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THE EFFECTS OF ENCAPSULATED PROTEASE AND LIPASE INTO GELLAN ON THE TEXTURAL AND ORGANOLEPTICAL PROPERTIES OF KASHAR CHEESE

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Abstract:

Kashar cheese is the most commonly produced and consumed cheese in Turkey, the Balkan Peninsula and the Mediterranean region after white cheese. The main problem in manufacturing Kashar cheese is the long maturation period, which increases the cost of handling significantly. Several attempts have been made to reduce the ripening period by the addition of individual and mixed lipase, protease and β -galactosidase enzymes, some of which have been reported to halve the normal maturation period of cheese. The addition of free lipase or protease has resulted in premature attack leading to excessive lipolysis, proteolysis and texture and flavour defects. The use of microencapsulated enzymes has been proposed to improve these drawbacks.

In this study, lipase, protease and the mixture of them were encapsulated in gellan and added to Kashar cheese milk to accelerate cheese ripening. The effect of encapsulated enzymes on the textural and organoleptical properties of the cheese was investigated during 180 days storage.

According to the result, the best cheeses were obtained with encapsulated protease. So usage of encapsulated protease into gellan for Kashar cheese production could be recommended.

Keywords: Kashar Cheese, Encapsulation, Lipase, Protease, Texture

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