Physicochemical properties and sensory acceptance of pumpkin (Cucurbita maxima) noodle / Leong Main Choy.

Lihat Sebelah

PHYSICOCHEMICAL PROPERTIES AND SENSORY ACCEPTANCE OF PUMPKIN (*Cucurbita Maxima*) NOODLE

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RESEARCH PROJECT submitted impartial fulfilment of the requirements for the Degree of Bachelor of Food Science (Food Service and Nutrition)

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DECLARATION

I hereby declare that this research project is based on my original work except for quotations and summaries which have been duly acknowledged.

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Approved by,

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ABSTRACT

This research has been carried out to determine the physicochemical properties and sensory acceptance of the pumpkin noodle. The pumpkin noodles were prepared by using the wheat flours augmented with 10, 20, 30, 40 and 50 % of pumpkin flour. Addition of incremental amounts of pumpkin flour resulted in significant decreased the color profile (brightness, L, redness, a and yellowness, b) of the pumpkin noodles. In addition, the pumpkin noodles texture also decreased with increasing the pumpkin flour into noodle formulation. All the physical analysis results are significantly different ($p < 0.05$). For the chemical analysis, significant difference ($p < 0.05$) was shown on the moisture, fiber content and carotenoid content of the pumpkin noodles due to the increasing of pumpkin flour except the carbohydrate content of the pumpkin noodles which had not significant different. Besides, addition of pumpkin flour was decreased the shelf life of the noodles. However, sensory analysis shown that there has significant different ($p < 0.05$) for all the attributes such as color, smell, shape, firmness, moistness, softness, taste and overall acceptance for the sensory test for all formulations with different percentage of pumpkin flour. The formulation noodles with 10 % of pumpkin flour and 90 % of wheat flour showed significant different ($p < 0.05$) with the formulation noodles with 50 % of pumpkin and 50 % of wheat flour. This result showed that the increasing pumpkin flour into noodles formulation was affecting the score preference in noodles. Based on the physicochemical and sensory properties, noodles with the 10 % of pumpkin flour and 90 % of wheat flour are the most accepted by the consumers.

CIRI-CIRI FIZIKOKIMIA DAN PENERIMAAN SENSORI TERHADAP MEE LABU (*Cucurbita Maxima*)

ABSTRAK

Kajian ini dilakukan untuk menetukan ciri-ciri fizikokimia and menilai penerimaan sensori terhadap mee labu. Mee labu ini disediakan dengan menggunakan tepung gandum dengan penambahan 10 %, 20 %, 30 %, 40 % dan 50 % tepung labu dalam formulasi mee. Penambahan tepung labu telah menyebabkan pengurangan secara signifikan profil warna (kecerahan, L, kemerahan, a, kekuningan, b) bagi mee labu. Selain itu, penambahan tepung labu dalam formulasi mee juga menyebabkan pengurangan tekstur mee labu. Semua hasil analisis fizikal mempunyai perbezaan yang signifikan ($p < 0.05$). Bagi analisis kimia pula, terdapat perbezaan yang signifikan ($p < 0.05$) dalam kelembapan, kandungan fiber dan kandungan carotenoid dalam mee labu disebabkan oleh penambahan tepung labu kecuali kandungan karbohidrat yang tidak mempunyai perbezaan yang signifikan. Di samping itu, penambahan tepung labu dalam formulasi mee juga mengurangkan jangka hayat mee itu. Bagi analisis sensori telah menunjukkan perbezaan yang signifikan bagi semua atribut seperti warna, bau, bentuk, keteguhan, kelembapan, kelembutan, rasa dan penerimaan keseluruhan bagi semua formulasi mee dengan kuantiti tepung labu yang berbeza. Formulasi mee dengan 10 % tepung labu dan 90 % tepung gandum mempunyai perbezaan yang signifikan ($p < 0.05$) dengan formulasi mee yang 50 % tepung labu dan 50 % tepung gandum. Hasil ini menunjukkan bahawa penambahan tepung labu dengan kuantiti yang banyak akan menjejaskan penerimaan mee labu. Berdasarkan analisis fizikokimia dan penerimaan sensori, dapat disimpulkan bahawa formulasi mee labu dengan 10 % tepung labu dan 90 % tepung gandum lebih diterima oleh pengguna.