

**PENGARUH PENAMBAHAN SUSU FERMENTASI TERHADAP
KUALITAS FISIK DAN TOTAL MIKROBA DAGING AYAM
BROILER SELAMA PENYIMPANAN
SUHU REFRIGERATOR**

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan susu fermentasi dan perbedaan lama penyimpanan pada suhu *refrigerator* terhadap kualitas fisik dan total mikroba daging ayam broiler. Bahan yang digunakan pada penelitian ini adalah daging ayam broiler dan susu fermentasi berupa Yakult. Perlakuan penambahan susu fermentasi yaitu pada penambahan 0, 1, 2, dan 3 botol. Lama penyimpanan pada suhu *refrigerator* (4°C) pada hari ke-0, 5, 10, dan 15. Parameter yang diuji adalah total mikroba dan kualitas fisik yang meliputi daya ikat air (DIA), keempukan, dan warna yang terdiri dari *lightness*, *redness*, dan *yellowness*. Data dianalisis menggunakan RAL faktorial 4x4, serta menggunakan uji lanjut dengan uji *Duncan's Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa rerata total mikroba mengalami kecenderungan naik ($P < 0,05$) dengan penambahan susu fermentasi dan lama penyimpanan. Penambahan susu fermentasi menunjukkan hasil yang berpengaruh nyata ($P < 0,05$) terhadap peningkatan keempukan, nilai *lightness*, *redness*, dan *yellowness*, serta penurunan persentase DIA. Penyimpanan menunjukkan hasil yang berpengaruh nyata ($P < 0,05$) terhadap penurunan DIA, nilai *lightness*, *redness*, dan *yellowness*, serta peningkatan nilai keempukan. Hasil terbaik terdapat pada penambahan 1 botol susu fermentasi untuk total mikroba dan daya ikat air, serta penambahan 3 botol untuk keempukan, nilai *lightness*, *redness*, dan *yellowness*. Total mikroba memberikan hasil terbaik pada hari ke-10, keempukan hari ke-5, sedangkan DIA, nilai *lightness*, *redness*, dan *yellowness* pada hari ke-15.

Kata kunci: Daging Ayam, Kualitas Fisik, Penyimpanan Suhu *Refrigerator*, Susu Fermentasi, Total Mikroba.

THE EFFECT OF FERMENTED MILK ADDITION ON PHYSICAL PROPERTIES AND TOTAL MICROBIAL QUALITIES OF BROILER CHICKEN MEAT DURING REFRIGERATOR TEMPERATURE STORAGE

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ABSTRACT

This study aim to determine the effect of fermented milk utilization and storage time on refrigerator temperature on total microbial and physical properties of broiler chicken meat. The main ingredients used were broiler chicken meat and fermented milk in the form of Yakult. Fermented milk addition treatment was 0, 1, 2, and 3 bottles. Treatment of storage time on refrigerator temperature was carried out on 0, 5th, 10th, and 15th days. The parameters tested were total microbial and physical properties included Water Holding Capacity (WHC), tenderness, color through lightness, redness, and yellowness. The data obtained were analyzed using Completely Randomized Design (CRD) 4x4, followed by Duncan's Multiple Range Test (DMRT). The result showed that the treatment on the addition of fermented milk and storage time significantly increased ($P<0,05$) the average total microbial. The additional fermented milk significantly increased ($P<0,5$) the tenderness value, lightness value, redness value, yellowness value, and decreased the average WHC percentage. The storage time on refrigerator temperature treatments significantly decreased ($P<0,05$) the average WHC percentage, lightness value, redness value, and yellowness value, but significantly increased ($P<0,05$) the tenderness value. The average of total microbial and water holding capacity showed the best result with 1 bottle addition of fermented milk, while tenderness, lightness, redness, and yellowness value with 3 bottle addition. Total microbial showed the best result on 10 days storage, tenderness on 5 days, and water holding capacity, lightness, redness, and yellowness for 15 days.

Keywords: Chicken Meat, Fermented Milk, Physical Properties, Refrigerator Temperature Storage, Total Microbial, Refrigerator Temperature Storage.