OBJECTIVE

In cow milk fat, the triacylglycerols account for about 98% of the total milk lipids. Thediacylglycerols, monoacylglycerol and free fatty acids (FFA) are mostly products of lipolysis. Chemical changes that takes place in fat content of milk and milk products is of great concern to the dairy industry due to the flavour changes that bring about in the products particularly during storage of fat rich dairy products. There are two changes that the fat undergoes chemical changes. They are hydrolytic rancidity and autoxidation. Hydrolytic rancidity is a result of hydrolytic degradation of milk lipids due to action of lipase enzyme on lipids, whereas, autoxidation is the oxidation of milk lipids.

The main objective of this presentation is to understand the importance of the chemical reactions of milk fat covered under following points:

Hydrolysis of lipids in milk- which includesinduced lipolysis and spontaneous lipolysis and
Autoxidation of lipidsin milk– which includes conditions favoring autoxidation, prevention of autoxidation and measurement of autoxidation