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Bacillus sporothermodurans em leite UHT
Bacillus sporothermodurans in UHT milk

Ultra-High Temperature (UHT) milk is the milk heat-treated at temperatures between 130 and 150 °C during 2-4 seconds and immediately cooled to 32 °C. The consumption of UHT milk in Brazil has increased significantly and today represents about 86% of the fluid milk consumption, a fact that can be explained due to the ease of storage and its long shelf life. The quality of the final product as well as its stability over the shelf life is mainly dependent on the quality of the raw material and the application of good practices throughout the entire production chain. There are a number of sporulated, heat-resistant microorganisms contaminating foods, among which the *Bacillus* genus stands out. *Bacillus sporothermodurans* is a microorganism that has recently been found in UHT milk. They consist of aerobic mesophiles capable of producing heat-resistant endospores, mostly capable of resisting UHT treatment. It is believed that its presence in UHT milk is associated with the contamination of the raw material, therefore it is evident the importance of the care that must be taken along the production chain in order to obtain a final product of quality. Although it is not considered pathogenic, there are some authors that claim that at high counts, the *B. sporothermodurans* is capable of causing physical-chemical changes in milk, thus decreasing its shelf life. The Brazilian legislation, through the normative instruction of 62, recommends a maximum limit of 100 CFU/mL in UHT milk with the exclusion of *B. sporothermodurans*. However, currently, there has been a mobilization by the UHT milk producers to better understand what the presence of this micro-organism can cause from the point of view of quality of the final product. In this way, there is still much to study in order to enable one rebuild UHT milk legislation.

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