



Let's Begin A New Life, Consumers' Response Towards Healthy Lifestyles: Do Our Higher Education Students Care?

Hasnizam Shaari
Suhaila Abdul Hanan

ABSTRACT

Issues on food and health are frequently making the headlines. Stories about the state of the nation's diet and the food industry's role in providing healthy choices are regularly in the news. Recent study reported that Malaysia has the most number of fat people in the Asian region, exceeding that in many developed countries, including Germany and France (MySoN, 2006). Despite the seriousness of the problem, very limited study was conducted to understand consumers' attitude towards healthy lifestyle especially in the context of Malaysia and to university students as a future asset of human capital. Therefore, this study aims to investigate the university students' attitude towards healthy lifestyle by examining their knowledge toward healthy eating and exercising as a major indicator of practicing healthy lifestyle. A pilot study of 94 students of Universiti Utara Malaysia showed that there were differences between gender, race, and year of study affects the knowledge on of nutrition and exercise benefits. The finding also showed that there was still a loophole in managing healthy lifestyle among university students to ensure that the production of a healthy human capital for the nation.

Keywords: *Consumer behavior, health behavior, healthy lifestyle*

Introduction

Issues on food and health are frequently making the headlines. Stories about the state of the nation's diet and the food industry's role in providing healthy choices are regularly in the news. Recently, Nestle (Malaysia) Berhad had announced their commitment to produce food and beverage tag for a more wholesome image-that of nutrition, health and wellness group (Nursiah Nurani, 2007). This repositioning of Nestle Malaysia took place in line with today's consumers who are more sophisticated and health-conscious. Nestle will be offering new products that are low in fat content, with less sugar, less sodium and no added MSG (monosodium glutamate). Bloch (1984) defined a healthy lifestyle as an orientation toward the prevention of health problems and the maximization of personal wellbeing.

Problem Statement and Objectives of the Study

Recent study reported that Malaysia had the most number of fat people in the Asian region, exceeding that in many developed countries, including Germany and France (Malaysian Shape of the Nation (MySoN, 2006). According to that report, 54 % of our adult population was either obese or overweight which showed a 24 % increase as compared to 10 years ago. In addition, 48 % of our adult male and 62 % of our adult female are fat. On the other hand, study of ten years ago of National Morbidity and Health Survey 1996-1997 (Ministry of Health Malaysia, 1997), revealed that almost 6 percent of Malaysian children encountered an obese and fat problem. The statistics increased by one case for every 136 students (1990) to one case for every 18 students (1997). The statistics was clear enough to show how serious the problem was to our country. However, the statistics gave evidence of about ten years ago. Thus, what is the current state? Has it gotten worst? If the respondents of the past study were aged between 7 to 12 years, by now they are around 19 to 25 years old. Maybe some of them are in the universities.

Therefore, this study aims to analyze how higher education students practice healthy lifestyle

in their campus life. The study of university students is important because students have the ability to influence disproportionately the health of the population, through both personal choices and possibly in a professional capacity as future policy and decision-makers (Steward-Brown et al., 2002). In addition, it is equally important to consider the immediate dangers of unhealthy or risk-taking behavior while still at the university (Keeling, 2001). Specifically, the objective of the study is to determine students' response toward healthy lifestyle based on demographics variables such as gender, ethnicity and number of years in university.

Significant and Scope of the Study

This study is important to that permit marketers and decision-maker in understanding the level of healthy lifestyle behavior in the local higher education institutes. The understanding of whether these students are practicing healthy or unhealthy lifestyle or not is important as it would show a holistic view of the strength of the future human capital. Students are the nation's valuable assets, who will lead the country and world class organization in a future. This also in line with the government policies to produce high quality graduates who are free from the shadows of 3K which refer to 'Kuliah' (lecture), "Kantin" (canteen), and "Kolej" (college) (Noah, 2006). Healthy lifestyle refers to as to caring for own health, involvement in exercises and co-curriculum activities which are importance to ensure a balance human capital; physically and spiritually. In addition, university's stakeholders would not be interested in students who are involved in unhealthy lifestyle such as bad eating habit, physically unhealthy, bad physical appearance, stress, drug addicted and smoking due to academic pressures and being away from home (Dunne & Somerset, 2004). Therefore, this study is important to permit decision-maker to identify any weaknesses and take any preventive or corrective action to produce high quality students.

Healthy lifestyle practices discussed earlier was too broad. The definition of healthy lifestyle supposes will cover any action of consumers to maximize personal wellbeing and prevent of health problem. Thus, include washing hand before and after meals, flossing after meals, applying sunscreen etc (Kraft & Goodell, 1993). However, for the purpose of the study, the researchers will focus on major healthy lifestyle indicator i.e., healthy eating and physical exercises.

Since this pilot study focuses on students, only few demographics variable will be considered namely gender, ethnicity and years in university. Other variables such as age and income will not be discussed in this report as students have homogenous characteristics in age and level of income.

Literature Review

In Malaysia, healthy lifestyle awareness campaign had seriously started in 1991. The Ministry of Health Malaysia (MHM) started a continuous campaign to change a Malaysian attitude toward health from its campaign such as 'Food Cleanliness (1993), 'Eat for Health (1997)', and 'Long-life Healthy (2003-2007)'. Recently, MHM has also encouraged non-government organizations (NGOs) and professional health association to apply for funds to promote healthy living (Anonymous, 2007).

Although, these campaigns are targeted to change consumers' attitude toward health, there is a noticeable lack of recent study towards the understanding or investigating health issues among higher education students. Previous studies in Malaysia focused on general health issues and more on clinical aspect of health (Tee, 1999). The authors focus on the development and growth of nutrition among Malaysian. Recent study by Shamsudin and Abdul Haris (2000) was on family influence towards smoking habit among secondary school children.

Previous studies on healthy lifestyle mostly focused on healthy eating behavior. Healthy eating was also measured by various instrument such as the intake of balance diet (Seaman et al., 1997; Ralph et al., 1996; Goldsmith et al., 1995), meat eating behavior (Armitstead, 1998; Ralph et al., 1996), snack food and soft drink (Divine & Lepisto, 2005; Schroder & McEachern, 2005), alcohol consumption (Divine & Lepisto, 2005; Von Ah et al., 2004), sugar, salt, fat and preservative rates (Misra & Aguillon, 2001; Maddock et al., 1999; Armitstead, 1998; Harden,

1994), and fruits and vegetables intake (Maddock et al., 1999; Goode et al., 1995). In addition, smoking habit was also considered by various authors to measure one's healthy or unhealthy (Dennis & Hicks, 2006; Dunne & Somerset, 2004; Ralph et al., 1996).

On the other hand, few researchers focused on physical exercise to measure healthy lifestyle (Divine & Lepisto, 2005; Misra & Aguillon, 2001; Ralph et al., 1996; Goode et al., 1995).

Healthy lifestyle

CDCA (Centre for Disease Control of America, 2005) indicated that 71.8 percent of their populations took low fat and calories food in order to reduce or maintain body weight. However, almost 60 percent of adults were obese or overweight and only 14 percent were on a weight loss diet program. Based on that report, it was also reported that 22.6 percent of the population consumed the recommended five daily serving of fruit and vegetables.

Men are prone towards physical exercises as opposed to women. On the other hand, women are more conscious on balance diet such as reducing the consumption of sugar, salt and fat. Women believed that focusing on balance diet shall reduce body weight (CDCA, 2005; Divine & Lepisto, 2005; Misra & Aguillon, 2001; Ralph et al., 1996).

Shiu et al. (2004) and Huston and Finke (2003) suggested that older consumers were more concerned about healthy diet. Maquire (1999) indicated that a growing number of elder consumers of 55 years and above are in health care club. On the other hand, CDCA (2005) reported that population of teenagers were more engaged in regular exercise to lose weight as compared to the older population. The elder were considered to consume more fruit and vegetables as recommended as compared to doing physical exercises. In addition, Divine and Lepisto (2005) suggested that the older tend to consider healthy lifestyle than youngsters. However, Misra and Aguillon (2001) stated that there was no significant relationship between age and healthy eating. Age only showed negative relationship with the frequency of physical exercises done by the respondents. Interestingly, the authors also suggested that respondents who had healthier eating habits were also more active just as those who exercised would also eat healthy meals.

Even though there was no significant different between men and women regards to physical exercise, Ralph et al. (1996) suggested that there was a tendency for men to do physical exercise frequently as compared to women. On the other hand, CDCA (2005) survey indicated that 75 percent of the population exercised frequently, but only 26.2 percent reported exercised as recommended by health organization (i.e. five time a week for 30 minutes). The surveys also stated that almost 61 percent of the population was using exercise to help them either to lose or maintain their weight.

Recent study by Dennis and Hicks (2006) on university students found data on students' understanding of physical health, psychological health, current lifestyle, life pressure in college, and their attitudes towards health. This study has provided a baseline of subgroup with high risk which should have also received a great emphasis from the authority. This argument was supported by various studies that students were facing substantial negative behavior changes during the first three years of college (Lau et al., 1990). Unhealthy eating and poor sleeping behavior, smoking and drinking habits typically took place during the college years (Sparling & Snow, 2002; Taylor, 1999; Morgan, 1997; Naquin & Gilbert, 1996; McCormack, 1996).

Research Methodology

Questionnaire Surveys

The questionnaire consisted of section A, the general information of consumer profiles; Section B comprised of attitude toward healthy lifestyle and its influences. Most of the questions in section B, mainly in 5-point Likert Scale. Category and dichotomous scale were widely used especially in Section A.

in Section A.

Selection of Sample

For the purpose of the pilot test, 100 students were selected conveniently from various faculties. The rationalities of selecting the sample are as follows:

Firstly, the health care at the university levels is important. This is because students are the nation's human capital who will lead country in the future. It is also in line with the Prime Minister of Malaysia's vision which is to produce high quality human capital. The 'creation' of quality human capital will probably not solely be measured by academic excellent yet also focusing on developing excellent graduate physically, emotionally and spiritually. The study of university students is also important because students have the ability to influence disproportionately the health of the population, through both personal choices and possibly in a professional capacity as future policy and decision-makers (Steward-Brown et al., 2002).

Secondly, the university students were selected due to their dramatic changes of lifestyle during college. University life has been seen as a challenging stage for students to survive and develop. Since they are now moving away parental support to independence, every decision is counted. This included their attitude toward health and their ability to cope with student life (Keeling, 2001; Steward-Brown et al., 2000; Diebold et al., 2000). There were also evidences that health care and eating behavior of an individual started changing during college due to various pressures such as peers influences, time management, academic stress and financial difficulties (Dennis & Hicks, 2006; Dunne & Somerset, 2004). Basically, these pressures do face the majority during the study years.

Finally, university students were selected because of it was importance for the decision-maker and the authorities to understand and predict any unhealthy lifestyle and risk taking behavior (if any) among students while in the university. This will permit the authorities to take corrective action to ensure the vision of producing and protecting high quality of the nation's human capital.

Development of Measurement

Most of the measurement used in this study were either adopted from previous studies or developed specifically for analysis. A measurement of healthy eating was developed by combining the scale of Divine & Lepisto (2005); Armitstead (1998); Ralph et al. (1996) and Goode et al., (1995). While for the physical activities, the measurement was adapted from the study of Ralph et al., (1996) and Kaplan (1991).

Statistical Test

For the purpose of the study, only descriptive statistic was used. For an example, frequency analysis was used to provide the descriptive information such as frequency of smoking, exercising, food labels reading, etc. Cross-tabulation was also conducted to examine the phenomenon i.e. students response toward healthy lifestyle.

Findings and Discussion

Table 1 summarized the profiles of respondents.

Do the students care?

The above question can be answered by the following discussion.

Practicing and commitment to healthy lifestyle. When the respondents were asked whether they have heard about healthy lifestyles or not, almost 98 % of male and female said 'yes'. A very small percentage i.e. 5 % for male and 2.7% for female stated that they had never heard it before.

Interestingly, when they were asked whether they were practicing healthy lifestyles, there was no difference between male and female. Both score for 'yes' and 'no' answers were fairly consistence with 65 % male and 63.5% female practicing healthy lifestyle and 35 % male and 36.5 % female said 'no'. However, the 'no' answer was quite high and still questionable and should be properly studied. To confirm this it was further discussed in the next section, whether the percentage really reflect the real phenomenon. By ethnicity, Indian showed a high commitment in practicing healthy lifestyle with 100 % of the respondents currently practicing it. It then was followed by the Malays 73.2 % and the Chinese 45 %.

Awareness towards nutrition and healthy food. Based on the top two boxes score (good and very good), almost 26 % of female agreed that they had a good knowledge in food nutrition. Surprisingly, 50 % of male respondents stated that they had a good knowledge in food nutrition. In comparison, Indian respondents showed a high percentage on knowledge in nutrition with 66.7 % either had a good or very good knowledge. The rank was followed by the Malays with 28.6 % and Chinese 25.8%. However, the Malays and Chinese showed a high percentage on fair knowledge in nutrition with almost 71 % as compared to Indians with only 33.3 % had a fair knowledge in food nutrition. The assumption of whether the higher the number of year in study the higher the commitment of them to practicing healthy lifestyle seemed to be unsupported. The result showed no high differential in percentage of their knowledge toward nutrition regarding the number of year in study (Year 1 (28%), Year 2 (36%), Year 3 (35%) and Year 4 (21%)).

When respondents were asked to rate their frequency of choosing healthy food (from always, frequent, never), the score was most likely to be dominated by female where 23% said they always choose healthy food and 77 % were frequently choosing it. On the other hand, 25 % males always choose healthy food, 60% frequently choose and 15 % of them do not care about choosing healthy or unhealthy food. By race, the Indian still showed a high score in choosing a healthy food with 66.7% always and 33.3% frequently choose. Only 28.6% of the Malays stated that they always choose healthy food, 69.6% frequently choose and 1.8% of them do not care about their food selection. The Chinese respondents' showed that only 12.9 % always choose healthy food, 83.9 % frequent and 3.2 % do not care.

Table 1: Respondent's Profiles

Items	Percentage
Gender	
Male	21.3
Female	78.7
No of family members	
1 to 3	7.4
4 to 6	55.3
7 to 9	31.9
Ten and above	5.3
Age	
Below 18	3.2
18 to 25	94.7
26 to 35	1.1
36 to 45	1.1
Above 45	0
Race	
Malay	59.6
Chinese	33
Indian	3.2
Others	4.3
Religious	
Islam	61.7
Buddha	33
Hindu	3.2
Christian	2.1
Study Admission	
Diploma	23.4
STPM	68.8
STAM	3.2
Matriculation	10.6
Year of study	
Year 1	34
Year 2	11.7
Year 3	39.4
Year 4	14.9
Year 5	0
Family Income	
Below RM500	12.8
RM501- RM1000	29.8
RM1001- RM1500	24.5
RM1501- RM2000	12.8
RM2000 and above	20.2
Financial sources	
Family members	18.1
Personal savings	1.1
Scholarship/loan	78.7
Part time job	2.1
Monthly expenditure	
Below RM100	6.4
RM101 – RM200	28.7
RM201 – RM300	41.5
RM301 – RM400	16
Above RM400	7.4

In order to confirm their awareness towards healthy food, one question was asked pertaining to their frequency of reading the food labels before making a purchasing decision of related foods. Based on the findings, it was consistent with the first question on their awareness i.e. the high percentage went to the female with 40.5% always read the nutrition facts before purchase and 55.4 % frequently read the labels. Interestingly, about 4.1 % of the female never read the labels although they almost 100 % confirmed to choose healthy food. On the other hand, only 30 % of male always read, 60% frequently read and 10 % never read the labels prior to the purchase. However, by race, the result was rather consistent with their awareness stated before.

In detail students' preference and frequencies of reading food labels prior to purchase can be shown as on Table 2.

Commitment on physical activities. It was assumed that men are more active than female in practicing continuous and consistent physical activities. Based on the study, it showed that the presumption was true. 55% male and only 21 % female stated that they consistently did physical activities. Surprisingly, about 45 % male did not practice consistent physical activities. The findings also showed that the India were more consistent in practicing physical exercise as compared to Malays and Chinese (66.7 %, 26.8 % and 29 % respectively). With regard to number of year of study in university, surprisingly, Year 1 and Year 3 students were more consistent in doing the physical exercise as compared to other students (31.2% and 29.7%). Year 2 students was found to be not committed to exercise consistently with only 18.2 % said 'yes' and 81.8 % said 'no'.

Students also were asked to specify their involvement in sports as opposed to general physical activities. In general, the findings showed that male were more active in sports (football, squash, hockey, etc) as compared to the female. About 35 % of male were involved in more than three times a week of sports and only 9.5 % of females do. As low as 5 % of male said that they were not involved in any sports and almost 65 % female admitted that they were not involved in sports at all.

Consistent with commitment to physical exercise, Indian respondents also showed a high percentage of involvement in sports (66.7 %) followed by Malays (17.9 %) and Chinese (6.5%). Unfortunately, the Malays also showed a high percentage in passive involvement in sports with about 62.5 % not involved in sports at all. In general, there was no high differential between number of year studied and involvement in sports.

Besides doing physical activities and sports, students were also asked on their activities at leisure times. Watching television or movies were on the first rank for female, followed by reading, sleeping and go for outing/shopping/window shopping. On the other hand, for male, the top rank was watching television/movies, followed by outing/shopping/window shopping, sleeping and reading. The findings also stated that Malays enjoy reading during leisure time, while Chinese and Indian prefer to watch television/movies.

In conclusion, this study is consistent with previous study by CDCA (2005), Divine and Lepisto (2005), Misra and Aguilion (2001) and Ralph et al. (1996) which stated that male were more prone towards physical exercise and the female were more conscious on balance diet and healthy food. This study also suggested that there was a difference between races with the Indians being more concerned about healthy lifestyle as compared to Malays and Chinese. This may be true when considering the unique culture of different ethnicity in Malaysia itself. Indians consume more spice and herb, Malays food are rich in tasty with high fat (such as nasi lemak, roti canai, etc) and Chinese consume more vegetables in their daily diet. With regard to number of years in university, there were a little difference between Year 1, 2, 3 and 4 students. The findings of almost 82 % of Year 2 students were not involved in physical activities was quite surprising and questionable. Was it due to heavy work overload? Or was it just a matter of poor time management that limited them to be involved in physical activities. These findings were consistent with study of Lau et al. (1990) that students were facing substantial negative behavior changes during first three years in college.

Limitation and Recommendation

The study at hand was just a pilot study to understand the general idea of health behavior among higher education students. This study has limitation to that the number of sample and the selection of sample itself. The study at hand cannot be generalized into understanding the health behavior of the general public as the sample in this study was quite homogeneous in nature. However, this study has lead us to understanding the basic idea of what really happened after investing huge amount of money specifically to promote healthy lifestyle among Malaysians. Future research should focus on nationwide sample, with more variables and more advance statistical test.

Conclusion

In conclusion, the future human capital could not be fully equipped with the necessary 'power' to lead Malaysia. Even though their awareness of healthy lifestyle was reasonably good, practically they did not fully practice healthy behavior. The consumption of nutritious food but with lack of exercise or physical activities was still considered unhealthy. In general, the students still in the right track. However, further action should be taken to stress on the seriousness of taking own good health. The university should outline the program that can ensure the students are continuously involved in the university activities especially in sports or other co-curriculum activities. Merit or demerit system can be implemented to make sure that the students fully utilized their potential and become an excellent graduate not only mentally but also emotionally strong and physically healthy.

Table 2: Frequency of reading food labels prior to purchase

Characteristics	Nutritious food			Less salt			Less sugar			Low fat			Rich in vitamins			Low cholesterol			Total (n)
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
Male	6	10	4	4	12	4	4	13	3	5	10	5	7	10	3	6	9	5	20
Female	35	32	7	29	36	9	33	35	6	34	35	5	41	23	10	35	27	12	74
Malays	27	23	6	15	36	5	19	33	4	21	32	3	34	12	10	28	18	10	56
Chinese	12	17	2	13	12	6	14	13	4	14	12	5	10	19	2	10	16	5	31
Indian	2	0	1	3	0	0	2	1	0	3	0	0	3	0	0	2	1	0	3
Other ethnic	0	2	2	2	0	2	2	1	1	1	1	2	1	2	1	1	1	2	4
Year 1 student	19	12	1	11	19	2	10	20	2	14	17	1	22	8	2	18	12	2	32
Year 2 student	4	4	3	3	5	3	6	3	2	5	3	3	5	3	3	5	3	3	11
Year 3 student	15	17	5	16	17	4	18	17	2	15	17	5	16	16	5	14	14	9	37
Year 4 student	3	9	2	3	7	4	3	8	3	5	8	1	5	6	3	4	7	3	14

Note:

- 1 – Always
- 2 – Frequent
- 3 – Never

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HASNIZAM SHAARI & SUHAILA ABDUL HANAN, College of Business, Universiti Utara Malaysia. zamree@uum.edu.my, suhai@uum.edu.my