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The effects of chicken incorporation towards the characteristics of pumpkin (Cucurbita Maxima) nugget / Norashikin Mustapha

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## THE EFFECTS OF CHICKEN INCORPORATION TOWARDS THE CHARACTERISTICS OF PUMPKIN (Cucurbita Maxima) NUGGET

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# RESEARCH PROJECT submitted in partial fulfilment of the requirements for The Degree of Bachelor of Food Science (Food Service and Nutrition)

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#### APPROVAL AND CERTIFICATION FORM

I hereby declare that the thesis is based on my original work except for quotations and citations, which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any degree at UMT or other institutions.

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Date:

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## THE EFFECTS OF CHICKEN INCORPORATION TOWARDS THE CHARACTERISTICS OF PUMPKIN (Cucurbita Maxima) NUGGET.

#### **ABSTRACT**

The effects of different level of minced chicken meat incorporation (0 %, 10%, 20%, 30%, 40%, 50%) on the physicochemical and sensory characteristics of pumpkin nuggets were studied. Two types of pumpkin nuggets were evaluated i.e. pumpkin nuggets with rind (WP) and pumpkin nugget without rind (NP). It was found that the moisture content, crude fibre content, oil uptake and fat content after frying decreased as the incorporation level of minced chicken increased (p<0.05), both for NP and WP nuggets. This study indicated that the oil uptake during frying was the main contributor of fat content in all nugget samples. It was found that diameter shrinkage, fat content before frying and firmness of both WP and NP nuggets increased with increasing level of minced chicken incorporation. Significant differences (p<0.05) were found in L, a, b values for different percentage of chicken meat in NP and WP. These differences were shown by the significant different in the colour scores. Lightness increased as percentage of chicken meat increase between (41.5 - 48.9). The incorporation of minced chicken meat increased the acceptance of pumpkin nuggets in terms of colour, aroma, oiliness, texture, taste, and overall acceptance (p<0.05). NP and WP nuggets incorporated with 50% minced chicken were the most preferable pumpkin nugget samples.

#### ABSTRAK

Kajian ini mengkaji kesan penambahan peratusan berbeza ayam kisar (0%,10%,20%,30%,40%,50%) terhadap fizikokimia dan penilaian sensory. Dua jenis nugget labu dikaji iaitu nugget labu dengan kulit(WP) dan nugget labu tanpa kulit(NP). Keputusan kajian menunjukkan penentuan kelembapan, kandungan serat, kandungan lemak selepas goreng, penyerapan minyak menurun apabila peratusan ayam kisar samakin menaik(p<0.05), bagi nuget NP dan WP. Kajian ini juga menunjukkan bahawapengecutan diameter ,kandungan lemak selepas goreng serta kekenyalan bagi nuget WP dan NP meningkat apabila peratusan ayam kisar meningkat. Warna bagi nugget labu NP dan WP juga menunukkan peningkatan di antara julat (38.16 – 48.86). bagi nilai a menunjukkan perbeaan significant tetapi bukan semua sample.Penambahan ayam kisar meningkatkan penerimaan nugget labu dari segi warna, aroma, minyak, tekstur, rasa dan penerimaan keseluruhan(p<0.05). Nuget NP dan WP yang ditambah 50% ayam kisar adalah nugat labu merupakan nugget labu yang paling diterima antara semua sample.