

**PENGARUH PENCAMPURAN SUSU SAPI DENGAN PASTA  
TOMAT (*Solanum lycopersicum*) TERHADAP  
KARAKTERISTIK YOGHURT YANG DIHASILKAN**

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# **Pengaruh Pencampuran Susu Sapi dengan Pasta Tomat (*Solanum lycopersicum*) terhadap Karakteristik *Yoghurt* yang Dihasilkan**

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## **ABSTRAK**

Penelitian ini dilakukan untuk mengetahui pengaruh pencampuran susu sapi dengan pasta tomat terhadap karakteristik *yoghurt* yang dihasilkan serta mengetahui tingkat penerimaan panelis berdasarkan uji organoleptik terhadap panelis. Penelitian ini menggunakan rancangan eksploratif dengan perlakuan berdasarkan pencampuran susu sapi dengan pasta tomat dengan perbandingan sebagai berikut: A(75%:25%), B(80%:20%), C(85%:15%), D(90%:10%), E(95%:5%) dan F(100% atau kontrol). Pengamatan terhadap *yoghurt* yang dihasilkan adalah kadar protein, kadar lemak, kadar abu, total padatan, pH, total asam, viskositas, kadar likopen dan aktivitas antioksidan. Analisis mikrobiologi yaitu bakteri asam laktat dan angka lempeng total, aktivitas antioksidan IC<sub>50</sub> serta uji organoleptik (penampakan, homogenisasi, warna, aroma, dan rasa). Berdasarkan uji organoleptik, maka terpilih produk terbaik *Yoghurt* yaitu perlakuan C (pencampuran susu sapi 85% dengan pasta tomat 15%) dengan rata-rata terhadap warna (3,7), aroma (3,9), rasa (3,8), penampakan (3,8) dan homogenisasi (3,6), serta karakteristik fisik dan kimia yaitu kadar abu (0,59%), kadar protein (3,70%), kadar lemak (3,42%), total asam (1,17%), nilai pH (4,6), total padatan (20,71%), viskositas (31,03 dPas), aktifitas antioksidan (43,87%), likopen (32,73 mg/100g), total bakteri asam laktat (5,8x10<sup>8</sup>) cfu/g, angka lempeng total 6,0x10<sup>8</sup> cfu/g dan aktivitas antioksidan IC<sub>50</sub> 817 ppm.

*Kata Kunci:* ***Yoghurt, Susu Sapi, Pasta Tomat, Likopen, Aktivitas Antioksidan***

# The Influence of Mixing Cow's Milk with Tomato Paste (*Solanum lycopersicum*) Toward Characteristics of Yoghurt

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## ABSTRACT

This research was aimed to know the influence of mixing cow's milk with tomato paste toward characteristics of *yoghurt*, and know the best formulations from *yoghurt* based on panelists acceptance level. This study used explorative design with treatments according to the mixing of cow's milk and tomato paste with comparison as follow: A(75%:25%), B(80%:20%), C(85%:15%), D(90%:10%), E(95%:5%) dan F(100% or control). The observations of *yoghurt* which produced were levels of protein, fat contents, ash contents, total solids, pH, total acids, viscosity, lycopene, antioxidant, The microbiological analysis was total plates number dan total lactic acids bacteria, antioxidant activity IC<sub>50</sub> and sensory test (sighting, homogenization, colors, smell, and taste). Based on sensory test, so the best product of *yoghurt* has selected on the treatment C (the mixing of cow's milk and tomato paste by 85%:15%) with an average by colors (3,7), smells (3,9), taste (3,8), sighting (3,8) dan homogenization (3,6), and the characteristics of physic and chemicals that is the ashes (0,59%), protein levels (3,70%), fat contents (3,42%), total acids (1,17%), pH (4,6), total solids (20,71%), viscosity (31,03 dPas), antioxidant activity (43,87%), lycopene (32,73 mg/100g), total lactic acids bacteria (5,8x10<sup>8</sup>) cfu/g, total plates count (6,0x10<sup>8</sup>) cfu/g and antioxidant activity IC<sub>50</sub> 817 ppm.

*Keywords : Yoghurt, Cow's Milk, Tomato Paste, Lycopene, Antioxidant Activity*