



MAILLARD Reaction

The Maillard reaction results from the interaction between reducing sugars (lactose for milk) and amino acids (arginine, histidine, methionine, tryptophan and especially lysine, an amino acid found in large quantities in milk).

This reaction occurs only under quite particular physical conditions such as heat at high temperature (higher than 100°C) during a prolonged period of time. It is expressed, among other things, by the formation of coloured substances called melanoidins.

This reaction can modify the taste and colour of food, but its major consequence is a reduction in the nutritional value of proteins.

In regards to milk, today's technological control of pasteurization and sterilization avoids the appearance of Maillard compounds and thus protects the nutritional value of proteins.