

**KUALITAS FISIKO-KIMIA DAN AKTIVITAS ANTIOKSIDAN KEJU
COTTAGE DENGAN PENAMBAHAN TEPUNG LABU KUNING
(*Cucurbita moschata* Durch)**

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INTISARI

Penelitian ini bertujuan untuk mengetahui kualitas fisiko-kimia, dan aktivitas antioksidan pada produk keju *cottage* dengan penambahan tepung labu kuning. Keju *cottage* dibuat dari susu yang digumpalkan dengan 0,01% rennet dengan penambahan tepung labu kuning pada total campuran keju dengan level 0, 0,5, dan 1%. Pengujian fisiko-kimia meliputi pH dan tekstur, kadar abu, kadar lemak, keasaman, kadar air, kadar protein, FFA dan aktivitas antioksidan. Data aktivitas antioksidan dan fisiko-kimia dianalisis menggunakan analisis variansi pola searah, hasil yang berbeda nyata dilanjutkan dengan uji Duncan's New Multiple Range Test. Ulangan dilakukan sebanyak tiga kali. Hasil penelitian menunjukkan bahwa penambahan tepung labu kuning tidak berpengaruh ($p>0,05$) terhadap rendemen, nilai pH, kadar lemak, kadar protein, kadar abu, dan kadar *free fatty acid*. Rerata rendemen, nilai pH, kadar lemak, kadar protein, kadar air, kadar abu, dan kadar *free fatty acid* berturut-turut adalah $17,57\pm 4,15\%$, $4,22\pm 0,34$, $20,72\pm 0,93\%$, $17,30\pm 2,32\%$, $60,29\pm 3,92\%$, $2,71\pm 0,55\%$, $4,92\pm 0,94\%$. Penambahan tepung labu kuning mempengaruhi tekstur dan aktivitas antioksidan keju *cottage*. Rerata tekstur dan aktivitas antioksidan berturut-turut $4,73\pm 2,76$ N dan $2,61\pm 0,99\%$. Karakteristik organoleptik keju *cottage* dengan penambahan tepung labu kuning dapat diterima oleh panelis. Penambahan tepung labu kuning paling baik sebesar 0,5%.

Kata kunci: Keju *cottage*, Tepung labu kuning, Kualitas fisiko-kimia, Aktivitas antioksidan.

**PHYSICO-CHEMICAL QUALITY AND ANTIOXIDANT ACTIVITIES OF
COTTAGE CHEESE WITH ADDITION OF PUMPKIN FLOUR (*Cucurbita
moschata* Durch)**

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ABSTRACT

This research aimed to determine the physico-chemical quality and antioxidant activity of cottage cheese with the addition of pumpkin flour. Cottage cheese was made of milk coagulated with 0.01% rennet by adding pumpkin flour to the total cheese mixture at levels 0, 0.5, and 1%. Physico-chemical testing included pH and texture, ash content, fat content, acidity, moisture content, protein content, free fatty acid (FFA) and antioxidant activity. Antioxidant and physico-chemical activity data were analyzed using unidirectional analysis of variance, significantly different results followed by Duncan's New Multiple Range Test. Experiment was repeat as much as three times. The results showed that the addition of pumpkin flour had no effect ($p > 0.05$) on yield, pH value, fat content, protein content, ash content, and free fatty acid content. The mean yield, pH value, fat content, protein content, water content, ash content, and free fatty acid content were $17.57 \pm 4.15\%$, 4.22 ± 0.34 , $20.72 \pm 0.93\%$, $17.30 \pm 2.32\%$, $60.29 \pm 3.92\%$, $2.71 \pm 0.55\%$, $4.92 \pm 0.94\%$, respectively. The addition of pumpkin flour affected the texture and antioxidant activity of cottage cheese. The mean texture and antioxidant activity were 4.73 ± 2.76 N and $2.61 \pm 0.99\%$, respectively. The organoleptic characteristics of cottage cheese with the addition of pumpkin flour were acceptable to the panelists. The best addition of pumpkin flour was 0.5%.

Keywords: Cottage cheese, Pumpkin flour, Physico-chemical quality, Antioxidant activity.