

**Optimasi Penggunaan Sari Buah Nanas (*Ananas comosus*) dan Waktu Koagulasi Dalam Pembuatan Keju Mozzarella Dengan Metode RSM ,**  
*(Optimizing the Use of Pineapple Juice (*Ananas comosus*) and Coagulation Time in Making Mozzarella Cheese Using the RSM Method)*  
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**ABSTRACT**

Mozzarella cheese is a type of fresh cheese which is characterized by being elastic, fibrous and soft. One of the important processes in making mozzarella cheese is coagulation (clumping). The bromelain enzyme is a protease enzyme that is capable of hydrolyzing protein peptide bonds into amino acids. Pineapple is a fruit that contains high levels of the enzyme bromelain and grows widely in tropical areas. The research aims to determine the optimum conditions for using pineapple juice and coagulation time in making mozzarella cheese using the RSM method. The research method uses two factors, namely coagulation time with a coagulation time limit of 25-35 minutes and pineapple juice concentration with a limit of 2.5-3.5%. The research results showed that the optimal treatment combination was a coagulation time of 25 minutes with a pineapple juice concentration of 2.5%, the resulting desirability value was 57.4%. Confirmation results showed that the average curd weight data was 244.5 grams, water content 38.97%, elongation 17 inches, color 3, aroma 2.7, texture 3, and taste 3.3 showing results that were not significantly different compared to the predicted values. with a confidence level comparison of 95%.

*Keywords: Mozzarella Cheese, Coagulation, Pineapple Juice, Response Surface Methodology*