

**PENGARUH TAPIOKA TERMODIFIKASI, KACANG KOMAK
(*Lablab purpureus* L. Sweet), DAN KEDELAI (*Glycine max*) TERHADAP
KARAKTERISTIK FISIKOKIMIA DAN SENSORIS KEJU
MOZZARELLA ANALOG**

INTISARI

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Keju mozzarella analog adalah produk nabati yang serupa dengan keju mozzarella yang berbahan dasar hewani. Penelitian ini bertujuan untuk mengetahui pengaruh rasio pati tapioka dengan pati tapioka termodifikasi dan rasio kecambah kacang komak dengan kedelai terhadap karakteristik fisikokimia dan sensoris pada keju mozzarella analog. Rasio yang digunakan yaitu 100%:0%, 80%:20%, dan 60%:40%. Keju mozzarella analog dengan rasio pati dievaluasi berdasarkan analisis fisikokimia, sedangkan rasio kacang dievaluasi berdasarkan analisis fisikokimia, dan sensoris. Keju mozzarella analog formulasi terbaik dilakukan analisis proksimat. Berdasarkan hasil penelitian, rasio pati tapioka dengan pati tapioka termodifikasi memberikan pengaruh nyata terhadap karakteristik fisikokimia pada keju mozzarella analog. Penambahan pati tapioka termodifikasi menyebabkan titik leleh, kekerasan, daya kohesif, kelengketan, daya lenting, daya kunyah, dan nilai pH meningkat; sedangkan kecerahan warna dan kemuluran menurun. Rasio kecambah kacang komak dengan kedelai memberikan pengaruh nyata terhadap karakteristik fisikokimia pada keju mozzarella analog, kecuali pada kemuluran dan kelengketan. Penambahan kacang kedelai menyebabkan kecenderungan warna kuning, kemuluran, daya kohesif, kelengketan, dan daya lenting meningkat; sedangkan titik leleh, kekerasan, daya kunyah, dan nilai pH menurun. Penambahan kedelai menyebabkan nilai sensori keju mozzarella analog meningkat. Formulasi terbaik keju mozzarella analog yaitu rasio pati tapioka 80% : pati tapioka termodifikasi 20% dan rasio kecambah kacang komak 60% : kedelai 40%. Kandungan proksimat keju mozzarella analog formulasi terbaik yaitu 66,03% air; 2,20% abu; 3,06% protein; 4,09% lemak; dan 24,62% karbohidrat.

Kata kunci : keju mozzarella analog, pati tapioka, pati tapioka termodifikasi, kecambah kacang komak, kedelai

**THE EFFECTS OF MODIFIED TAPIOCA, HYACINTH BEAN
(*Lablab purpureus* L. Sweet), AND SOYBEAN (*Glycine max*) ON
PHYSICOCHEMICAL AND SENSORY PROPERTIES OF
MOZZARELLA CHEESE ANALOGUE**

ABSTRACT

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Mozzarella Cheese Analogue (MCA) is a plant based product similar to the animal based mozzarella cheese. This study aims to determine the effect of tapioca starch to modified tapioca starch ratio and hyacinth bean sprouts to soybeans ratio on the physicochemical and sensory characteristics of MCA. The ratios used are 100%:0%, 80%:20%, and 60%:40%. MCA with starch ratio was evaluated based of physicochemical analysis, while the ratio of beans was evaluated with physicochemical and sensory analysis. The best formulation of MCA was put through proximate analysis. Based on study results, the ratio of tapioca starch to modified tapioca starch had a significant effect on the physicochemical characteristics of the MCA. Addition of modified tapioca starch caused the melting point, hardness, cohesiveness, gumminess, resilience, chewiness, and pH value to increase; while the color brightness and stretchability decreased. The ratio of hyacinth bean sprouts to soybeans had a significant effect on the physical and chemical characteristics of the MCA, except for stretchability and gumminess. Addition of soybeans caused a tendency for yellow color, stretchability, cohesiveness, gumminess, and resilience to increase; while the melting point, hardness, chewiness, and pH value decreased. Addition of soybeans caused the sensory value of MCA to increase. The best formulation ratio of MCA was 80% tapioca starch: 20% modified tapioca starch and 60% hyacinth bean sprouts: 40% soybeans. The proximate content of the best MCA formulation was 66.03% water; 2.20% ash; 3.06% protein; 4.09% fat; and 24.62% carbohydrates.

Keywords : mozzarella cheese analogue, tapioca starch, modified tapioca starch, hyacinth bean sprouts, soybean