KUALA TERENGGANU'S CONSUMERS ACCEPTANCE OF *NASI LEMAK* (RICE COOKED IN COCONUT MILK) MADE WITH PARTIAL SUBSTITUTION OF SOYMILK

CHUA PZE CHII

FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE

UNIVERSITI MALAYSIA TERENGGANU

2012

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Lihat Sebelah

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By

Chua Pze Chiu

Uk 17467

Research Report submitted in partial fulfillment of

the requirements for the degree of

Bachelor of Food Science (Food Service and Nutrition)

DEPARTMENT OF FOOD SCIENCE

FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE

UNIVERSITY MALAYSIA TERENGGANU

2012

ENDORSEMENT

The project report entitled **Kuala Terengganu's consumers acceptance of *nasi lemak* (rice cooked in coconut milk) made with partial substitution of soymilk** by **Chua Pze Chiu**, Matric No **UK 17467** has been reviewed and corrections have been made according to the recommendations by examiners. This report is submitted to the Department of Food Science in partial fulfillment of the requirement of the degree of Bachelor of Food Science (Food Service and Nutrition), Faculty of Agrotechnology and Food Science, Universiti Malaysia Terengganu.

AZIZ YUSOF
Pensyarah
Jabatan Sains Makanan
Fakulti Agroteknologi dan Sains Makanan

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(En. Aziz bin Yusof)

Main Supervisor

Date: 16/2/2012

DECLARATION

I hereby declare that the work in this thesis is my own except
for quotations and summaries which have been duly
acknowledged.

Signature   :   _(signature)_

Name   :   Chua Pze Chiu

Matric No   :   UK 17467

Date   :   15.02.2012

ACKNOWLEDGEMENT

ABSTRACT

Soymilk is a source of good protein with low calories and fats. It has potential to be a good substitute or partial substitute for coconut milk. Besides, there is a need to improve current formulation of *nasi lemak*, and at the same time, know the public acceptance towards the new formulation of *nasi lemak*. As a result, this study was carried out to gauge consumers acceptance of *nasi lemak* made with partial substitution of soymilk in Kuala Terengganu. Meanwhile, the other objectives included were: to determine acceptance of *nasi lemak* made with partial substitution of soymilk against demographic background (gender, race, age, educational level, occupation, and personal monthly income), to determine purchase intent of *nasi lemak* made with partial substitution of soymilk, to determine relationship between nutritional knowledge and purchase intent of *nasi lemak* made with partial substitution of soymilk, and finally to compare food-related lifestyle regarding food consumption pattern among nasi lemak's consumers. In order to test the reliability and validity of the questionnaires, pilot test was carried out which involved 35 respondents by using test-retest technique. Following that, real data collection was done by using quota sampling method to represent the real population of Kuala Terengganu. Convenience sampling technique was used to select 100 respondents and three formulations of nasi lemak which involved sample A (100% coconut milk), sample B (100% soymilk), and sample C (75% coconut milk and 25% soymilk) were tested in three public areas around Kuala Terengganu city centre through face-to-face interview. Results in terms of acceptance showed that there was significant difference ($p<0.05$) among the samples in term of appearance ($p=0.000$), color ($p=0.000$), aroma ($p=0.000$), texture ($p=0.000$), and taste ($p=0.000$). For overall acceptance, Sample A made with 100% coconut milk scored the highest acceptance (mean=7.12 ± 1.444), followed by Sample C made with 75% coconut milk and 25% soymilk (mean=6.79 ± 1.707), and finally Sample B made with 100% soymilk (mean= 5.95 ± 1.822). In term of purchase intent, there was an increased of positive response (yes) from 83% (without prior knowledge of partial substitution of soymilk) to 95% after the respondents been informed about the presence of soymilk. Results from the acceptance of *nasi lemak* made with partial substitution of soymilk (sample C) and demographic factors showed no significant difference ($p>0.05$) and weak relationship between acceptance of sample c and all the demographic factors, which included gender ($r=-0.089$), age ($r=-0.036$), race ($r=0.106$), occupation ($r=-0.030$), educational level ($r=-0.094$), and personal monthly income ($r=0.066$). Besides, there is no significant relationship ($p=0.905$, $r=-0.012$) between nutritional knowledge and purchase intent of *nasi lemak* after knowing the presence of soymilk. Under food-related lifestyle regarding food consumption pattern of *nasi lemak*'s consumer, taste-related statement received the highest mean score (mean=4.030 ± 0.9040), followed by tradition-related (mean=3.480 ± 1.1235), health-related (mean=3.445 ± 0.9317) and finally convenience-related (mean=1.840 ± 0.9070).

ABSTRAK

Susu soya merupakan sumber protein yang baik dengan kalori dan kandungan lemak yang rendah. Dengan ini, susu soya menpunyai potensi untuk digunakan sebagai pengganti sepenuhnya atau pengganti sebahagian untuk santan. Pada masa kini, formulasi nasi lemak perlulah dibaharui disamping mengetahui penerimaan masyarakat terhadap formulasi baru nasi lemak tersebut. Oleh itu, kajian ini telah dijalankan untuk mengetahui penerimaan masyarakat terhadap penggantian sebahagian daripada santan menggunakan susu soya di Kuala Terengganu. Objektif lain kajian ini turut merangkumi penentuan penerimaan nasi lemak yang menggunakan penggantian sebahagian susu soya dengan latar belakang demografik responden (jantina, kaum, umur, tahap pelajaran, pekerjaan, dan gaji bulanan individu), penentuan reaksi pembelian nasi lemak yang menggunakan penggantian sebahagian susu soya, penentuan hubungan antara pengetahuan pemakanan dengan reaksi pembelian nasi lemak yang menggunakan penggantian sebahagian susu soya, dan akhirnya menbandingkan gaya hidup berkaitan dengan pemilihan makanan. Untuk menguji kebolehpercayaan dan kesahan borang soal selidik, *pilot test* telah dijalankan melibatkan 35 responden dengan menggunakan teknik *test-retest*. Selepas itu, penggumpulan data sebenar telah dijalankan menggunakan cara persampelan kuota bertujuan untuk mewakili populasi sebenar Kuala Terengganu. Teknik persampelan mudah telah digunakan dalam pemilihan 100 responden dan ujirasa yang melibatkan tiga formulasi nasi lemak iaitu sampel A (100% santan), sampel B (100% susu soya), dan sampel C (75% santan dan 25% susu soya) telah dijalankan di empat lokasi di sekitar pusat bandar Kuala Terengganu melalui teknik temu duga secara bersemuka. Hasil kajian menunjukkan terdapat perbezaan signifikan ($p<0.05$) di dalam sample bagi unsur rupa keseluruhan ($p=0.000$), warna ($p=0.000$), bau ($p=0.000$), tekstur ($p=0.000$), dan rasa ($p=0.000$). Bagi penerimaan keseluruhan, sampel A (100% santan) menperoleh skor penerimaan tertinggi (min=7.12 ± 1.444), diikuti oleh sampel C (75% santan dan 25% susu soya) (min=6.79 ± 1.707) dan akhirnya sampel B (100% susu soya) (min= 5.95 ± 1.822). Bagi reaksi pembelian, terdapat peningkatan dalam peratus pembelian daripada 83% sebelum mengetahui kandungan formulasi kepada 95% setelah mengetahui kewujudan susu soya. Hasil kajian bagi penentuan penerimaan nasi lemak yang menggunakan penggantian sebahagian susu soya dengan latar belakang demografik responden pula menunjukkan tiada perbezaan signifikan ($p>0.05$) dan hubungan lemah bagi kesemua latar belakang demografik iaitu jantina ($r=-0.089$), kaum ($r=0.106$), umur ($r=-0.036$), tahap pelajaran ($r=-0.094$), pekerjaan ($r=-0.030$), dan gaji bulanan individu ($r=0.066$). Selain itu, hasil kajian mendapati tiada hubungan signifikan ($p=0.905$, $r=-0.012$) antara pengetahuan pemakanan dengan pembelian nasi lemak setelah mengetahui kewujudan susu soya. Dari segi pemilihan makanan pula, pemilihan berdasarkan rasa menperolehi skor tertinggi (min=4.030 ± 0.9040), diikuti oleh tradisi (min=3.480 ± 1.1235), kesihatan (min=3.445 ± 0.9317), dan akhirnya mudah didapati (min=1.840 ± 0.9070).