



TAL 797 – Seminário

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## **HEALTH BENEFITS OF MAGNESIUM AND ITS APPLICATION IN THE DAIRY INDUSTRY**

**Pós-graduando:** Raiane Rodrigues da Silva

**Orientador:** Antônio Fernandes de Carvalho (Departamento de Tecnologia de Alimentos).

Health concerns have become increasingly frequent, and because of this, people are more interested and search for food with high quality that brings benefits to the body. Thus, food fortification is now a common process normally used in the food industry for being able to add compounds that will provide benefits to the consumer. An important nutrient that needs to be consumed more is magnesium. Magnesium is a mineral involved as a cofactor in more than 300 enzyme systems and is required for such fundamental processes as energy production and nucleic acid synthesis, and often its consumption is low. It is estimated that 68% of American consumed less than the recommended daily allowance (RDA) of magnesium, and 19% consumed less than 50% of the RDA. Therefore, is evident that the supplementation of food with magnesium develops an important role in human health and their supplementation needs to be encouraged. Milk and dairy products are one of the most consumed products around the world and nowadays, consumers are increasingly demanding the quality of these products, with pro-health and sensory features. Aligning these two factors, dairy products are considered a great alternative to magnesium fortification. Besides that, some studies have been developing with dairy products that are fortified with magnesium showing that in addition to increasing nutritional quality, magnesium compounds can bring several benefits to the industry such as microbiological control, improved stability of dairy products, and effluents treatment. It can be seen that in addition to improving the nutritional quality of dairy products, the use of magnesium can help to control important industrial problems, and studies in this area and its application are increasingly recommended.

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*Arvalho*

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**Orientador**

*Raiane Rodrigues da Silva*

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**Orientado**