

The Attitudes of Malaysians Towards Soybean Products

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Key words: Attitudes; Malaysians; soybean products.

RINGKASAN

Pengajian ini telah dijalankan untuk menentukan sikap orang-orang Malaysia terhadap hasil keluaran kacang soya. Matlamat penyelidikan ini adalah untuk mencari jawapan: "Bagaimana pendapat orang-orang Malaysia, diwakili oleh sampel rambang kakitangan Kerajaan terhadap penerimaan lebih banyak lagi hasil keluaran soya bagi makanan harian mereka?" Satu tinjauan sikap telah dijalankan ke atas 230 orang kakitangan Kerajaan di Kuala Lumpur. Tinjauan ini menggunakan teknik penilaian "Likert" yang mengandungi 9 kenyataan. Dari jumlah 230 salinan yang diedarkan, terdapat sebanyak 211 salinan dikembalikan. Keputusan yang berkaitan dengan matlamat pengajian ini telah dibincangkan. Penemuan utama menunjukkan sikap yang menggalakkan terhadap hasil keluaran kacang soya. Sikap dan tabiat terhadap makanan orang-orang Malaysia kini telah dikenal pasti. Data menunjukkan bahawa mereka mempunyai sikap positif terhadap hasil keluaran kacang soya.

SUMMARY

This study was carried out to determine the attitudes of Malaysians towards soybean products. The goal established for this study was: "How do Malaysians, represented by a random sample of civil employees, feel towards having more soybean products in their daily diet?" An attitude survey was administered to 230 civil employees in Kuala Lumpur. The survey instrument using the Likert Rating Techniques, had 9 statements. Of the 230 copies sent, 211 were returned. The results pertaining to the highlights of the study are discussed. The major findings reveal significant attitudes towards soybean products. Present attitudes and food habits have been identified. The data shows that Malaysians as represented by civil employees have positive attitudes towards soybean products.

INTRODUCTION

This investigative study is geared towards finding out the attitudes of Malaysians, (as measured by their responses to the questionnaires,) on the possibility of acquiring a greater percentage of their needed protein in the form of soybean dishes.

Soybean has high protein content (30-46%) and this protein, when properly processed, is of good nutritional quality (Liener, 1969). Its content is twice that of meat, four times that of eggs, and twelve times that of milk (Cordy, 1976). Glycinin, the protein in soybean, is high in biological quality (resembles animal protein more closely than any other vegetable protein).

Presently, Malaysia imports beef from countries like U.S.A., Australia, New Zealand and others to supplement the local beef production.

In the light of the growing population in Malaysia and the growing need for imported beef to supplement local production, the question "can Malaysians accept more soybean products in their foods" is important but has yet to be answered. Since soybean products are nutritious and beef is in shortage here, the writer was prompted to conduct this survey to determine whether soybean products are acceptable to Malaysians.

MATERIALS AND METHODS.

The method used for collecting the information was through a questionnaire survey. The procedure used for carrying out this survey was as follows:—

1. Selection of the subjects
2. Survey instruments
3. Data information

Selection of the Subjects

The population was represented by nine randomly selected government offices in Kuala Lumpur. They were chosen because it was assumed that these offices, by nature of appointment, reflect the composition of the various ethnic groups in the country. Government offices are deemed to be better places to conduct this survey because the multi-racial nature of the country's population is found here. It is also an accessible section of the population whereby the researcher can obtain a wider range of different socio-economic statuses, that is from the "blue-collar" employees to the top government executives, plus a wide range of age groups - from 18 - 55.

Two hundred and thirty copies of the questionnaire on the goal (Appendix A) together with the demographic questionnaire (Appendix B) were distributed in order to assess the racial composition of the country that is 53% ethnic Malays, 35% ethnic Chinese, 11% ethnic Indians and 1% others.

The list of staff from each of the nine Government Departments was selected by stratified sampling in order to cover the various subgroups based on age, sex and income.

Survey Instruments

The survey instrument was in the form of a questionnaire (Appendix A). The questionnaire or instrument consisted of a series of 9 statements to which an individual was asked to respond. Previous studies have indicated that the "Likert format instruments" or summated-type rating scales, are efficient methods of collecting information of this nature. Each category of the Likert Scale (Illustration 1) was assigned a point value; five points represented "strongly agree", four points for "agree", three points for "undecided", two points for "disagree", and one point for "strongly disagree".

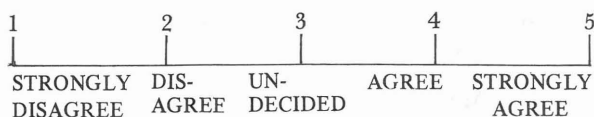


Fig. 1. Likert Scale

The author chose to use the closed-formed type of response format to statements for the instrument because it facilitates tabulation and

analysis of data without undue distortion. A set of 9 statements were carefully developed in an attempt to obtain relevant data to the need/goal of this study.

The survey questionnaire was preceded by a page for collecting demographic information about the respondent. It basically asked for information on the age group, the sex, race, religion, occupation, income bracket and marital status. Every care was taken to ensure that only the necessary and relevant information was asked in this section (Appendix B).

Data Decisions

Information from the returned questionnaire pertaining to the goal of this study was extracted, compiled and then fed into the computer. Guided by the purpose of this study which is: "The Attitudes of Malaysian towards Soybean Products", the following decisions were adopted:-

1. Data from all the respondents were analysed as a group.
2. Each item of the questionnaire was analysed by the computer to determine the mean and the standard deviation according to the "Likert" rating scales.

In the analysis of data, all responses of "strongly agree" and "agree" were grouped under "agreement", and all "strongly disagree" and "disagree" were grouped under "disagreement".

RESULTS AND DISCUSSIONS

Of the 211 returned copies of the questionnaire, 200 were selected to reflect the racial composition of the country. The rate of return was 91.7%.

Information obtained from the responses to the questionnaire is contained in Table 1 under the heading of the goal of the study. The responses reflect the "Attitudes towards Soybean Products in Malaysia".

The attitude towards Statement 1 was determined to be one of "agreement". Of the respondents 81.5% agreed to the statement. Added support for this statement comes from Statement 4, which had 80% "agreement".

To test the reliability of the responses to Statement 1, the response rate of Statement 6 was used. Statement 6 had 71.5% "disagreement"; since Statement 6 is the negative version of State-

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ment 1 and it has a high "disagreement" percentage, the responses to Statement 1 may be viewed as reliable.

Similarly, Statement 5 had 61% "agreement" responses. The reason, in the opinion of the researcher, for the high rate of "undecided" responses (21.5%) may be due to the dilemma of the respondents to either "agree" or "disagree". Soybean products in its raw, uncooked form is really not that attractive; therefore it can be considered "unappetising". On the other hand, the respondents may like soybean products by nature of their upbringing; therefore, any food of our preference may be considered "appetising" psychologically.

Statement 7, the negative version to Statement 5 had 65.5% "disagreement" responses. Judging from the three responses of "agree", "disagree" and "undecided" of Statements 5 and 7, the data for "agree" and "disagree" and the "undecided" seems to tally rather closely. In this connection, responses to Statements 5 and 7 can be said to be reliable.

Statement 9 had a 62.5% positive response. This high "undecided" rate (23.5%) can only be assumed to be due to the respondents being unsure as to whether they do like the texture of soybean products or not.

Liking foods may not necessarily be due to its texture. It can be due to its taste and its nutritive values. Statement 3, the opposite version of Statement 9, had 10.5% "agreement". Since the responses to both statements seem to tally, both can be considered reliable.

As for Statement 2, 47.5% "agreed". The 25.5% who disagreed may be from the ethnic group Indian, whose religion forbids the consumption of beef. It may also include the vegetarians, who by practice, do not consume any meat. In which case, neither of the hypothesis could be tested by the data of this survey. The 26.5% "undecided" respondents may be unsure of themselves as to whether they like the combined taste or they neither like nor dislike the combined product.

Statement 8, the opposite version of Statement 2, had 65.5% "disagreement". This statement is used to test the reliability of Statement 2. There, the disagreement rate seems to

be slightly higher than the agreement rate of Statement 2. The researcher believes that the reason behind this rather "bizarre" response may be due to the way Statement 8, which is: "I do not care for beef/soybean products", is worded.

The word "care" (as in American English) may be construed differently by the respondents who are "English" (British) educated. The responses may have been different had the word "liked" replaced "care".

CONCLUSION

In this study, the findings revealed a significant number of attitudes towards soybean products. Present attitudes and food habits were identified. Reasons as to why Malaysians desired soybean products were exposed.

From the data collected concerning attitudes towards soybean products, the conclusion may be drawn that the more urban educated Malaysians of ages 18 — 55 as represented by civil employees indicate a bias for soybean products.

Since soybean products have high nutritive values, are inexpensive, and are readily accepted by Malaysians, the findings of this study are particularly interesting and encouraging. Soybean products can be readily incorporated into most meals whenever circumstances and situation permit. In doing so, it is hoped that Malaysians can set an example to other countries that besides meats, soybean products also contain nutritive values.

ACKNOWLEDGEMENTS

The writer wishes to express her deep appreciation to Tuan Haji Nik Abdul Rashid, Director of I.T.M. for his encouragement and kind permission to publish this article and to Dr. Haji Mohd. Nassir Lanjong, Dean of Academic Affairs, for his valuable advice and encouragement. To the Head of School, Encik Mohd. Rosly Md. Selamat, the writer extends her thanks.

TABLE 1
How do Malaysians, represented by a random sample of civil employees,
feel toward having soybean products in their daily diet?

Item No.	Item	Res- ponse	% of Total	Agree	%	Un- decided	%	Dis- agree	%	Mean	Standard Dviation
1.	Soybean products should be used more often in the future	200	100	163	81.5	27	13.5	10	5	4.03	0.77
2.	I like combined beef/soybean products	199	99.5	95	47.5	53	26.5	51	25.5	3.19	1.04
3.	I dislike the texture of soybean products	199	99.5	21	10.5	26	13	152	76	2.25	0.84
4.	I like the taste of soybean products	200	100	160	80	22	11	18	9	3.82	0.75
5.	Soybean products look appetizing	200	100	122	61	43	21.5	35	17.5	3.50	0.91
6.	It is not important to increase our use of soybean products in the future	199	99.5	21	10.5	35	17.5	143	71.5	2.21	0.89
7.	Soybean products do not look appetizing	198	99	35	17.5	32	16	131	65.5	2.39	0.93
8.	I do not care for beef/soybean products	200	100	49	24.5	20	10	131	65.5	2.46	1.09
9.	I like the texture of soybean products	198	98	125	62.5	47	23.5	26	13	3.55	0.83

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APPENDIX A

A Survey to Determine the Attitude Toward Soybean Products
In Malaysia

Directions:

Please indicate your agreement or disagreement against each statement below. If you strongly agree with the statement, circle SA; if you agree with it, circle A; if you disagree; circle D; and if you strongly disagree; circle SD. Please feel free to add and rate any additional items that are not listed but which you consider important.

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. Soybean products should be used more often in the future.	SD	D	U	A	SA
2. I like combined beef/soybeen products.	SD	D	U	A	SA
3. I dislike the texture of soybean products	SD	D	U	A	SA
4. I like the taste of soybean products.	SD	D	U	A	SA
5. Soybean products look appetizing.	SD	D	U	A	SA
6. It is not important to increase our use of soybean products in the future.	SD	D	U	A	SA
7. Soybean products do not look appetizing.	SD	D	U	A	SA
8. I do not care for beef/soybean products.	SD	D	U	A	SA
9. I like the texture of soybean products.	SD	D	U	A	SA

APPENDIX B

Demographic Questionnaire.

1. *Age group:*
 - Below 20 ()
 - 20-29 ()
 - 30-39 ()
 - 40-49 ()
 - Abrove 50 ()
2. *Sex*
 - Male ()
 - Female ()
3. *Race:*
 - Malay ()
 - Chinese ()
 - Indian ()
 - Other ()
4. *Religion:*
 - Islam ()
 - Christianity ()
 - Buddhism ()
 - Hinduism ()
 - Others ()
5. *Occupation:* _____
6. How Long have you been in Government Service? _____ (months/years)*
7. *Income bracket:*
 - Below \$500 ()
 - \$501 - \$1000 ()
 - \$1001 - \$1500 ()
 - \$1500 - \$2000 ()
 - \$2001 - \$3000 ()
 - \$3001 - \$4000 ()
 - Above \$4001 ()
8. *Marital status:* *Single/Married

*Kindly delete where inapplicable.

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(Received 31 December, 1983)