



## Determination of percentage of protein in the given sample of milk and its common adulterants

**Areaba\*, Ritika\*, R.R. Pandey\*\***

\*B.Sc. (2008-2011), Department of Chemistry, Patna Women's College, Patna University

\*\*Lecturer, Department of Chemistry, Patna Women's College, Patna University

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*Milk is an emulsion or colloid of butterfat globules within a water-based fluid. The largest structures in the fluid portion of the milk are casein protein micelles. The outermost layer consists of strands of one type of protein, kappa-casein, Caseins have an appropriate amino acid composition that is important for growth and development of the nursing young. Caseins are highly digestible in the intestine and are a high quality source of amino acids. Milk is a source of Conjugated linoleic acid. CLA has been shown to kill human skin cancer, colorectal cancer and breast cancer cells in vitro studies and may help to lower cholesterol level and prevent atherosclerosis. Milk consumption reduces the risk of arterial hypertension, coronary heart disease, colorectal cancer and obesity. The common adulterants of the milk are cane sugar, cereal flour and gelatin solution. The experiment was performed for the determination of percentage of protein in different samples of milk by formal titration – Pyne's method (A. K. Gupta and M. L. Varshney, 1997). The experiments were also performed for the determination of cane sugar, cereal flour and gelatin solution in different milk samples. The percentage of protein in different milk samples ranges between 2.21 % to 3.91% Most of the milk samples contain of cane sugar but no milk sample was found to have cereal flours or gelatin solutions.*

**Keywords** :- Milk, Milk Protein, Adulterants, Cane sugar, Cereal flour, Gelatin Solution.

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