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OPTIMASI METODE *PRECOOKING* DAGING TERHADAP KUALITAS KIMIA DAN KETENGIKAN *READY-TO-EAT* EMPAL GENTONG

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INTISARI

Penelitian ini bertujuan untuk mengevaluasi pengaruh optimasi lama waktu *precooking* terhadap kualitas kimia dan ketengikan *ready-to-eat* empal gentong. Bahan yang digunakan pada penelitian ini adalah daging sapi bagian *longissimus dorsi* dengan ukuran 3 cm^3 dan kuah empal gentong. Perlakuan *precooking* dengan perebusan dilakukan pada suhu 90°C dengan variasi waktu P0 atau kontrol (10 menit), P1 (25 menit), P2 (40 menit), dan P3 (55 menit). Parameter yang diuji meliputi kualitas kimia (kadar air, kadar lemak, kadar protein, dan kadar kolagen) dan tingkat ketengikan (nilai TBARS/*Thiobarbituric Acid Reactive Substances*). Data penelitian ini dianalisis menggunakan Rancangan Acak Lengkap (RAL) pola searah. Data yang menunjukkan perbedaan signifikan ($P<0,05$) dilakukan uji lanjut menggunakan *Duncan's Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa lama waktu *precooking* tidak berpengaruh nyata terhadap kadar air, kadar protein, kadar lemak, kadar kolagen. Namun, lama waktu *precooking* berpengaruh nyata terhadap tingkat ketengikan. Hasil uji *Duncan's Multiple Range Test* (DMRT) menunjukkan bahwa nilai TBARS terendah diperoleh pada P2 (40 menit) sebesar 0,24 mg MDA/kg yang berbeda nyata dengan P0 (0,27 mg MDA/kg) dan P1 (0,26 mg MDA/kg), namun tidak berbeda nyata dengan P3 (0,26 mg MDA/kg). Berdasarkan hasil tersebut, dapat disimpulkan bahwa perlakuan *precooking* pada suhu 90°C selama 40 menit merupakan perlakuan terbaik yang menghasilkan nilai TBARS terendah sebagai indikator tingkat oksidasi lemak paling rendah pada produk *ready-to-eat* empal gentong.

(Kata kunci: Empal Gentong, *Precooking*, *Ready-to-Eat*, Kualitas Kimia, Ketengikan)

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OPTIMIZATION OF MEAT PRECOOKING METHODS ON THE CHEMICAL QUALITY AND RANCIDITY OF READY-TO-EAT EMPAL GENTONG

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ABSTRACT

This study aims to evaluate the effect of optimizing precooking time on the chemical quality and rancidity of ready-to-eat empal gentong. The materials used in this study were longissimus dorsi beef with a size of 3 cm^3 and empal gentong soup. Precooking with boiling was carried out at a temperature of 90°C with variations in time: P0 or control (10 minutes), P1 (25 minutes), P2 (40 minutes), and P3 (55 minutes). The parameters tested included chemical quality (water, protein, fat, and collagen content) and rancidity level (TBARS/Thiobarbituric Acid Reactive Substances value). The research data were analyzed using a one-way Completely Randomized Design (CRD). Data showing significant differences ($P<0,05$) were further tested using Duncan's Multiple Range Test (DMRT). The results of the study indicate that precooking time had no significant effect on moisture content, protein content, fat content, or collagen content. However, precooking time had a significant effect on rancidity levels. The results of Duncan's Multiple Range Test (DMRT) indicate that the lowest TBARS value was obtained in P2 (40 minutes) at 0,24 mg MDA/kg, which was significantly different from P0 (0,27 mg MDA/kg) and P1 (0,26 mg MDA/kg), but not significantly different from P3 (0,26 mg MDA/kg). Based on these results, it can be concluded that the precooking treatment at 90°C for 40 minutes is the optimal treatment, yielding the lowest TBARS value as an indicator of the lowest level of fat oxidation in the ready-to-eat empal gentong product.

(Key words: Empal Gentong, Precooking, Ready-to-Eat, Chemical Quality, Rancidity)