

## KUALITAS FISIK DAN ORGANOLEPTIK KEJU FETA RENDAH LEMAK DENGAN KULTUR TUNGGAL DAN KULTUR CAMPURAN SELAMA PENYIMPANAN PADA SUHU DINGIN

Mayang Puspitasari  
14/366613/PT/07640

### INTISARI

Penelitian ini bertujuan untuk mengetahui kualitas fisik dan organoleptik keju Feta yang terbuat dari susu sapi rendah lemak dengan jenis kultur yang berbeda yaitu kultur tunggal dan campuran. Kultur tunggal menggunakan bakteri *Streptococcus thermophilus* dan kultur campuran menggunakan bakteri *Lactobacillus acidophilus*, *Bifidobacterium longum*, dan *Lactobacillus casei*. Keju disimpan selama 30 hari pada suhu 4°C dan diamati perubahan fisik dan organoleptiknya pada hari ke-0, 15, dan 30. Parameter yang diamati yaitu rendemen, pH, tekstur, dan cita rasa keju. Data pH dan tekstur hasil penelitian dianalisis dengan analisis variansi pola faktorial, data hasil rendemen diuji dengan analisis variansi *independent sample compare mean*. Perbedaan rata-rata diuji dengan *Duncan's Multiple Range Test* (DMRT), serta data organoleptik yang diperoleh dianalisis menggunakan Nonparametrik K-Indipendent Kruskal-Wallis. Hasil penelitian menunjukkan bahwa presentase rendemen keju *Streptococcus thermophilus* yaitu  $7,23 \pm 0,92\%$  dan keju ABC yaitu  $5,35 \pm 0,59\%$ . Nilai pH semakin meningkat selama penyimpanan untuk kedua jenis keju, dengan pH keju ABC tertinggi  $4,53 \pm 0,13$  dan pH keju *Streptococcus thermophilus*  $4,49 \pm 0,08$ . Hasil uji dengan *texture analyzer* menunjukkan keju semakin lunak pada hari ke-30. Keju *Streptococcus thermophilus* lebih lunak dengan hasil uji  $1,72 \pm 1,02$  N, dan keju ABC  $2,12 \pm 0,73$  N. Uji organoleptik menunjukkan tekstur keju ABC lebih disukai daripada keju *Streptococcus thermophilus*. Cita rasa kedua keju menunjukkan peningkatan pada rasa pahit dan penurunan rasa asam.

Kata kunci: Keju Feta rendah lemak, *Lactobacillus acidophilus*, *Bifidobacterium longum*, *Lactobacillus casei*, *Streptococcus thermophilus*, kualitas fisik, organoleptik, penyimpanan dingin

## PHYSIC AND ORGANOLEPTIC QUALITY OF FETA LOW FAT CHEESE WITH SINGLE CULTURE AND MULTI CULTURE DURING COLD STORAGE

Mayang Puspitasari  
14/366613/PT/07640

### ABSTRACT

This study aimed to determine the physical and organoleptic qualities of Feta cheese made of low-fat cow's milk with different types of cultures, single and mixed cultures. Single culture using *Streptococcus thermophilus* and mixed cultures using *Lactobacillus acidophilus*, *Bifidobacterium longum*, and *Lactobacillus casei* bacteria. Cheese was stored for 30 days at 4°C and observed for physical and organoleptic changes on days 0, 15 and 30. Parameters observed were curd, pH, texture, and taste of cheese. The pH and texture data of the research results were analyzed by factorial pattern variance analysis, the curd data were tested by an independent variance analysis of the sample compare mean. The average difference was tested with Duncan's Multiple Range Test (DMRT), and the organoleptic data obtained were analyzed using the Nonparametric K-Independent Kruskal-Wallis. The results showed that the percentage cheese curd of *Streptococcus thermophilus* cheese which was  $7.23 \pm 0.92\%$  and ABC cheese which was  $5.35 \pm 0.59\%$ . The pH value increases during storage for both types of cheese, with the highest ABC cheese pH  $4.53 \pm 0.13$  and cheese pH *Streptococcus thermophilus*  $4.49 \pm 0.08$ . The texture analyzer test results showed that the cheese was getting softer on the 30th day. The *Streptococcus thermophilus* cheese was softer with the results of  $1.72 \pm 1.02$  N, and ABC cheese  $2.12 \pm 0.73$  N. The organoleptic test showed the texture of ABC cheese was preferred over *Streptococcus thermophilus* cheese. The second taste of cheese showed an increase in bitter taste and a decrease in sour taste.

Keywords : Feta low fat cheese, *Lactobacillus acidophilus*, *Bifidobacterium longum*, *Lactobacillus casei*, *Streptococcus thermophilus*, physical quality, organoleptic, cold storage