

OBJECTIVE

Milk is a dilute emulsion of milk fat combined with colloidal dispersion of proteins with a continuous phase of solution containing lactose minerals and other water soluble solids. In the milk processing industry, the measurement of the physical properties of the milk and milk products are important for designing of the processing equipments. Certain properties help in determining the chemical quality of the milk while some helps in determining the microbial quality of milk.

The objectives of this presentation are to understand the properties of milk on following aspects:

pH and buffering capacity, Refractive index, Viscosity
Surface tension, Specific heat
Freezing and boiling point
Electrical conductivity
Oxidation-Reduction (Redox) system and
Lactose - its significance in dairy processing