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PLANT-BASED PRODUCTS: AN APPROACH TO VEGAN CHEESES

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With the scarcity of environmental resources and the increase in the world population, it has become crucial to develop food from renewable and sustainable alternative sources. Plant-based foods have grown exponentially, primarily due to their characteristics in terms of vitamin and fiber content, with a particular focus on proteins. Studies have shown that proteins of plant origin, such as those from algae and insects, are emerging sources of this macronutrient, capable of nourishing the human body and thus replacing the main sources of animal-based protein. In this regard, milk stands out, as among its components are the primary proteins (casein, β-lactoglobulin, and α-lactalbumin) and lactose, which can cause allergies and intolerance in specific organisms, respectively, making it impossible to consume foods containing milk in their formulation. As a result, numerous dairy companies have included milk- and lactose-free foods in their portfolios to serve this audience. Over the years, individuals referred to as "Vegans," who do not consume or use any animal-derived foods, have become a presence in society, prompting a new adjustment in offerings by the food market. Consequently, several other products have been created and/or modified with the absence of milk and/or derivatives in their composition, notably "Plant-Based Cheeses" or "Vegan Cheeses." Although there is no Technical Regulation in Brazil recommending the production of these cheeses, they are produced on a large scale, albeit with complexities related to texture and sensory aspects. Studies are being conducted to incorporate vegetable proteins so that they can, together with an added coagulant, form a structured gel network capable of creating a "Cheese" called "Vegan," analogous to traditional ones found in the market. Soy is a legume frequently used in the production of plant-based cheeses and is readily available on the shelves of major supermarkets. However, other sources of vegetable proteins are being analyzed for the same purpose.

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