The Attitudes of Malaysians Towards Soybean Products

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Key words: Attitudes; Malaysians; 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”.

![Likert Scale](image)

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 Statement...
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.

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

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

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.

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

APPENDIX B
Demographic Questionnaire.

1. Age group:
   - Below 20
   - 20-29
   - 30-39
   - 40-49
   - Above 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
   - $1501 - $2000
   - $2001 - $3000
   - $3001 - $4000
   - Above $4001

8. Marital status: *Single/Married
*Kindly delete where inapplicable.

REFERENCES


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