Summary

Milk is defined as a complex colloidal dispersion having fat globules, casein and whey proteins in an aqueous suspension consisting of lactose, minerals and vitamins and minerals. Milk is an emulsion or colloid of butterfat globules within a water-based fluid that contains dissolved carbohydrates and protein aggregates with minerals. Because it is produced as a food source for the young, all of its contents provide benefits for the growth. The principal requirements are energy which is obtained from the lipids, lactose and protein present in milk. Biosynthesis of amino acids which is supplied by proteins (essential amino acids and amino groups), essential fatty acids, vitamins and other inorganic elements also supply energy.

The physical and chemical properties of milk depend the intrinsic compositional factors. Also contributing extrinsic factors such as temperature and post-milking treatments. Assessment of some of the physico-chemical properties of milk is used as a parameter to know the quality of milk.

We discussed about the various physical properties such as viscosity, density, surface tension, refractive index etc. Also, we studied the chemical properties such as pH or acid-base equilibria, isoelectric point, titrable acidity etc.

We also understood the definitions, property and applications of the physical and chemical properties of milk