

## PENGARUH LAMA MARINASI DAN LAMA PENYIMPANAN TERHADAP KUALITAS FISIK, SENSORIS, DAN MIKROBIOLOGI AYAM BACEM PADA PENYIMPANAN SUHU RUANG

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### INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh lama marinasi dan lama penyimpanan serta interaksi keduanya terhadap kualitas fisik, sensoris, dan total bakteri produk yang disimpan pada suhu ruang. Materi yang digunakan antara lain timbangan digital, baskom, pisau, *copper*, wajan, kompor gas, vakum merk *powerpack* DZ 300N, autoklaf, timbangan analitik, inkubator, *warner blatzter*, cawan petri, plat kaca, *fix* mikropipet, Bunsen, LAF (*Laminar Air Flow*), *counter*, spidol, tabung reaksi, pH meter, gelas beaker, sendok, soutil, capitan, botol aquades, mortar, bluetip, Erlenmeyer, gelas ukur, jangka sorong, spatula, gunting, nampan, penggaris, pinset, loyang, *double spike infusion*, oven, paha ayam, bumbu ayam bacem yang terdiri dari bawang putih, bawang merah, kemiri, jahe, lengkuas, serai, daun salam, garam, gula pasir, gula jawa, ketumbar, lada, kecap manis, air putih, minyak goreng, cabai rawit, *retort pouch* ukuran 17x25 cm, media PCA atau *Plate Count Agar* (terdiri dari casein enzymic hydrolysate, yeast extract, dextrose, agar), NaCl fisiologis, aquades, alcohol 70%, kertas milimeter blok, kertas saring bebas air, piring plastik, pulpen, pensil, label, tisu, kapas, kain kasa, tali, karet, spiritus, plastik, air kelapa, gas, alumunium foil, dan kertas kuisioner. Metode yang dilakukan yaitu memberikan perlakuan marinasi pada paha ayam dengan waktu 0, 15, 30, 45 menit kemudian dikemas menggunakan kemasan kantong *retort* dan melalui proses vakum serta sterilisasi. Bahan yang digunakan pada penelitian ini yaitu paha ayam, kantong *retort*, vakum, dan autoklaf. Pengujian yang dilakukan adalah fisik, sensorik dan uji mikrobiologi pada penyimpanan minggu 0,2,4, dan 6. Desain penelitian yang digunakan untuk total data bakteri dan kualitas fisik adalah Acak Lengkap Metode Desain (CRD) dengan pola faktorial 3 perlakuan lama marinasi dan 4 pengujian lama penyimpanan, kualitas sensoris menggunakan Friedman Test. Kesimpulan yang didapatkan yaitu lama waktu marinasi pada ayam bacem berpengaruh nyata terhadap pH, daya ikat air, keempukan, sensoris dan mikrobiologi. Lama waktu marinasi selama 45 menit memberikan hasil yang paling optimum terhadap kualitas fisik, sensoris, dan mikrobiologi. Lama penyimpanan pada ayam bacem berpengaruh nyata ( $P < 0,05$ ) terhadap pH, daya ikat air, keempukan, sensoris dan mikrobiologi. Ayam bacem pada kualitas sensoris masih layak dikonsumsi hingga minggu ke-4 dan pada kualitas mikrobiologi masih layak dikonsumsi hingga minggu ke-6 sesuai SNI yaitu  $1 \times 10^6$  koloni/gram.

Kata Kunci: Ayam Bacem, Lama Marinasi, Lama Penyimpanan, Kualitas Fisik, Total Bakteri, Kualitas Sensoris.

## **THE EFFECT OF MARINATION TIME ON THE PHYSICAL, SENSORY, AND MICROBIOLOGICAL QUALITY OF READY TO EAT BACEM CHICKEN ON STORAGE AT ROOM TEMPERATURE**

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### **ABSTRACT**

This study aims to determine the effect of marinating time and storage time and their interaction on the physical, sensory, and total bacterial qualities of the product stored at room temperature. The materials used include digital scales, basins, knives, copper, frying pans, gas stoves, DZ 300N powerpack vacuum, autoclave, analytical balance, incubator, warner blatzter, petri dish, glass plate, fix micropipette, Bunsen, LAF (Laminar Air Flow), counter, marker, test tube, pH meter, beaker, spoon, spatula, tongs, aquades bottle, mortar, bluetip, Erlenmeyer, measuring cup, caliper, spatula, scissors, tray, ruler, tweezers, baking sheet, double spike infusion, oven, chicken thighs, chicken bacem seasoning consisting of garlic, onion, candlenut, ginger, galangal, lemongrass, bay leaf, salt, sugar, palm sugar, coriander, pepper, sweet soy sauce, water, oil fried, cayenne pepper, retort pouch size 17x25 cm, PCA media or Plate Count Agar (consisting of casein enzymic hydrolysis, yeast extract, dextrose, agar), physiological NaCl, aquades, 70% alcohol, millimeter block paper, water-free filter paper, plastic plates, pens, pencils, labels, tissue, cotton, gauze, rope, rubber, spiritus, plastic, coconut water, gas, aluminum foil, and questionnaire paper. The method used is to give marinade treatment to chicken thighs with a time of 0, 15, 30, 45 minutes then packaged using a retort bag and through a vacuum and sterilization process. The materials used in this study were chicken thighs, retort bag, vacuum, and autoclave. The tests carried out were physical, sensory, and microbiological tests at storage weeks 0, 2, 4, and 6. The research design used for total bacterial data and physical quality was the Completely Randomized Design Method (CRD) with a factorial pattern of 3 treatments for marinating time and 4 treatments. storage time testing, sensory quality using Friedman Test. The conclusion obtained is that the length of time for marinating chicken bacem has a significant effect on pH, water holding capacity, tenderness, sensory, and microbiology. The 45 minute marinade time gave the most optimum results for the physical, sensory, and microbiological qualities. The length of storage in bacem chicken had a significant effect ( $P < 0.05$ ) on pH, water holding capacity, tenderness, sensory, and microbiology. Bacem chicken on sensory quality is still suitable for consumption until the 4th week and on microbiological quality it is still suitable for consumption until the 6th week according to SNI, namely  $1 \times 10^6$  colonies/gram.

**Keywords:** Chicken marinated, Marinating Time, Storage Time, Physical Quality, Total Bacteria, Sensory Quality.