

TAL 797 – Seminário

Data: 26/10/2022

NUTRIENT LOSS DURING THE PROCESSING OF MILK POWDER

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Improving the process conditions of milk and dairy products is a way to boost their quality and merchantability. Among different milk derivatives, powdered milk is considered a foodstuff of social relevance, meeting the demand for the inclusion of vitamins and minerals in special diets to treat micronutrient deficiency or for micronutrient supplementation. Therefore, still pertinent studies for evaluating the behavior of micronutrient losses during milk and dairy processing stages, such as skimming, pasteurization, concentration, and drying. The two latter unit operations, concentration and drying, can promote the reduction of transport and storage costs and increase of shelf life of milk and dairy products, but those operations can also damage thermolabile milk components such as vitamins and enzymes. Hence, adjusting the operational conditions involved in the milk and dairy processing line can reduce the retention of the nutritional constituents of milk and dairy products and minimize the costs of fortification if required in the final product. In fact, studies are still needed on the effect of operational conditions of concentration and drying stages of powder milk on its micronutrient composition. The results of such studies can contribute to using new technologies and concentration/drying processes of milk and dairy products, providing a specific approach to the micronutrient losses in processing lines.

References

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Orientadora

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