# **CHANGES OF ACIDITY LEVEL OF RAW CREAM AND THEIR EFFECTS ON FREE FATTY ACID VALUES OF THE BUTTER**

By

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## **ABSTRACT**

Butter is the one of milk food product, which is made exclusively from milk or cream. Butter is a source of vitamin A and certain essential fatty acids. High free fatty acid in butter badly affects to the consumer preference. But free fatty acid can give some good characters also to the butter. Therefore, present study was planned to identify the milk and raw cream quality parameters and evaluate the yield and free fatty acid of butter by using different combinations of milk fat levels and cream acidity level.

In this study, milk samples were collected from milk bowsers which came from different chilling centers and milk fat, acidity, specific gravity and keeping quality of milk were studied. Similarly, raw cream samples were collected with different acidity levels and corresponding free fatty acid values of butter were studied. Further, raw milk samples with different fat levels were also collected and corresponding butter yield was studied.

As a result of this study of milk quality parameter, there was no any milk sample containing the hydrogen peroxide and highest and lowest specific gravity of raw milk was 29.5 and 26.3, respectively. Similarly, highest fat level and lower fat level of raw milk were 4.35% and 3.8%, respectively. During this study almost all the milk samples were recorded as good or excellent quality of milk. The higher acidity level of the raw milk was 0.18% and the lower level was 0.09%.

The fat level of raw milk was positively correlated with butter yield. Free fatty acid level of the butter linearly increased with the acidic level of the raw cream.

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