OBJECTIVE

The principal function of the milk lipids is to serve as source of energy for the infants and young ones. It is also serves as a source of essential fatty acid. Milk and milk products occupy a significant position in the human diet which is primarily attributed to its nutritional properties and also the body, texture and flavour of these foods. The fatty acids composition ofthe lipid plays a significant role in the characteristics of the products. The milk fat is present in milk as oil-in-water emulsion in globular form. The bulk of cow milk lipids are triacylglycerols (TGs)which are 97-98 % of the total lipidsfound in pooled milk. The major components of fats are the acids. In case of milk fat, the fatty acids account for about 85% and the glycerol for approximately 12.5% of the weight. Short chain fatty acids have strong and characteristic flavours which are released by the action of lipase enzyme in milk and milk products. They impart strong flavours which are undesirable in milk and butter while they contribute to the characteristic desirable flavour in cheeses. Certain constants are important in detecting the adulterations and certain properties of the milk.

The objective of presentation of this unit is to understand the milk fat on following aspects;
Composition and structure of Fatty acid profile of milk fat
Fat constants such as Saponification value, Iodine value,
RM value and Polensky value and Significance of peroxide value