

## PENGARUH LAMA PENYIMPANAN DAGING AYAM PADA SUHU RUANG DAN REFRIGERATOR TERHADAP ANGKA LEMPENG TOTAL BAKTERI DAN ADANYA BAKTERI *Salmonella sp*

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### ABSTRAK

Tujuan dari penelitian ini adalah untuk mengetahui adanya cemaran bakteri sebagai indikator kelayakan konsumsi pada daging ayam. Penelitian ini menggunakan 100 gr sampel daging ayam berasal dari salah satu pasar tradisional di Medan. Setiap sampel ditanam pada media *Nutrient Agar* dan *Salmonella Shigella Agar*. Jika tumbuh koloni pada media SSA yang tampak cembung dan berwarna kuning bening, dilanjutkan dengan uji biokimia meliputi media *Triple Sugar Iron Agar* dan *Simmons Citrate Agar*. Hasil pengujian menunjukkan bahwa penyimpanan daging ayam pada suhu ruang selama 9 jam dan 12 jam di atas batas maksimum SNI (di atas  $1 \times 10^6$ ), yaitu  $173 \times 10^4$  dan  $354 \times 10^4$ . Hasil analisis sidik ragam sampel daging ayam yang disimpan pada suhu ruang menunjukkan nilai Fhitung ( $101,356$ ) > Ftabel ( $2,866$ ), maka lama penyimpanan daging ayam pada suhu ruang berpengaruh nyata terhadap angka lempeng total bakteri. Hasil analisis sidik ragam sampel daging ayam yang disimpan pada suhu *refrigerator* menunjukkan nilai Fhitung ( $21,443$ ) > Ftabel ( $2,866$ ), maka lama penyimpanan daging ayam pada suhu *refrigerator* berpengaruh nyata terhadap angka lempeng total bakteri. Berdasarkan hasil uji lanjut menggunakan uji BNT diperoleh bahwa lama penyimpanan daging ayam pada suhu ruang berpengaruh sangat nyata antar perlakuan selama 0 jam dan 3 jam penyimpanan terhadap angka lempeng total bakteri. Sedangkan pada suhu *refrigerator* berpengaruh sangat nyata antar perlakuan selama 9 jam dan 12 jam penyimpanan terhadap angka lempeng total bakteri. Hasil pengujian menunjukkan bahwa terdapat 2 sampel dari 10 sampel yang diuji positif tercemar bakteri *Salmonella sp*. Hal ini menunjukkan bahwa kualitas daging ayam yang telah disimpan lebih dari 9 jam pada suhu ruang tidak memenuhi standar berdasarkan Standar Nasional Indonesia.

**Kata kunci:** Daging Ayam, Lama Penyimpanan, Angka Lempeng Total Bakteri, *Salmonella sp*.

## THE EFFECT OF STORAGE DURATION OF CHICKEN MEAT AT ROOM TEMPERATURE AND REFRIGERATOR ON TOTAL PLATE BACTERIA COUNT AND EXAMINATION OF BACTERIA *Salmonella sp*

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### ABSTRACT

The purpose of this research is to understand the existence of bacteria contamination as an indicator of consumption feasibility in chicken meat. The research used 100 grams of chicken meat sample from on of the traditional market in Medan. Each sample was grown on Nutrient Agar and *Salmonella* Shigella Agar media. If the colony grows on SSA media that appear convex and clear yellow, it will followed by biochemical tests including Triple Sugar Iron Agar and Simmons Citrate Agar. The results showed that chicken meat storage at room temperature for 9 hours and 12 hours above maximum value of SNI (above  $1 \times 10^6$ ), that is  $173 \times 10^4$  and  $354 \times 10^4$ . The results of analysis of variance samples of chicken meat stored at room temperature showed the value of Fcount (101,356) > Ftable (2,866), storage duration of chicken meat at the room temperature have a significant effect to the total plate bacteria count. The results of analysis of variance samples of chicken meat stored at refrigerator temperature showed the value of Fcount (21,443) > Ftable (2,866), storage duration of chicken meat at the refrigerator temperature have a significant effect to the total plate bacteria count. Based on the results of further tests using BNT test obtained that the storage duration of chicken meat at room temperature for 3 hours have a very significant effect on the total plate bacteria count. The results of further tests using BNT test, that chicken meat storage at room temperature have a very significant effect between treatment for 0 hours and 3 hours of storage to total plate bacteria count. While at refrigerator temperature have a very significant effect between treatment for 9 hours and 12 hours of storage to total bacterial plate number. The results showed that 2 samples from 10 samples tested were positive contaminated by *Salmonella sp*. This indicates that the quality of chicken meat that has been stored for more than 9 hours at room temperature does not accord suit to the standards based on Indonesian Nasional Standard.

**Keywords:** Chicken Meat, Storage Duration, Total Plate Bacteria Count, *Salmonella sp*.