

## CHAPTER III

### MATERIALS AND METHODS

#### 3.1 RESEARCH DESIGN

This chapter focuses on the research design of this study. The study used quantitative method since the aim of this study was to determine the attitude of Libyans toward food choice and preferences and the impact on their socio-cultural life when staying in Malaysia. This study can be categorized as a correlational type of research which typically answers questions about the relationship among variables. Correlation research provides some indicators to show how two or more phenomena are related to one another or in effect, what they share or have in common, or how well a specific outcome might be predicted by one or more pieces of information (Salkind, 2012). Hence, this study was conducted to examine the impact of socio-cultural aspects of food choice and preferences among Libyan residents in the Klang Valley, Malaysia. Also, laboratory test was conducted to strengthen the outcome of the study.

#### 3.2 SAMPLES

This section described the kind of sampling procedure that is used in this study to select the subjects from the population. The sampling itself was restricted to specific types of people who could provide the desired information, either because they were only ones who had it or to conform to some criteria set by the researcher (Sekaran & Bougie, 2010). Since it was quite impossible to get data from all Libyans that are living in Malaysia, and so the non-probability convenient sampling was used for this study to ensure the samples

represented the population. Questionnaires were distributed to the Libyans that stayed in Malaysia mostly in the Klang Valley area.

### 3.2.1 SUBJECTS

The participating subjects of this study are Libyans residing in Malaysia. The subjects must have stayed at least three months in Malaysia to take part in this study, because the researcher believed that they would have understood the cultural diversity of the host community. There is no gender restriction in the ongoing study. Their willingness to participate in the study was tested by oral presentation of the aims of the ongoing study, and then they were supplied with the questions. To ensure accuracy, every question listed in the questionnaire was interpreted into Arabic, the native language of the Libyans. They were given enough time to complete answering the questionnaire so that all their responses would be true and based on their food choices and preferences and their socio-cultural adaptation in Malaysia.

### 3.2.2 DATA COLLECTION

The data for this study were collected in many ways, in different settings and from different sources. The researcher used a set of structured questionnaires to collect the data and calorie test was done as well. For the questionnaire part, a cover letter was attached to each set of questionnaire. The purpose of the cover letter was to explain the objective of the study as well as to ensure the confidentiality of the information given. There were 400 questionnaires that were distributed to the respondents. They were distributed directly by hand to the potential respondents and at the same time the

researcher clearly explained the questions to the respondents. Table 3.1 shows the data collection procedure for this study.

Table 3.1

*Data Collection Procedure*

NO	ACTIVITIES	MONTH/YEAR
1	Initial Preparation of Questionnaire	20 <sup>th</sup> December 2015
2	Distribution of Questionnaires	21 <sup>st</sup> January - 15 <sup>th</sup> March 2016
3	Data Analysis	16 <sup>th</sup> March – 16 <sup>th</sup> April 2016

### 3.3 QUESTIONNAIRE DESIGN

This section discusses the type of measuring instruments or items used in the questionnaire for this study. The researcher used the questionnaires as a research instrument to obtain the information for the study. Meanwhile, in this study the questionnaire was bilingual, i., in English and Arabic. The researcher used the 5-point Likert Scale and open-ended questions as the questionnaire procedure was to measure the socio-cultural, food choices and food preferences. For the demographic profile of the respondents, the questions were adapted from those of previous researchers. The questionnaire used for the ongoing study comprised three (3) parts. The first part contains selected questions aimed at getting personal information about the respondents and other demographic characteristics. The second part has questions asking for

information about the respondent's food choices and preferences. The third part seeks to understand the socio-cultural perception of the respondent. The researcher distributed 400 sets of questionnaires to the potential subjects and they responded well given the adequate time to provide true results.

Table 3.2

*Sources of Variables*

<i>ITEMS/VARIABLES</i>	<i>SOURCES</i>
Food Choice Questionnaires (FCQ)	Steptoe et al. (1995)
Food Preferences Questionnaires (FPQ)	Geiselman et al. (1998)
Socio-cultural Adaptation Scale (SCAS)	Furnham and Bochner (1982)

### 3.3.1 ITEMS GENERATION FOR SOCIO-CULTURAL ADAPTATION

The Socio-cultural Adaptation Scale (SCAS) was developed by Furnham and Bochner' (1982) and all together there are 41 items, most of them derived from Social Situations Questionnaire (SSQ). The first version of the SCAS developed by Searle and Ward (1990) contains 16 items. Besides, parts of the adaptation pertaining to food and climate are also included in the questionnaire. Like Furnham and Bochner (1982), the SCAS requires respondents to indicate the level of difficulty experienced in a number of areas by using a Likert-type five-point scale. The SCAS is an instrument that can be easily reformed according to the characteristics of the research sample. The instrument was originally developed as an assessment of intercultural competence with emphasis

on behavioral domains. Table 3.3 shows the items for Socio-cultural Adaptation Scale (SCAS).

**Table 3.3**

*Items from the Sociocultural Adaptation Scale*

No.	Items
1	Making friends
2	Using the transport system
3	Making yourself understood
4	Getting used to the pace of life
5	Going shopping
6	Going to social events/gatherings/functions
7	Worshipping in your usual way
8	Talking about yourself with others
9	Understanding jokes and humor
10	Dealing with someone who is unpleasant/cross/aggressive
11	Getting used to the local food/finding food you enjoy
12	Following rules and regulations
13	Dealing with people in authority
14	Dealing with bureaucracy
15	Making yourself understood
16	Adapting to local accommodation
17	Communicating with people of a different ethnic groups
18	Relating to members of the opposite sex
19	Dealing with unsatisfactory service
20	Finding your way around
21	Dealing with the climate
22	Dealing with people staring at you
23	Going to coffee shops/food stalls/restaurants/fast food outlets
24	Understanding the local accent/language
25	Living away from family members overseas/independently from your parents
26	Adapting to local etiquette

27	Getting used to the population density
28	Relating to older people
29	Dealing with people of higher status
30	Understanding what is required of you at university
31	Coping with academic work
32	Dealing with foreign staff at the university
33	Expressing your ideas in class
34	Living with your host family
35	Accepting/understanding the local political system
36	Understanding the locals' world view
37	Taking a local perspective on the culture
38	Understanding the local value system
39	Seeing things from the locals' point of view
40	Understanding cultural differences
41	Being able to see two sides of an inter-cultural issue

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### 3.3.2 ITEMS GENERATION FOR FOOD CHOICE

There were 68 items in the original Food Choice Questionnaire (FCQ) but after the items were factor analyzed with varimax rotation 36 were retained. The developer of this scale reported that the questions with a severely skewed distribution and those which did not load clearly on a single factor were discarded. In order to develop a relatively short questionnaire, a maximum of 6 was set for the number of items to be included in each scale, and the highest loading items were selected. Hence, this procedure resulted in retention of 36 items. Table 3.4 below summarizes the 36 items of the FCQ.

Table 3.4

*Items from Food Choice Questionnaire*

No.	Factors	Items
1	Health	Contain a lot of vitamins and minerals
2		Keeps me healthy
3		Is nutritious
4		Is high in protein
5		Is good for my skin/teeth/hair/nails, etc
6		Is high in fiber and roughage
7	Mood	Helps me cope with stress
8		Helps me cope with life
9		Helps me relax
10		Keeps me awake/alert
11		Cheers me up
12		Makes me feel good
13	Convenience	Is easy to prepare
14		Can be cooked very simply
15		Takes little time to prepare
16		Can be bought in shops close to where I live or work
17		Is easily available in shops and supermarkets
18	Sensory Appeal	Smells nice
19		Looks nice

20		Has a pleasant texture
21		Tastes good
22	Natural Content	Contains no additives
23		Contains natural ingredients
24		Contains no artificial ingredients
25	Price	Is not expensive
26		Is cheap
27		Is good value for money
28	Weight Control	Is low in calories
29		Helps me control my weight
30		Is low in fat
31	Familiarity	Is what I usually eat
32		Is familiar
33		Is like the food I ate when I was a child
34	Ethical Concern	Comes from countries I approve of politically
35		Has the country of origin clearly marked
36		Is packaged in an environmentally friendly way

### 3.3.3 ITEMS GENERATION FOR FOOD PREFERENCES

The questionnaire on food preferences was developed to evaluate adults (Geiselman et al., 1998, and Deglaire et al., 2012). However, the questionnaire was not specific for use with adolescents. Food preferences are shaped by innate and learned behaviors. Humans

are born with a preference for sweet tastes and a dislike for bitter tastes (Ganchrow et al., 1983; Mennella, et al., 2001). The influence of these preferences appears to extend into early childhood and may continue to change throughout adolescence and adulthood. Besides, food preferences and habits established in childhood influence food choice over the lifespan and have both short and long-term consequences for health (Must & Strauss 1999). Table 3.5 summarizes the 20 items for food preferences.

**Table 3.5**

*Items from Food Preferences*

No.	Items
1	Raw or boiled Broccoli
2	French Fries
3	Kool-Aid (made with sugar)
4	Nuts or Peanut Butter
5	Water
6	Low-fat or fat-free yogurt
7	Unsweetened or artificially sweetened tea
8	Carrot sticks (with no more than 2 tbsp low-fat dressing)
9	Grapes
10	Regular Cola Drinks
11	Glazed Donut
12	Low-fat unflavored milk
13	Cookies
14	Diet Cola Drinks
15	Lemonade
16	Coffee with 1 tsp/1 sugar packet or less
17	Pizza with meat topping
18	Low-fat chocolate milk
19	Banana
20	Tea sweetened with sugar

### 3.4 DATA ANALYSIS

The data collected in the study were analyzed by using the Statistical Package for Social Sciences (SPSS) version 21.0. The analysis included descriptive statistics such as frequencies, percentages, standard deviation, and means. In addition, the findings of the study were supported with the aid of illustrations such as tables, charts and graphs. By using SPSS, the data were analyzed using statistical tools like analysis of variance, X<sup>2</sup> test and correlation analysis to deduce the inference. X<sup>2</sup> test was used to analyze the relationship between food choice, food preferences and socio-cultural adaptation, and to equate categorical variables of eating patterns in the country of origin and in Malaysia. Both one-way and two-way analyses of variance were used as well.

### 3.5 CALORIE TEST

To be able to further measure the level of calories intake in food of Libyan residents in the Klang Valley, Malaysia, the real meal consumed by Libyans in Malaysia were subjected to test. Although most Libyan foods are carbohydrate concentrated, despite that a lot of vegetables are consumed as well. To examine the calories, three different sets of meals were taken for three days to be able to measure the content of, carbohydrate, protein and fat.

On the other hand, further analysis about the measurement of the calories intake and body mass index (BMI) was discussed and presented in Chapter four. This test was carried out to measure the relationships between Libyan dietary and health-related consequences, and to calculate the quality of food intake among Libyans staying in Malaysia.