

INTISARI

Daging ayam *broiler* memiliki warna putih kekuningan, cerah, mengkilat dan bersih, tekstur elastis dan daging terasa lembab, namun mengandung lemak yang tinggi, sehingga diperlukan proses pengolahan menjadi produk yang dapat diterima dan sehat dalam bentuk *nugget*, daging ayam lebih praktis untuk dikonsumsi, namun penggorengan menyebabkan asam lemak semakin tinggi. Akibatnya *nugget* mudah teroksidasi menghasilkan radikal bebas yang tidak aman. Penelitian ini bertujuan menghasilkan *nugget* ayam dengan penambahan ekstrak dan bubuk kunyit dengan sifat kimia dan efek antioksidatif tinggi. Metode yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan variasi penambahan bubuk kunyit 0,2%, 0,4%, 0,6%, dan ekstrak 0,05%, 0,1%, 0,2%. Analisis yang dilakukan adalah aktivitas antioksidatif dengan metode ftc, asam lemak bebas (ALB), kadar lemak, air, dan nilai *thiobarbituric acid* (TBA). Hasil yang diperoleh dilakukan analisis varian (ANOVA) pada tingkat kepercayaan 95%. Apabila beda nyata dilanjutkan dengan uji *Duncan Multiple Range Test*. Hasil penelitian menunjukkan bahwa penambahan ekstrak dan bubuk kunyit dapat menghasilkan *nugget* ayam berpengaruh nyata terhadap nilai *thiobarbituric acid*, asam lemak bebas, nilai peroksidasi lemak, namun tidak berpengaruh pada kadar air dan lemak. Didapatkan hasil kadar air pada konsentrasi penambahan ekstrak 0,2% yaitu 56,87%, nilai *thiobarbituric acid* yaitu 0,44g *malonaldehid/kg*, asam lemak bebas 0,050% serta persentase peroksidasi lemak 46,55%.

Kata kunci: daging ayam *broiler*, oksidasi, *nugget*, bubuk kunyit.

**ANTIOXIDATIVE PROPERTIES AND LIPID DAMAGE LEVEL OF FRIED
NUGGET WITH ADDITION OF TURMERIC (*Curcuma domestica* Val.)
EXTRACTS AND POWDER**

ABSTRACT

Broiler chicken has a yellowish white, bright, shiny and clean, elastic texture and meat feels moist, but contains high fat, so that the processing is needed to become an acceptable and healthy product. In the form of nuggets, chicken meat is more practical to consume, influence frying pan causes fat to get higher. As a result, easily oxidized nuggets produce unsafe free radicals. This research produces chicken nuggets with the addition of turmeric extract and powder with chemical properties and antioxidative effects. The method used was a completely randomized design (CRD) with variations in the addition of 0.2%, 0.4%, 0.6% turmeric powder and extract 0.05%, 0.1%, 0.2%. The analysis carried out was an antioxidant activity with the FTC method, free fatty acid (ALB), fat, water, and thiobarbituric acid (TBA) values. The results obtained were analyzed by variance (ANOVA) at a 95% confidence level. If the real difference is followed by the Duncan Multiple Range Test. The results showed that the addition of turmeric extract and powder to produce chicken nuggets had a significant effect on the value of thiobarbituric acid, free fatty acid, fat peroxidation value, but had no effect on water and fat content. The following results obtained the water content in the concentration of addition of 0.2% extract which is 56.87%, thiobarbituric acid value of 0.44g malonaldehyde/kg, free fatty acid value 0.050% and has a percentage of 46 fat peroxidations 55%.

Keywords: broiler chicken, oxidation, nuggets, turmeric powder.