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TAL 797 – Seminário

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OBTAINING NATURAL SWEETENERS IN THE FOOD INDUSTRY

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The process of obtaining sugar was discovered in the coming century and after the product arrival in Europe it turned into a luxury item. With the great navigations, sugar cane arrived in Brazil and made it possible the production of sugar on a large scale. Currently, high sugar consumption is related to several chronic diseases, such as diabetes mellitus 2 (DM), hypertension and obesity, which together are among the main causes of health expenditure in the world. In 2018, the costs of these diseases reached 3.45 billion reais (R$) for the Brazilian Unified Health System (SUS). Among the nutritional strategies recommended for people with DM or obesity to reduce the consumption of carbohydrates is the partial replacement of the table sugar (sucrose) diet with sweeteners. Sweeteners can be obtained by synthetic or natural ways, and these latter are mostly sought by consumers influenced by health issues and autonomy in food choices. The food industry searches for new natural sweeteners with the same chemical and sensory demand as sucrose, in addition to seeking strategies to reduce sugars in their formula and also a better performance in the formula of naturally sweet compounds. In this sense, stevia (*Stevia rebaudiana*) has been standing out as a natural substitute for sucrose in several industrialized products and scientific studies investigate the methodology of extraction of its compounds, such as Rebaudioside A. The extraction of these compounds by techniques using solvents can contribute to the characteristic bitter taste of stevia in addition to increasing industrial waste generation and process costs. Thus, the ultrasound assisted technique is an emerging technology that enables the production of clean label foods, considerably reducing the amount of solvents and possibly improving the stevia sweeteners components extraction yield.

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