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Microbiological quality of Greek soft cheeses: The case of Xygalo Sitias

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Abstract

This article concerns original research on a Greek dairy product PDO, the spreadable soft cheese "Xygalo Sitia", which until now, based on the existing literature, has not been studied in depth or almost at all. Microbiological tests have been carried out at the Laboratory of Quality Control and Food Hygiene of the Hellenic Mediterranean University, Department of Nutrition and Dietetics Sciences, and some indicative conclusions have been drawn. These tests showed the need for further studies. There exists cooperation with the Xygalo production industry in Sitia, which supplies us with unpackaged and packaged product throughout the research and with data of the production processes. Samples of packaged product from similar cheeses, such as PDO Katiki Domokou - PDO Pychtogalo Chania -PDO Galotyri et al., were also studied in parallel with Xygalo as reference products. The microbiological characteristics of PDO Xygalou Sitia were studied throughout the predetermined lifespan of the packaged product, in order to check whether it is in accordance with the legislation for the safety of dairy products (EU Regulation No. 2073/2005). Based on the results extracted, proposals are made to improve the production process of the product. Research focus: i.) In the "behavior" of the basic hygiene indicators of food during its storage and distribution, in various retail outlets. ii). The extent to which is its microbiological load affected during the production, storage and handling, by quality systems (HACCP type), when this is applied during its preparation or as opposed to when the rules of good industrial practice and good hygiene practice are simply applied (pre-required by legislation). iii). The potential of the product to be packaged and maintained as a "micro-serving" and used as an "appetizer" in catering, locally and/or abroad.

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