



## To Detect Adulterants Present in Different Milk Samples Available in the Market of Patna

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**Abstract :** Milk is a perishable commodity and it gets spoiled soon during summer season. Hence, to keep milk temporarily fresh and to increase its shelf-life it is adulterated with adulterants like water, urea, formalin, added sugar, skimmed milk powder, detergent, etc. Our study was aimed to detect the adulterants present in the locally available milk samples from three different localities of Patna. Total of 8 samples were taken for the study in which 2 were packaged milk and 6 samples were collected from the local vendors. Among those 8 milk samples, 62.5% of the samples were adulterated with water, 25% with formalin, 25% with detergent, 25% with added sugar and 25% with skimmed milk powder. The finding of the study highlighted that majority of the milk samples were adulterated with water which reduces the quality of milk. Hence there is urgent need for

creating awareness among the consumers and the local milk vendors about unethical malpractices in the milk supplying chain which may cause health hazards to consumers.

**Key words :** Milk adulteration, packaged milk, milk from vendors, public health risk.

### Introduction :

Milk in its natural form has high food value. Milk is the cheapest and perfect food which can be easily digested and absorbed (Ghulam et. al., 2014). It provides body building protein, bone forming minerals and health giving vitamins and furnishes energy giving lactose and milk fat and other food item (Neumann et.al., 2012).

As the milk is a perishable commodity and it can easily be spoiled during summer seasons when weather becomes very hot (Tipu et. al., 2007). Adulteration in milk is considered to reduce the quality and to increase the quantity of milk. Adulteration means substitution of cheaper ingredients to impress the buyer to think that the product is more valuable or of better quality (Kandpa et. al., 2012).

Adulterants are mainly added to increase the shelf-life of milk. To meet the demand of milk and to keep temporarily fresh, some unethical activities are usually adopted to prevent the financial losses due to the spoilage of milk during its transportation

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