

PENGARUH LAMA MARINASI DAN PENYIMPANAN SUHU RUANG *READY TO EAT DAKGALBI* KEMASAN KALENG TERHADAP KOMPOSISI KIMIA, TOTAL BAKTERI, DAN TBA

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh lama marinasi *ready to eat dakgalbi* terhadap komposisi kimia, total bakteri, dan TBA pada penyimpanan suhu ruang dengan kemasan kaleng. Bahan utama yang digunakan terdiri atas daging ayam broiler bagian dada, kentang dan wortel yang digunakan untuk pembuatan. Bumbu marinasi terdiri atas saus *gochujang*, air, bawang putih, kecap asin, bubuk cabai gula pasir, jahe, merica, dan minyak wijen. Lama marinasi yaitu 0, 30, 60, dan 90 menit. Pengujian kimia (kandungan protein, air, dan lemak), dan nilai *thiobarbituric acid* (TBA) dilakukan pada penyimpanan minggu ke-0, 1, 2, 3, 4, 5, dan 6. Pengujian total bakteri dilakukan pada penyimpanan minggu ke-0, 2, 4, dan 6. Kualitas kimia diuji dengan metode Osborne dengan NIRS (*Near Infrared Spectroscopy*) *FoodScan*. Data dianalisis menggunakan analisis variansi pola faktorial dan dilanjutkan dengan uji *Duncan's Multiple Range Test* (DMRT). Berdasarkan hasil penelitian terhadap komposisi kimia, lama marinasi tidak berpengaruh ($P > 0,05$) terhadap kadar air (65,19-65,83%), protein (24,77-25,30%), lemak (4,90-5,24%), dan kolagen (2,57-2,75%) *dakgalbi*. Nilai TBA dengan lama marinasi 90 menit memiliki nilai rerata terendah (0,053 mg malonaldehid/kg), sedangkan kontrol tertinggi (0,081 mg malonaldehid/kg). Kadar air, protein, kolagen, dan TBA dipengaruhi secara nyata ($P < 0,05$) oleh lama penyimpanan. Selama penyimpanan, persentase air tertinggi diperoleh pada penyimpanan minggu ke-6 dengan rerata 66,83%. Kandungan protein terendah pada minggu ke-6, dengan rerata kadar protein 24,20%. Penurunan kadar kolagen dimulai pada penyimpanan minggu ke-4 dan mencapai nilai terendah pada penyimpanan minggu ke-6. Nilai TBA pada penyimpanan minggu ke-6 mengalami peningkatan 0,059 mg malonaldehid/kg dibandingkan minggu ke-0. Lama penyimpanan tidak berpengaruh terhadap kadar lemak *dakgalbi* ($P > 0,05$). Data cemaran mikroba pada semua perlakuan menunjukkan hasil masih dibawah ambang batas. Kesimpulan penelitian ini yaitu lama marinasi terbaik adalah 90 menit dengan lama penyimpanan 6 minggu.

Kata kunci: *Dakgalbi*, Lama marinasi, Komposisi kimia, Kualitas mikrobiologi, TBA

EFFECT OF MARINATION DURATION AND STORAGE AT ROOM TEMPERATURE ON THE CHEMICAL COMPOSITION, TOTAL BACTERIA, AND TBA VALUE OF READY TO EAT DAKGALBI

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ABSTRACT

This study aimed to determine the effect of marination duration on the chemical, total bacteria, and TBA value of ready-to-eat canned dakgalbi. The ingredients used in this product mainly consisted of broiler chicken breast then added with potatoes and carrots. The ingredients used for making the marinade consist of gochujang paste, water, garlic, soy sauce, chili powder, granulated sugar, ginger, pepper, and sesame oil. The duration of the marination used was 0, 30, 60, and 90 minutes. Tests towards chemical compositions (protein, water, and fat content) and thiobarbituric acid (TBA) value were carried out at weeks 0, 1, 2, 3, 4, 5, and 6 of the storage periods. While the test towards the total bacteria value were carried out at weeks 0, 2, 4, and 6 of storage. Chemical compositions was tested using the Osborne method with a NIRS (Near Infrared Spectroscopy) food scan. The data obtained were analyzed using analysis of variance with a factorial pattern. Based on the study, the duration of the marination did not have a significant effect ($P > 0.05$) on the water (65.19-65.83%), protein (24.77-25.30%), fat (4.90-5.24%), and collagen (2.57-2.75%) on the content of the canned dakgalbi. Based on the TBA value, the 90 minutes marination duration had the lowest average value (0.053 mg malonaldehyde/kg), and control showed the highest average TBA value at 0.081 mg malonaldehyde/kg. Water, protein, collagen, and TBA value were significantly affected ($P < 0.05$) by storage duration. During storage, the highest water content percentage was obtained in the 6th week of storage with an average value of 66.83%. Protein content reached the lowest value at the 6th week of storage, with an average protein content of 24.20%. Decrease in collagen content starting at the 4th week of storage and reached the lowest value on the 6th week of storage. The TBA value at the 6th week of storage increased by 0.059 mg malonaldehyde/kg compared to the week 0 of storage. Storage duration did not significantly affect the fat content of the dakgalbi products ($P > 0.05$). Data on microbial contamination in all treatments were still under the allowed standard. The conclusion of this research was the best marination treatment were the 90 minutes with 6 weeks of storage.

key words: *Dakgalbi*, Marination, Chemical composition, Total bacteria, TBA value