

# Comparison of Food Choice Motives between Malay Husbands and Wives in an Urban Community

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## ABSTRACT

The main objective of this study was to determine the motives underlying the selection of foods between husbands and wives in an urban community. This cross-sectional study was carried out in Bandar Baru Bangi, Selangor, Malaysia among 150 married couples aged 20 and above, who voluntarily agreed to participate and were not on any special diet. Data were collected using the Food Choice Questionnaire (FCQ) which measured the health-related and non health-related factor that influence people's food choices. It consisted of 36 items designed to assess the reported importance of nine factors: *health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity, and ethical concern*. In this study, the FCQ was adapted and a new factor, *religion* (religious guidelines), was included. Demographic characteristics including age, occupation, education, household income and household size were also collected. Data were analysed using SPSS version 16. Results showed that 40.7% of husbands (mean age= 43.33 ± 11.16 years) and 55.3% of wives (mean age= 41.28 ± 10.93 years) perceived themselves as the main food shopper while 12.0% of the husbands and 85.3% of the wives perceived themselves as the main meal planner. Husbands rated religion as the most prominent factor in food choice motives with a mean average rating of 4.56 ± 0.59 on a 5-point rating scale, followed by health and convenience factor. Meanwhile, the wives rated health as the most essential factor with mean average rating of 4.49 ± 0.58, followed by religion and convenience factor. Sensory appeal, ethical concerns and familiarity were rated as the bottom three factors of food choice motives among these two groups. Price of foods was not considered as an important factor in making food choices for the subjects in this study. In conclusion, the husbands and wives of this urban community rated religion, health and convenience as the three most important food choice motives in food selection.

**Keywords:** Food choice motives, Malay husbands, Malay wives, urban community

## INTRODUCTION

In general, women tend to choose healthier diet compared to men because of their desire to control their body weight, their concern

about health and also due to motives of ethical concerns (Pollard, Steptoe & Wardle, 1998). On the other hand, men usually prefer to have diets that have fewer low fat foods, fewer high fibre foods and fewer fruits and

vegetables compared to women (Schafer *et al.*, 1999a; Wardle *et al.*, 2004) and diets that may show 'masculinity' (Turrell, 1997). There is extensive literature (Turrell, 1997; Roos *et al.*, 1998; Fagerli & Wandel, 1999; Louk *et al.*, 1999; Liebman *et al.*, 2003; Wardle *et al.*, 2004) showing that men and women's food choices differ between one another. Therefore it is important to know the food choices particularly of husbands and wives in a household, as it has an impact on the nutritional status of other family members too (Patrick & Nicklas, 2005; McIntosh *et al.*, 2006). To determine the differences of food choices between husbands and wives, Louk *et al.* (1999) carried out a study on 151 white married couples, part of the larger Family Relationships and Nutrition Study, living in the same household and who were selected randomly. In that study, Louk *et al.* (1999) found out that wives' diets were not a reflection of the husbands' diet which concluded that their diets differ with one another even though they were living in the same household.

Food choice decisions in families are embedded in the role of household food provision that involves food shopping and preparation (Brown, 2006). Food choice is important because it may depict the motive for the usual purchase of a food or preparation of a meal. Food decision making may influence the diet intake of all the family members. Therefore, it is important to assess the food choices of husbands and wives as their decisions has an influence on other family members' diet quality especially the children (Schafer *et al.*, 1999b).

Many of the studies done on food and families had focused on household labour, examining shopping and cooking rather than food choice activities (Bove, Sobal & Rauschenbach, 2003) especially that involving marital partners (Schafer *et al.*, 1999b). Moreover, studies regarding food choices are very scarce in Malaysia, especially those involving husbands and wives of the same household.

This study seeks to address the following questions:

1. Between husbands and wives, who is most involved in making food choices in this selected urban community?
2. What are the motives underlying the selection of foods between husbands and wives in this study area?
3. Does socio-economic status influence the motives underlying the selection of foods of husbands and wives in this study?

## METHODOLOGY

This cross-sectional study was carried out in Bandar Baru Bangi, Selangor among 150 married couples aged 20 and above, who voluntarily agreed to participate in the study and were not on any special diet at the time of study. Sample size was determined based on G\*Power 3, a statistical power analysis program for the social, behavioral, and biomedical sciences (Faul *et al.*, 2007). Resulting from the G\*Power 3 analysis, the minimum sample size for hypothesis testing for these two groups (husbands and wives) was found to be 105 in each group.

For this study, 150 married couples were recruited. In order to ensure that every household has equal chances of being selected, systematic selection was utilised. That is, in each street within the selected housing area, houses with odd numbers were selected. Attempts were made to reach each odd numbered house as otherwise the response rate will be low as some of the respondents were not at home during weekends; moreover, most were at work during weekdays while some even worked on weekends too. Those who voluntarily agreed to participate were each given a set of questionnaire and were interviewed face-to-face either by the researcher or trained enumerators. Most of the interviews were conducted during the weekends.

Ethical approval for the study was granted by the Medical Research Ethical

Committee of the Faculty of Medicine and Health Sciences (FMHS), Universiti Putra Malaysia. The questionnaire included demographic and socio-economic characteristics of the respondents.

Motives underlying the selection of foods between husbands and wives were determined using the Food Choice Questionnaire (FCQ) which was developed by Steptoe, Pollard & Wardle(1995). The FCQ measures the health-related and non health-related factors that influence people’s dietary food choices.

It consisted of 36 items designed to assess the reported importance of nine factors: *health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity, and ethical concern*. In this study, the FCQ was adapted and a new factor, *religion* (religious guidelines), was included to suit the cultural values of the subjects as shown in Table 1.

This scale assessed the degree to which the respondents placed importance on motives in making food-related decisions with a 5-point Likert-type scale, ranging from ‘1 = very not important’ to ‘5 = very important’.

Scores on items contributing to each scale were computed by averaging the points so that scale scores were between 1 and 5. For example:

The highest possible score for *health* was 30 and lowest possible score was 6. The score

Factor 1 – <i>Health</i>	Likert-scale
9. Is high in fiber	5
10. Is nutritious	4
24. Contains a lot of vitamins and minerals	5
29. Is high in protein	3
32. Is good for my skin /teeth/hair/nails etc	3
31. Keeps me healthy	5

Score 25

ranged from 6-30 points. They were then averaged between 1 and 5 scale; ‘very not important’ scored 6-10 points, ‘not important’ scored 11-15 points, ‘less important’ scored 16-20 points, ‘important’ scored 21-25 points and ‘very important’ scored 26-30 points. As for the example above, *health* which scored 25 points was rated as ‘important’.

The internal consistency of the Food Choice Questionnaire (FCQ) scale and test-retest reliability is good (Steptoe *et al.*, 1995). The internal consistency of the FCQ factors in this study was good, with Cronbach’s  $\alpha$  scores = 0.90.

## RESULTS

### Socio-demographic background of respondents

This cross-sectional study was carried out in Bandar Baru Bangi among 150 Malay married couples aged 20 and above, who voluntarily agreed to participate and were not on any special diet. The mean age was  $43.33 \pm 11.16$  years for husbands and  $41.28 \pm 10.93$  years for wives.

The majority of the husbands had received tertiary education (71.9%) and predominantly belonged to the professional groups based on occupation (30.0%), as shown in Table 2. As for wives, the majority had also received tertiary education (60.0%) but most of them were housewives/not working (40.0%). The mean number of individuals per household was  $4.79 \pm 1.86$  with a majority having a household size of 3 to 5 persons (57.7%), and a household monthly income of more than RM3500 (54%). The descriptive characteristics of the respondents are summarised and shown in Table 2.

### Involvement of husbands and wives in making food choices

Involvement in food choice was assessed by looking at ‘who is the main food shopper?’ and ‘who is the main meal planner?’ As can

**Table 1.** Food Choice Questionnaire

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*It is important to me that the food I eat on a typical day:*

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## Factor 1 – Health

- 9. Is high in fibre
- 10. Is nutritious
- 24. Contains a lot of vitamins and minerals
- 29. Is high in protein
- 32. Is good for my skin/teeth/hair/nails ets
- 31. Keeps me healthy

## Factor 2 – Mood

- 13. Cheers me up
- 16. Helps me cope with life
- 26. Keeps me awake
- 28. Helps me relax
- 33. Makes me feel good
- 36. Helps me cope with life

## Factor 3 – Convenience

- 1. Is easy to prepare
- 11. Is easily available in shops/supermarkets
- 15. Can be cooked very simply
- 30. Takes no time to prepare
- 37. Can be bought in shops close to where I live/work

## Factor 4 – Sensory appeal

- 4. Tastes good
- 14. Smells nice
- 18. Has a pleasant structure
- 27. Look nice

## Factor 5 – Natural content

- 2. Contains no additives
- 5. Contains natural ingredients
- 25. Contains no artificial ingredients

## Factor 6 – Price

- 6. Is not expensive
- 12. Is cheap
- 38. Is good value for money

## Factor 7 – Weight control

- 3. Is low in calories
- 7. Is low in fat
- 17. Helps me control my weight

## Factor 8 – Familiarity

- 8. Is familiar
- 23. Is like the food I ate when I was a child
- 35. Is what I usually eat

## Factor 9 – Ethical concern

- 19. Is packaged in an environmentally friendly way
- 20. Comes from the country I approve of politically
- 34. Has the country of origin clearly marked

## Factor 10 – Religion

- 21. Has certification from the government
  - 22. Permissible by religion
- 

Cronbach  $\alpha$  =0.90

Item numbers refer to the order in which statements were presented in the final items of Food Choice Questionnaire factor after being factor analysed with varimax rotation (Steptoe, Pollard & Wardle 1995).

**Table 2.** Socio-demographic background of the respondents

Characteristics	Husbands (n=150)		Wives (n=150)	
	n (%)	Mean ± SD	n (%)	Mean ± SD
Age of respondents		43.33 ± 11.16		41.28 ± 10.93
20 – 29 Years	16 (10.7)		25 (16.7)	
30 – 39 Years	41 (27.3)		41 (27.3)	
40 – 49 Years	45 (30.0)		48 (32.0)	
50 – 59 Years	48 (32.0)		36 (24.0)	
Educational level of respondents				
Primary education	4 (2.7)		2 (1.3)	
Secondary education	38 (25.3)		58 (38.7)	
Tertiary education and above	108 (71.9)		90 (60.0)	
Occupation of respondents*				
Managers	12 (8.0)		1 (0.7)	
Professionals	45 (30.0)		33 (22.0)	
Technician & Associate Professionals	29 (19.3)		4 (2.7)	
Clerical support workers	7 (4.7)		19 (12.7)	
Service & sales workers	29 (19.3)		17 (11.3)	
Machine operator and assembler	4 (2.7)		6 (4.0)	
Elementary occupations	2 (1.3)		2 (1.3)	
Pensioners	20 (13.3)		8 (5.3)	
Not working/housewives	2 (1.3)		60 (40.0)	
Household size**		4.79 ± 1.86		
< 3	31 (10.3)		-	
3 – 5	173 (57.7)		-	
6 – 8	85 (28.3)		-	
> 8	11 (3.7)		-	
Household income (RM)**		5746.84 ± 4779.86		
Less than RM1500	19 (6.3)		-	
RM1500 - RM3500	119 (39.7)		-	
More than RM3500	162 (54.0)		-	

\* Classification of occupation was based on Malaysia Standard Classification of Occupations 2008 (MASCO-08)

\*\* Household income and size were based on means of all respondents (husbands and wives are in the same households)

**Table 3.** Husbands' and wives' perceptions of the main food shopper

Main food shopper	Husbands n (%)	Wives n (%)
Myself	61 (40.7)	83 (55.3)
Spouse	77 (51.3)	55 (36.7)
Me and my spouse	12 (8.0)	12 (8.0)

**Table 4.** Husbands and wives perception of the main meal planner

<i>Main meal planner</i>	<i>Husbands n (%)</i>	<i>Wives n (%)</i>
Myself	18 (12.0)	128 (85.3)
Spouse	123 (82.0)	14 (9.3)
Me and my spouse	9 (6.0)	8 (5.3)

been seen in Table 3, 40.7% (n = 61) husbands perceived themselves as the main food shopper while 36.7% (n = 55) of wives perceived their husbands as the main food shopper. On the other hand, 55.3% of wives perceived themselves as the main food shopper while 51.3% of the husbands perceived their wives as the main food shopper. Both husbands and wives perceived equally (8.0%) that both of them do food shopping together.

Table 4 shows that 12.0% of the husbands perceived themselves as the main meal planner for the household, compared to 9.3% of wives who perceived their husbands as the main meal planner. Meanwhile, 85.3% of wives perceived themselves as the main meal planner compared to 82.0% of husbands who perceived their wives as the main meal planner. Six percent of husbands reported that both husbands and wives did the meal planning while 5.3% of wives reported the same.

Thus, while the majority of wives were the main food shopper or meal planner, husbands do help in shopping for foods and a few also contribute in meal planning.

### **Motives for food selection of subjects**

Husbands and wives are required to rate on a 5-point scale the motives for making food-related decisions. Mean average ratings on a 5-point rating scale of food choice motives between husbands and wives are presented in Table 5. Scores on each scale were computed by averaging unweighted ratings for individual items; hence the score could

range from a minimum of 1 to a maximum of 5. It is apparent from Table 5 that the highest mean average rating of husbands' motive for food choice is religion (religious guidelines) ( $M = 4.56 \pm 0.59$ ) followed by the health factor ( $M = 4.43 \pm 0.55$ ) and convenience factor ( $M = 4.17 \pm 0.76$ ). These three factors were rated higher compared to the other factors which were mood ( $M = 4.07 \pm 0.72$ ), price ( $M = 3.84 \pm 0.69$ ), natural content ( $M = 3.87 \pm 0.64$ ), weight control ( $M = 3.77 \pm 0.73$ ), sensory appeal ( $M = 3.62 \pm 0.62$ ), ethical concern ( $M = 3.43 \pm 0.78$ ) and familiarity ( $M = 3.07 \pm 0.77$ ).

Meanwhile, for wives, the health factor ( $M = 4.49 \pm 0.54$ ) has the highest mean average ratings of food choice motives followed by religion (religious guidelines) factor ( $M = 4.49 \pm 0.58$ ) and convenience factor ( $M = 4.33 \pm 0.64$ ) as shown in Table 5. Interestingly, the top three highest mean average ratings of food choice motives of wives were similar to those of their husbands.

By looking at the ranking of husbands' and wives' motives in food choices as shown in Table 6, religion, health and convenience factors were rated as the most prominent motives underlying the selection of foods between husbands and wives. It can also be seen that the bottom three factors of food choice motives among these two groups were similar, namely the sensory appeal, ethical concern and familiarity factors.

Thus the subjects in this study do not let price control their choice in making food-related decisions. Instead healthy foods, foods that are easily available, convenient

**Table 5.** Mean average ratings of food choice motives by husbands and wives

Factor	Husbands		Wives	
	Mean	Standard deviation	Mean	Standard deviation
Religion (Religious Guidelines)	4.56	0.59	4.49	0.58
Health	4.43	0.55	4.49	0.54
Convenience	4.17	0.76	4.33	0.64
Mood	4.07	0.72	4.06	0.69
Price	3.84	0.69	3.81	0.67
Natural content	3.87	0.64	3.79	0.69
Weight control	3.77	0.73	3.87	0.67
Sensory appeal	3.62	0.62	3.68	0.63
Ethical concern	3.43	0.78	3.33	0.74
Familiarity	3.07	0.77	3.08	0.66

**Table 6.** Ranking of husbands' and wives' motives in food choices

Food choice ranking	Husbands	Wives
1	Religion	Health
2	Health	Religion
3	Convenience*	Convenience*
4	Mood	Mood
5	Natural content	Weight control
6	Price	Price
7	Weight control	Natural content
8	Sensory appeal	Sensory appeal
9	Ethical concern	Ethical concern
10	Familiarity	Familiarity

\*significant  $p < 0.05$ ,  $t = -2.047$ .

to prepare and which are 'halal' are the deciding factors. These are in line with the needs and lifestyle of working, urban, educated Malay Muslim couples.

**Relationship of socio-economic status and motives of food choices of subjects**

Pearson Product Moment Correlation Coefficient was computed to assess the relationship between motives of food choices (religion, health, convenience, mood, natural content, price, weight control, sensory appeal, ethical concern and familiarity) and socio-economic status (education and

household income) of subjects. Meanwhile, Kendall's Coefficient of Rank Correlation Tau was employed to assess the relationship between motives of food choices and socio-economic status (occupational level) since it involved continuous and ordinal variables.

For husbands, there was a positive correlation between education and convenience factor,  $r = 0.182$ ,  $n = 150$ ,  $p = 0.026$  as shown in Table 7. Overall, there was a weak, positive correlation between education and convenience factor among husbands. Higher educational attainment correlated with higher motives of con-

**Table 7.** Pearson Correlation Coefficient (husbands, n = 150)

<i>Factors</i>	<i>Education</i>	<i>Occupation</i>	<i>Household income</i>
Religion	0.015	-0.070	-0.055
Health	0.024	-0.030	-0.003
Convenience	<b>0.182*</b>	-0.005	<b>-0.261**</b>
Mood	-0.153	-0.031	<b>-0.184*</b>
Natural content	0.072	-0.060	0.067
Price	-0.082	-0.007	<b>-0.258**</b>
Weight control	0.111	-0.141	-0.072
Sensory appeal	-0.064	0.018	-0.135
Ethical concern	0.001	-0.037	-0.077
Familiarity	-0.099	0.017	-0.158

\*\* Correlation is significant at 0.01 level (2-tailed).

\* Correlation is significant at 0.05 level (2-tailed).

venience factor in food selection of husbands.

There was a negative correlation between household income and convenience factor,  $r = -0.261$ ,  $n = 150$ ,  $p = 0.001$  among husbands. So, there was a weak, negative correlation between household income and convenience factor among husbands. Higher household income was correlated with lower motives of convenience factor in food selection of husbands.

Again, there was a negative correlation between household income and mood factor,  $r = -0.258$ ,  $n = 150$ ,  $p = 0.001$  among husbands. Therefore, there was a weak, negative correlation between household income and mood factor among husbands. Higher household income was correlated with lower motives of mood factor in food selection of husbands.

Once more, there was a negative correlation between household income and price factor,  $r = -0.258$ ,  $n = 150$ ,  $p = 0.001$  among husbands. There was a weak, negative correlation between household income and price factor among husbands. Higher household income was correlated with lower motives of price factor in food selection of husbands.

For wives, there was a negative correlation between household income and convenience factor,  $r = -0.167$ ,  $n = 150$ ,  $p =$

0.041 as shown in Table 8. Overall, there was a weak, negative correlation between household income and convenience factor among wives. Higher household income was correlated with lower motives of convenience factor in food selection of wives.

There was a negative correlation between occupation and familiarity,  $r = -0.218$ ,  $n = 150$ ,  $p = 0.001$  among wives. So, there was a weak, negative correlation between occupation and familiarity factor among wives. A higher occupational level was correlated with lower motives of familiarity factor in food selection of wives.

## DISCUSSION

### Involvement of husbands and wives in making food choices

Wives were predominantly the main food shopper and meal planner in this study. This was in agreement with many previous studies conducted (Harnack *et al.*, 1998; Lake *et al.*, 2006). However, it is interesting to note that nearly half of the husbands (40.7%) perceived themselves as the main food shopper. This was similar to finding from Laitinen, Hogastrom & Rasanen (1997) study carried out in Finland which showed that approximately 40% of the husbands were involved in food shopping. Husbands were reported to be mainly involved in food

**Table 8.** Pearson Correlation Coefficient (wives, n = 150)

<i>Factors</i>	<i>Education</i>	<i>Occupation</i>	<i>Household income</i>
Religion	-.028	-.031	.085
Health	-.136	.076	-.140
Convenience	-.083	-.029	-.167*
Mood	-.130	-.056	-.124
Natural content	.084	-.044	.028
Price	-.129	-.080	.020
Weight control	-.015	.086	-.048
Sensory appeal	-.153	-.003	-.115
Ethical concern	-.122	-.111	-.047
Familiarity	-.132	-.218**	-.096

\*\* Correlation is significant at 0.01 level (2-tailed).

\* Correlation is significant at 0.05 level (2-tailed).

shopping compared to other household chores. A study by Harnack and colleagues (1998) showed that 36% of husbands in the US were doing food purchasing compared to other household chores; 27% helped in cooking and 23% in meal planning. Similar results have been reported in another Finland study (Laitinen *et al.*, 1997). As men receive a better education and have an egalitarian attitude towards household chores (Brown & Miller, 2002), the more they were willing to do household chores to assist their wives. Some studies also showed that when husbands' income was lower than that of the wives (Laitinen *et al.*, 1997; Harnack *et al.*, 1998), the wives have a prestigious career (Laitinen *et al.*, 1997), or they were in their early years of marriage (Harnack *et al.*, 1998), the more the husbands were involved in household chores, particularly food purchasing.

In this study, wives who perceived their husbands as the main food shopper were slightly lower (36.7%) than that perceived by their husbands (40.7%). Different perceptions between husbands and wives on the main roles they played in terms of household chores in this study were also found in a study carried out by Laitinen and colleagues (1997). Laitinen *et al.* (1997) showed that husbands and wives in his study had reported differently of one

another's role in doing household chores. He suggested that the reasons may be due to the respondents tending to exaggerate their own contributions in doing household tasks and it may also be due to different concepts of definitions for each household task.

Wives still hold the main responsibility as the meal planner in this sample of study as perceived by more than 80% of the respondents, either by themselves or by their husbands. This result was similar to the findings of many other studies (Laitinen *et al.*, 1997; Kemmer, Anderson & Marshall, 1998; Caraher *et al.*, 1999). Wives acted in this role as they aimed to nourish their husbands and children through dietary intake (Kemmer *et al.*, 1998) by providing a healthy diet for the family and thus they assumed to be more aware of the quality of foods purchased than their spouses (Lake *et al.*, 2006); moreover, they usually have the skills to prepare foods better compared to their husbands (Caraher *et al.*, 1999).

Interestingly, there were a small percentage of husbands and wives in this study that shared household chores. Some studies found that those who shared household tasks were most likely to be those in the early phase of their marriage (Kemmer *et al.*, 1998) and childless families (Laitinen *et al.*, 1997).

### Motives for food selection of subjects

Apparently they were no differences between motives underlying food choices between husbands and wives for the top three motives, which were religion, health and convenience. Religion (religious guidelines) was rated as the most important motive for choosing the food in this study as all of the respondents were Muslims and were restricted to food guidelines as stated in Islam. They placed their first priority in selecting foods based on 'Halal' foods rather than other food motives. Lindeman & Väänänen (2000) stated that in certain countries or regions, religion may override other food motives while in other countries, religious motive was rated as not important. In Finland (Lindeman & Väänänen, 2000) and Russia (Honkanen & Frewer, 2009), religion was ranked as the least important motive which was contrary to this study.

Husbands and wives in this study also rated *health* as one of the prominent motives. This finding echoed an earlier study conducted in Malaysia on ethnic Chinese, where health was found to be the most important motive rated by the respondents (Prescott *et al.*, 2002). Therefore, regardless of ethnicity, health is an important motive underlying food choices in Malaysia. However, in some countries, health was surpassed by other motives. For example, in Russia, health was ranked in the 6<sup>th</sup> place preceded by sensory, availability, product naturalness, price, and mood motives (Honkanen & Frewer, 2009). The reason behind this might be related to the general public's perceptions of their own diets where the majority were falsely optimistic that their diets were already adequately healthy. This would make it difficult to expect them to alter their diets, or to consider healthy eating as an important motive in food selection (Kearney *et al.*, 2000).

Convenience was one of the important motives which came after health in this sample of study. This was in line with Steptoe's finding among the population of

Great Britain. Steptoe *et al.*, (1995) suggested that if convenience and health were rated as the most important motives, then education and information about healthy food that is readily available and easy to prepare might be more acceptable than messages emphasising health alone.

Surprisingly, price was not considered as the most important motive in this study sample. It was surpassed by religion, health, convenience, mood and natural content or weight control motives. This finding is similar to another study conducted in Malaysia where price was rated as the least important over other motives (Prescott *et al.*, 2002). However, this was different from Steptoe's finding (1995), where price was an important determinant motive of food choices in Great Britain. It was vital in other countries too, including Russia (Honkanen & Frewer, 2009), Japan (Prescott *et al.*, 2002), New Zealand (Prescott *et al.*, 2002) and Belgium (Eertmans *et al.*, 2005).

In relation to weight control, it is noteworthy that the difference between husbands and wives was only in the 5<sup>th</sup> and 6<sup>th</sup> places of food choice ranking. Wives rated weight control as the 5<sup>th</sup> most important motive and placed natural content in the 6<sup>th</sup> place while the findings were vice versa with the husbands. Wives were found to be more concerned about weight control motives than the husbands in previous study findings (Honkanen & Frewer, 2009). In a study conducted by Honkanen & Frewer (2009), the results showed that the majority of respondents who rated *natural content* as an important motive were pensioners and unemployed people.

The bottom three food choice motives were similar for both husbands and wives in this study which rated sensory appeal, ethnical concerns and familiarity as the lesser important motives. The findings were contrary to studies in Great Britain (Steptoe *et al.*, 1995), Russia (Honkanen & Frewer, 2009), New Zealand (Prescott *et al.*, 2002) and Belgium (Eertmans *et al.*, 2005) where sensory appeal was ranked as the most

important motive underlying food choices. Honkanen & Frewer (2009) state that sensory motives are an important factor in Europe specifically. However, in Asian countries, including Japan, Taiwan and Malaysia, sensory appeal was not one of the most important motives rated (Prescott *et al.*, 2002). This was in agreement with the finding of this study.

Ethical concerns and familiarity were rated as least important in this study which were found to be similar to findings in New Zealand (Prescott *et al.*, 2002), Great Britain (Stephoe *et al.*, 1995), Taiwan (Prescott *et al.*, 2002) and in an earlier study conducted in Malaysia (Prescott *et al.*, 2002). However, in Japan, ethical concerns were found to be relatively important (Prescott *et al.*, 2002).

### **Relationship of socio-economic status and motives of food choices of subjects**

Several aspects in relation to socio-economic status have an influence on the motives underlying food choices between husbands and wives in this study. The results suggest that having a higher level of education is associated with higher motives of the convenience factor in food selection of husbands. Well-educated persons were more likely to be associated with convenience factor due to time constraints (Lappalainen *et al.*, 1997). This was in agreement with Furst *et al.*, (1996) who stated that time was an important component of convenience. Guthrie, Lin & Frazao(2002) highlighted those using convenience foods, often foods of lower nutritional value, may be associated with the feeling of 'rushing for time'.

Higher household income was found to correlate less with convenience, mood and price factor in food selection of husbands in this study. Devine *et al.*, (2006) highlighted that with better income, one can make available a broader range of family and work adaptive strategies that can have an impact on motives of food choices, because of access to more facilities or household help. Having more household help may outweigh the

convenience motive. Price motive was also less related with higher household incomes, both with husbands and wives. In other words, price was the least important motive underlying food choices in the higher income groups. The results of this study confirmed a similar relationship regarding price motive and household income. This is consistent with findings from other studies which found the existence of a negative correlation between household income and price motive (Furst *et al.*, 1996; Kearney *et al.*, 2000).

There was also an inverse relationship between occupation and familiarity factor among wives. A higher level of occupation (for example; professional worker which include academician, researcher, lawyer etc.) was correlated with lower motives of the familiarity factor in food selection of wives. A higher level of occupation may relate to having a higher income. Having higher income was observed to have a significant correlation with lower motive of familiarity in a study done by Steptoe and colleagues (1995). Steptoe *et al.*, (1995) suggested that as income increases, people may have the power to expose themselves to new foods and were less bound to buy only foods that they were familiar with.

### **STUDY LIMITATION**

This study was a small scale study which consisted of Malay Muslim respondents only. Therefore, it does not represent the entire population of Malaysia which comprises Malays, Chinese, Indians and other groups with different religions.

### **CONCLUSION**

Among the motives influencing food choices of husbands and wives in this study were religion (religious guidelines), health and convenience factors which were rated as the most prominent underlying motives of food choices. The food choice motives depended mostly on several aspects of socio-economic status; namely, educational level, household

income level and occupational level. Understanding the prominent determinants of motives underlying the food choice of husbands and wives in this urban community may provide a better insight to the health professionals, researchers and those who share the same interest. A reasonable approach to tackle this targeted population could be by developing targeted intervention programmes towards achieving a healthier food intake. Further research might explore the motives underlying the food choices of the entire population in Malaysia or by clustering groups either by different socio-economic status or demographic characteristics with a much larger sample size.

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