DEVELOPMENT OF COOKIES BY USING PUMPKIN FLOUR

FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE

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DEVELOPMENT OF COOKIES BY USING PUMPKIN FLOUR

By

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RESEARCH PROJECT submitted in partial fulfillment of the requirements for Degree of

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FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE

UNVERSITI MALAYSIA TERENGGANU

MENGABANG TELIPOT

2007

DECLARATION

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 is has not been previously or concurrent submitted for any degree at UMT or other institutions.

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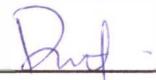
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Thank you.

ABSTRACT

This study reported on the effects of incorporating different level of pumpkin flour (0-50 %) and different types of pumpkin flour on the physicochemical and sensory properties of cookies. Three types of pumpkin flour were used which are whole pumpkin flour (WH), pumpkin flour without rind (W) and pumpkin flour with rind (S). It was found that fiber and moisture content influence the hardness of cookies. Fracturability result shows the decreasing value instead of the increasing level of pumpkin flour incorporation. L^* value of control cookies were higher than pumpkin cookies. For a^* value, there was increase as the level of pumpkin flour incorporation is increase. W cookies and WH cookies show the decreasing trend while S cookies shows increasing trend of b^* values. Proximate analysis was carried out on four cookies samples which are control cookies, 20 % W cookies, 20 % S cookies and 20 % WH cookies. The results of proximate analysis showed the formulated cookies that were incorporated with pumpkin flour contained more ash, protein, fiber and fat compared to control cookies. However, 20 % WH cookies contained more ash, fiber and fat compared with 20 % W cookies and 20 % S cookies. For the protein content, 20 % W cookies shows the highest value compared to other cookies samples. Besides that, sensory evaluations for the cookies were carried out. From the evaluation, result indicated that 10 % W cookies and 10 % S cookies have the highest acceptability among the panelists.

PENGHASILAN COOKIES DENGAN MENGGUNAKAN TEPUNG LABU

ABSTRAK

Kajian ini adalah mengenai kesan daripada penggabungan tepung labu dengan tahap yang berbeza (0-50 %) dan jenis tepung labu yang berbeza terhadap sifat fizikokimia dan deria cookies. Tiga jenis tepung labu yang digunakan adalah tepung sebiji labu (WH), tepung labu tidak berkulit (W) dan tepung labu berkulit (S). Didapati kandungan serat dan lembapan mempengaruhi kekerasan cookies. Keputusan kebolehpatahan menunjukkan penurunan nilai dengan penambahan tahap penggabungan tepung labu. Nilai L* bagi cookies kawalan adalah lebih tinggi berbanding cookies labu. Bagi nilai a*, ia semakin meningkat apabila tahap penggabungan tepung labu meningkat. Cookies W dan cookies WH menunjukkan trend penurunan manakala cookies S menunjukkan trend peningkatan bagi nilai b*. Analisis proksimat telah dijalankan terhadap empat sampel cookies iaitu cookies kawalan, cookies 20 % W, cookies 20 % S dan cookies 20 % WH. Keputusan analisis proksimat menunjukkan cookies formulasi yang digabung dengan tepung labu mengandungi lebih abu, protein, serat dan lemak berbanding dengan cookies kawalan. Walau bagaimanapun, cookies 20 % WH mengandungi lebih abu, serat dan lemak berbanding cookies 20 % W dan cookies 20 % S. Bagi kandungan protein, cookies 20 % W menunjukkan nilai yang tertinggi berbanding sampel cookies yang lain. Selain itu, penilaian deria bagi cookies telah dilakukan. Daripada penilaian tersebut, keputusan menunjukkan bahawa cookies 10 % W dan cookies 10 % S mendapat penerimaan tertinggi di kalangan panel.