

**PENGARUH TEPUNG JAMUR TIRAM PUTIH (*Pleurotus Ostreatus*)
TERHADAP KARAKTERISTIK FISIK DAN MIKROSTRUKTUR
CHICKEN NUGGET**

**Figita Putri Melati
16/399125/PT/07243**

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh tepung jamur tiram putih terhadap karakteristik fisik dan mikrostruktur *chicken nugget*. Perlakuan penelitian ini yaitu menambah tepung jamur tiram putih dengan konsentrasi 0; 1; dan 2% (^w/_w) dari total adonan *chicken nugget*. Bahan yang digunakan pada pembuatan *chicken nugget* yaitu daging ayam broiler, bawang putih bubuk, pala, merica bubuk, ketumbar bubuk, garam, tepung jamur tiram, telur, tepung tapioka, tepung terigu, air es. Variabel yang diamati adalah karakteristik fisik yang meliputi pH, daya ikat air, keempukan dan mikrostruktur *chicken nugget*. Data karakteristik fisik dianalisis dengan analisis variansi Rancangan Acak Lengkap (RAL) pola searah dengan pengulangan sebanyak tiga kali, apabila hasilnya berbeda nyata maka dilanjutkan dengan uji *Duncan's New Multiple Ranges Test* (DMRT). Hasil analisis statistik menunjukkan bahwa tepung jamur tiram putih menaikkan nilai pH dan daya ikat air dan menurunkan nilai keempukan *chicken nugget*. Hasil analisis deskriptif mikrostruktur *chicken nugget* menunjukkan bahwa tepung jamur tiram putih menyebabkan perubahan keadaan struktur yang kurang padat, sedikit lebih padat dan padat, perubahan keadaan tekstur yang kurang kompak, sedikit lebih kompak, dan kompak, perubahan ketajaman warna dari warna merah yang jelas, kurang jelas dan sangat kurang jelas, perubahan keadaan rongga yaitu jumlah rongganya yang sedikit, sedikit lebih banyak dan banyak, dan perubahan ukuran rongganya yang besar, sedikit lebih kecil dan kecil. Penambahan tepung jamur tiram putih 2% menghasilkan *chicken nugget* dengan nilai karakteristik fisik dan mikrostruktur yang terbaik.

Kata kunci: *Chicken nugget*, Jamur Tiram Putih, Karakteristik Fisik, dan Mikrostruktur.

**EFFECT OF WHITE OYSTER MUSHROOM (*Pleurotus Ostreatus*)
FLOUR ON PHYSICAL AND MICROSTRUCTURE
CHARACTERISTICS OF CHICKEN NUGGET**

**Figita Putri Melati
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ABSTRACT

This study is aimed to understand the effect of white oyster mushroom flour addition on the physical characteristics and microstructure of chicken nuggets. The treatments given in this research were white oyster mushroom flour addition with a concentration of 0; 1; and 2% ($^w/w$) from the total dough chicken nugget. The ingredients used for chicken nuggets were broiler chicken meat, garlic powder, nutmeg, ground pepper, coriander powder, salt, oyster mushroom flour, eggs, tapioca flour, wheat flour, and ice water. The variables observed were physical characteristics including pH, water-bounding capacity, tenderness and microstructure of chicken nugget. Physical characteristics data were analyzed using one way completely randomized design (CRD) variance analysis with three times repetitions. If the results were significantly different, the analysis will be proceeded to the Duncan's New Multiple Ranges Test (DMRT). The result of statistical analysis showed that white oyster mushroom flour increased the pH value and water-bounding capacity and decreased the tenderness of chicken nugget. The result from the descriptive analysis of the chicken nuggets microstructure showed that white oyster mushroom flour caused structure to be less dense, slightly denser and denser, changed the texture conditions to be less compact, slightly more compact, and compact, changed the color sharpness from clear red, less clear and very less obvious, changed the cavity state from the small number of cavities, a little more and a lot more, and changed in the size of the cavities that were large, slightly smaller and smaller. The addition of 2% white oyster mushroom flour produced chicken nuggets with the best physical characteristics and microstructural value.

Keywords: Chicken nuggets, White Oyster Mushrooms, Physical Characteristics, and Microstructure.