

CHAPTER IV

RESULTS AND DISCUSSIONS

4.0 INTRODUCTION

This chapter presents the findings of the study on the socio-cultural impact of food choice and preferences among Libyan residents in the Klang Valley, Malaysia in relation to maintaining good health. The questionnaire was divided into three sections particularly about the demographic background, independent variables and dependent variable of the study. For section A, the respondents were asked about their background profile, while section B focused on respondents attitudes toward food choice and preferences, whereas section C mainly asked about the socio-cultural practices among the respondents. Also, the outcome of the laboratory test was presented.

There are several discussions to support the results obtained. This chapter comprises several parts, which begin with the response rate of the survey, profile of respondents and analyses of findings to answer all the research questions of the study. The results of this study were analyzed by using IBM SPSS Statistics version 21.0.

4.1 SURVEY RETURN RATE ANALYSIS

The questionnaire was distributed personally by hand by the researcher to the 400 respondents who are Libyans living in the Klang Valley area for more than three months. The process of distribution and collection took approximately three months. However, out of 400 questionnaires distributed, only 252 questionnaires were successfully returned.

Therefore, the survey return rate of the collected questionnaires was 63% which represents (n=252). Table 4.1 shows the rate of survey return of the study.

Table 4.1 Survey Return Rate

Survey Return Rate (n=252)

	<i>Number of Questionnaires Distributed</i>	<i>Number of Questionnaires Collected</i>	<i>Total (Percentage of response rate)</i>
Libyan Residents in Malaysia	400	252	63
TOTAL	400	252	$(252/400) \times 100\% = 63\%$

4.2 DEMOGRAPHIC PROFILES

This section discusses the result of the analysis on the demographic profile of respondents such as gender, age, marital status, income level, weight change, eating outside, eating habit change, and chronic disease. There are ten categories of the respondents' demographic background used in the study and all the data were analyzed and interpreted by using frequency and percentage. Table 4.2 presents the summary of the demographic profile of the respondents for this study. The explanation of each category of respondents' demographic profiles will be discussed further in the following section.

Table 4.2 Demographic Profiles of the Respondents

Demographic Variable	Category	Frequency (n=252)	Percent (%)
Gender	Male	147	58.3
	Female	105	41.7
	Total	252	100.0
Age	18 years and below	4	1.6
	19-29 years	42	16.7
	30-40 years	136	54.0
	41-50 years	63	25.0
	51 years and above	7	2.8
	Total	252	100.0
Height	1.50m and below	2	0.8
	1.51-1.60 meter	32	12.7
	1.61-1.70 meter	116	46.0
	1.71-1.80 meter	81	32.1
	1.81 meter & above	21	8.4
	Total	252	100.0
Marital Status	Single	26	10.3
	Married	226	89.7
	Total	252	100.0
Income Level	RM3000 and below	62	24.6
	RM3001-RM5000	44	17.5
	RM5001-RM7000	30	11.9
	RM7001-RM9000	62	24.6
	RM9001 and above	54	21.4
	Total	252	100.0

Weight Change	Lost weight	108	42.9
	Gained weight	144	57.1
	Total	252	100.0

Weight	55-65 Kg	22	8.7
	66-75 Kg	31	12.3
	76-85 Kg	85	33.7
	86-95 Kg	76	30.2
	96 Kg and above	38	15.1
	Total	252	100.0

Eating Outside	Once a month	97	38.5
	Once a week	109	43.3
	Every day	24	9.5
	Others	22	8.7
	Total	252	100.0

Eating Habit Change	Yes	163	64.7
	No	89	55.3
	Total	252	100.0

Chronic Disease	Yes	20	7.9
	No	232	92.1
	Total	252	100.0

4.2.1 Gender

Based on the results, it shows that a majority of 147 respondents were male and comprised 58.3% whereas 105 or 41.7% of the respondents were female. Hence, it can be concluded that the male respondents outnumbered the female respondents for this study. In Figure 4.1 the pie chart clearly shows the breakdown of the respondents gender for the study.

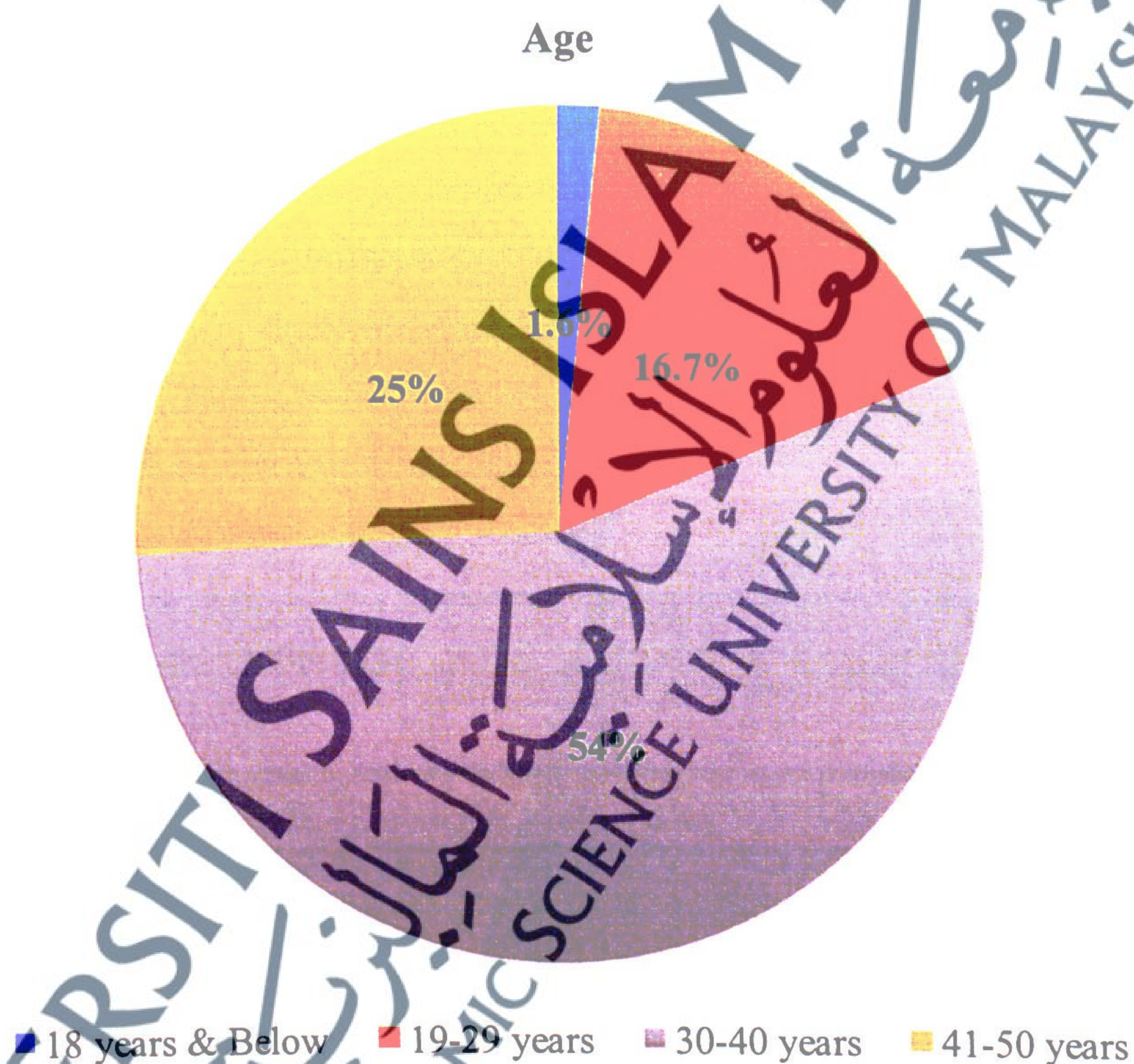
Figure 4.1 Pie Chart for the Gender of Respondents



4.2.2 Age

Meanwhile, as shown in Figure 4.2, the majority of the respondents comprise 136 or 54.0% in the age group of 30-40 years, followed by 63 or 25% of the respondents aged 41-50 years. A total of 42 or 16.7% of respondents are aged 19-29 years. The minority of respondents are in the groups aged above 51 years and those 18 years and below who numbered 7 (2.8%) and 4 (1.6%) respectively.

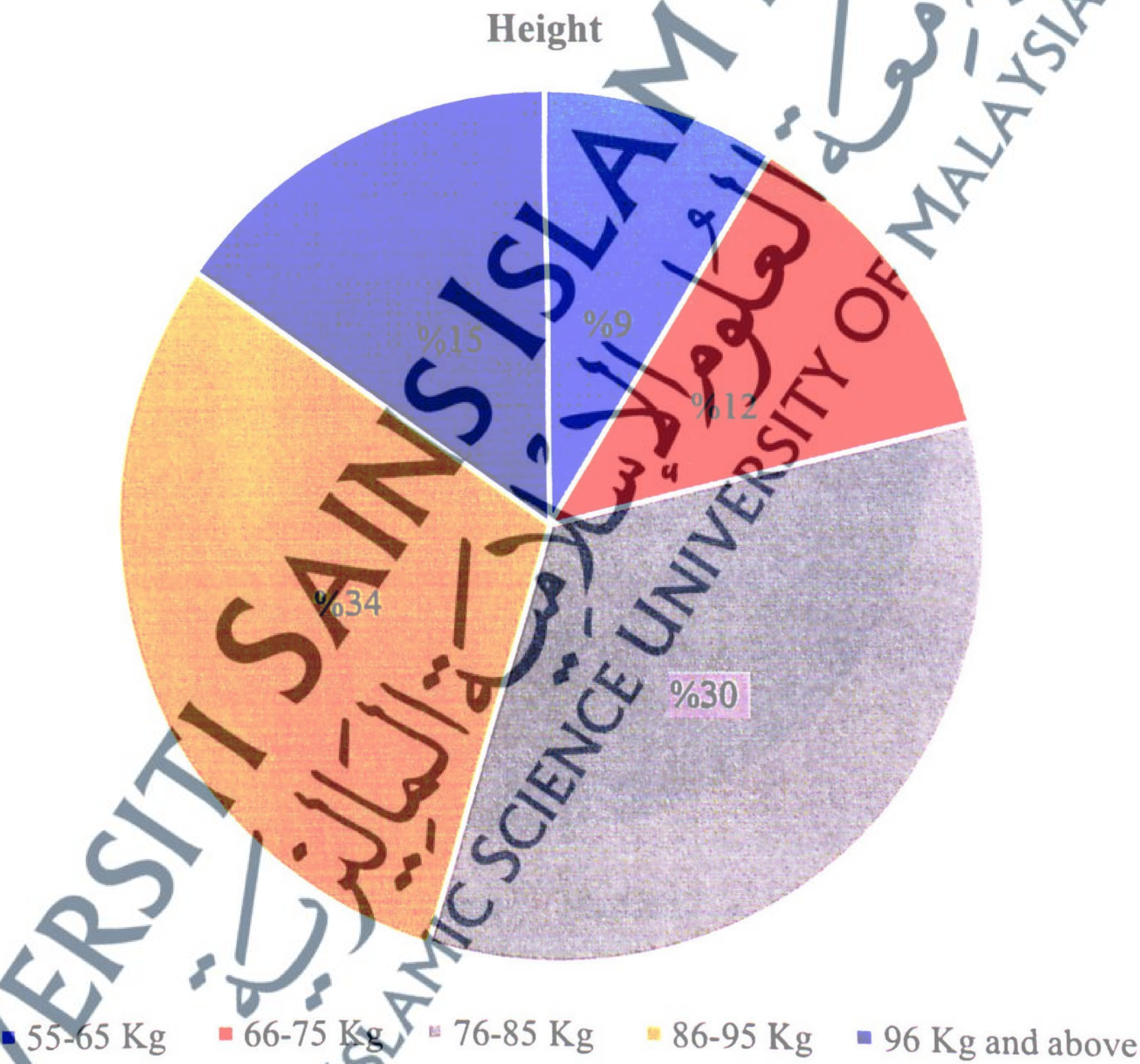
Figure 4.2 Pie Chart for the Age of Respondents



4.2.3 Height

Similarly, as shown in Figure 4.3, the majority of the respondents (116 or 46.0%) are between 1.61 and 1.70 meters tall. Respondents with heights of 1.71-1.80 meters make up 81 or 32.1% percent, while 32 or 12.7% of respondents' are 1.51-1.60 meters tall, whereas 22 or 8.4% of respondents are had heights of 1.81 meters and above. There were only 2 or 0.8% of respondents with heights 1.50 meter and below.

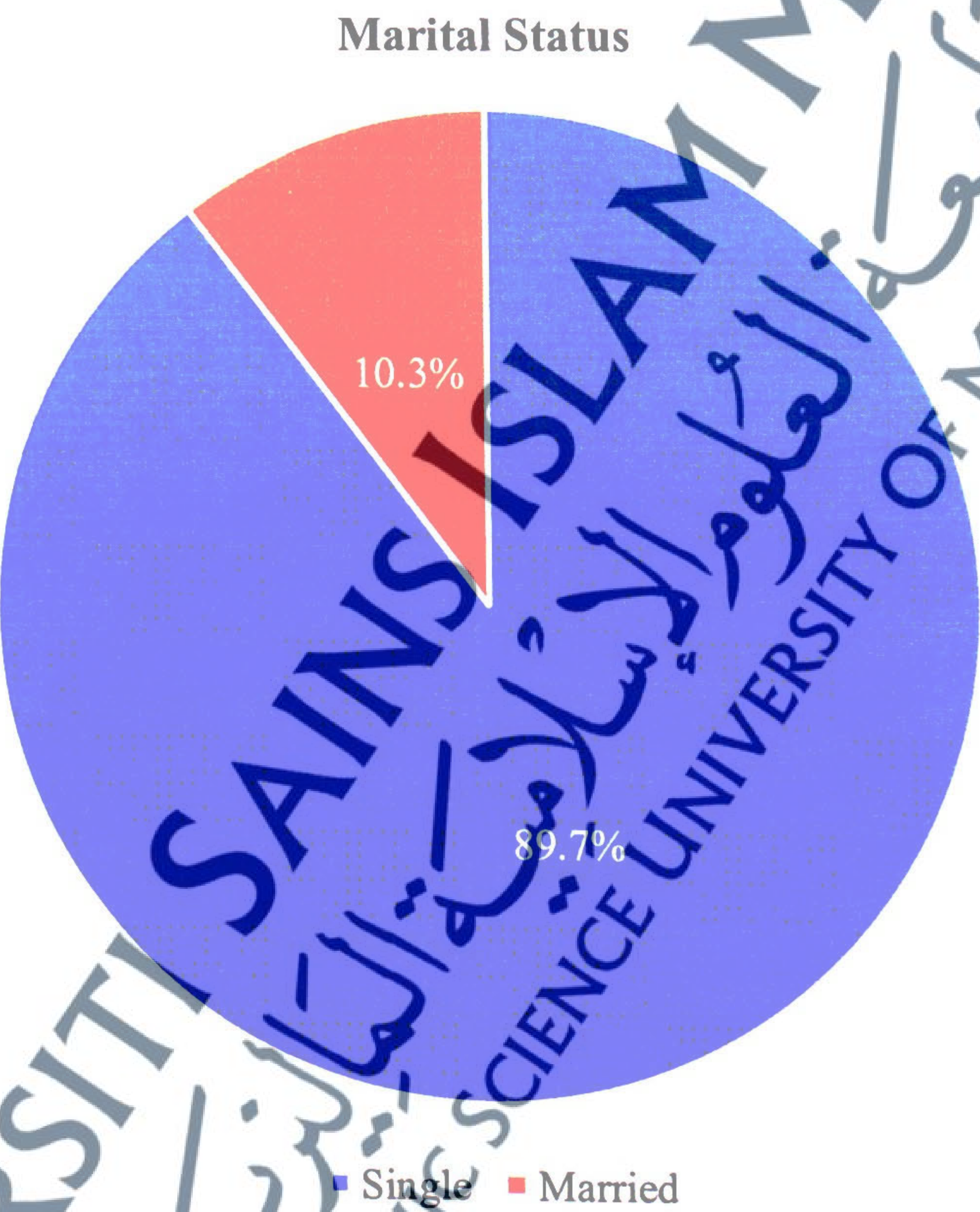
Figure 4.3 Pie Chart for the Height of Respondents



4.2.4 Marital Status

In addition, for the marital status, the majority (226 or 89.7%) of the respondents are married. The remaining respondents are single and comprise 26 or 10.3%. Figure 4.4 shows the pie chart of the respondent’s marital status for the study.

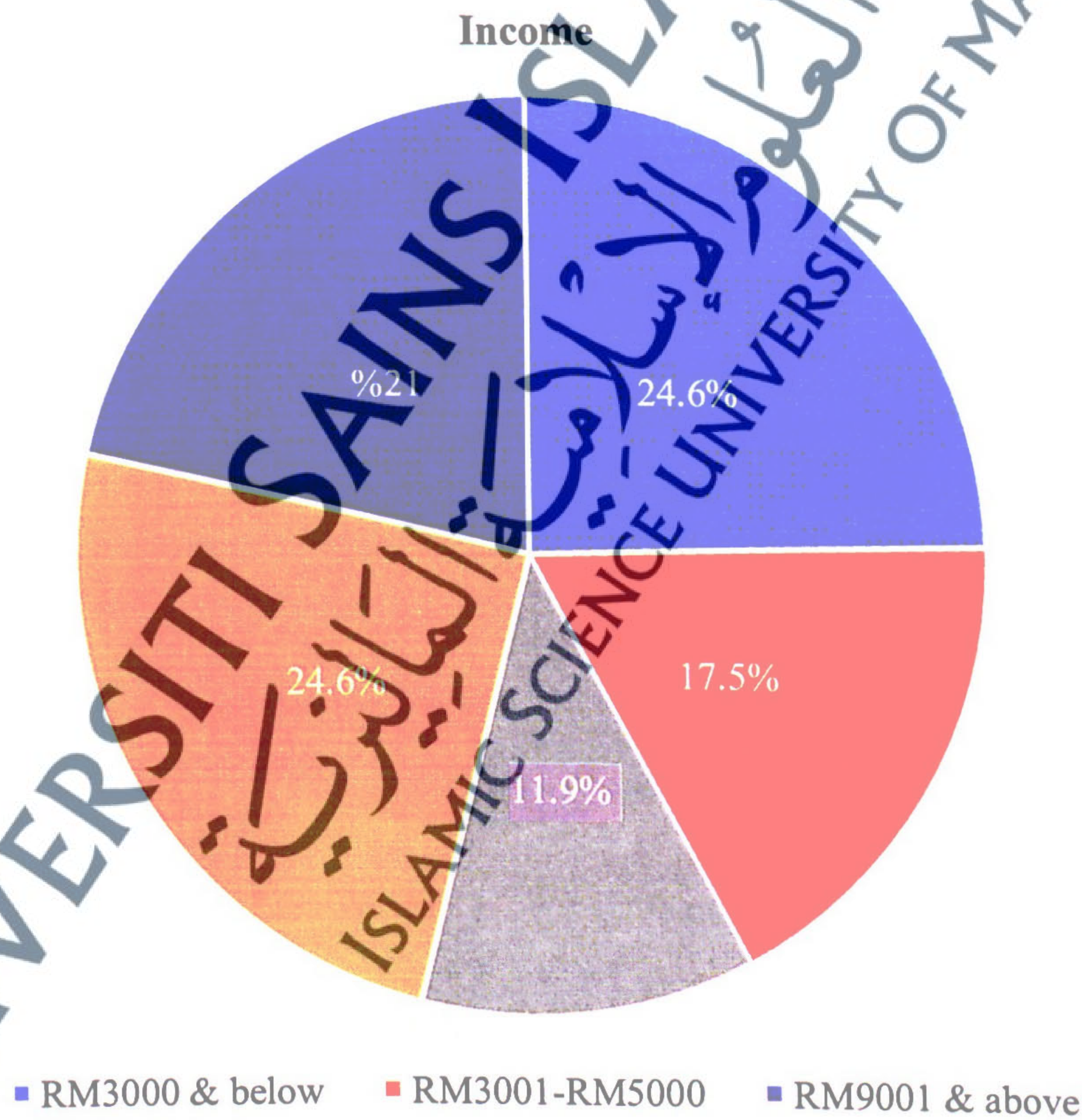
Figure 4.4 Pie Chart for Marital Status of Respondents



4.2.5 Income Level

As can be seen from Figure 4.5 below, it shows that there are two majority groups (both 62 respondents/24.6%), those with monthly incomes of RM3000 and below and those earning RM7001-RM9000. They are followed by those with monthly income of RM9001 and above with 54 respondents or 21.4 % of the total number of respondents. The next group with 44 respondents or 17.5% of the respondents comprise those with monthly income of RM3001-RM5000. The remaining respondents earn monthly incomes of RM5001-RM7000, comprising 30 respondents or 11.9% of the total respondents.

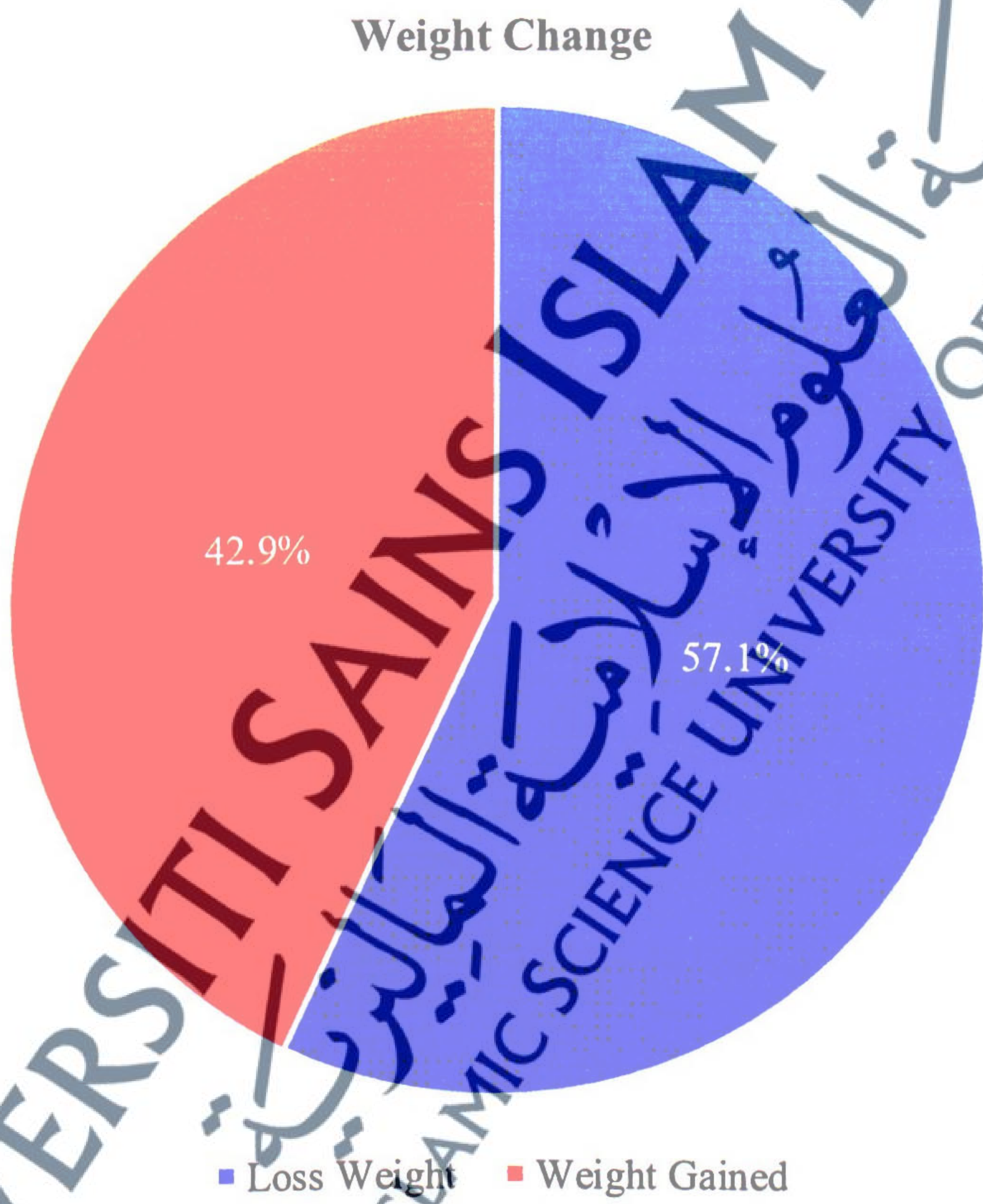
Figure 4.5 Pie Chart for the Income Level of Respondents



4.2.6 Weight Change

For the weight change, Libyans appear to gain more weight when living in Malaysia. This is clearly shown in Figure 4.6 which shows that the majority of Libyans who live in Malaysia gained rather than lost weight with 144 out of 252 respondents or 57.1 %. Meanwhile, the remaining 108 respondents (or 42.9%) lost weight when staying in Malaysia.

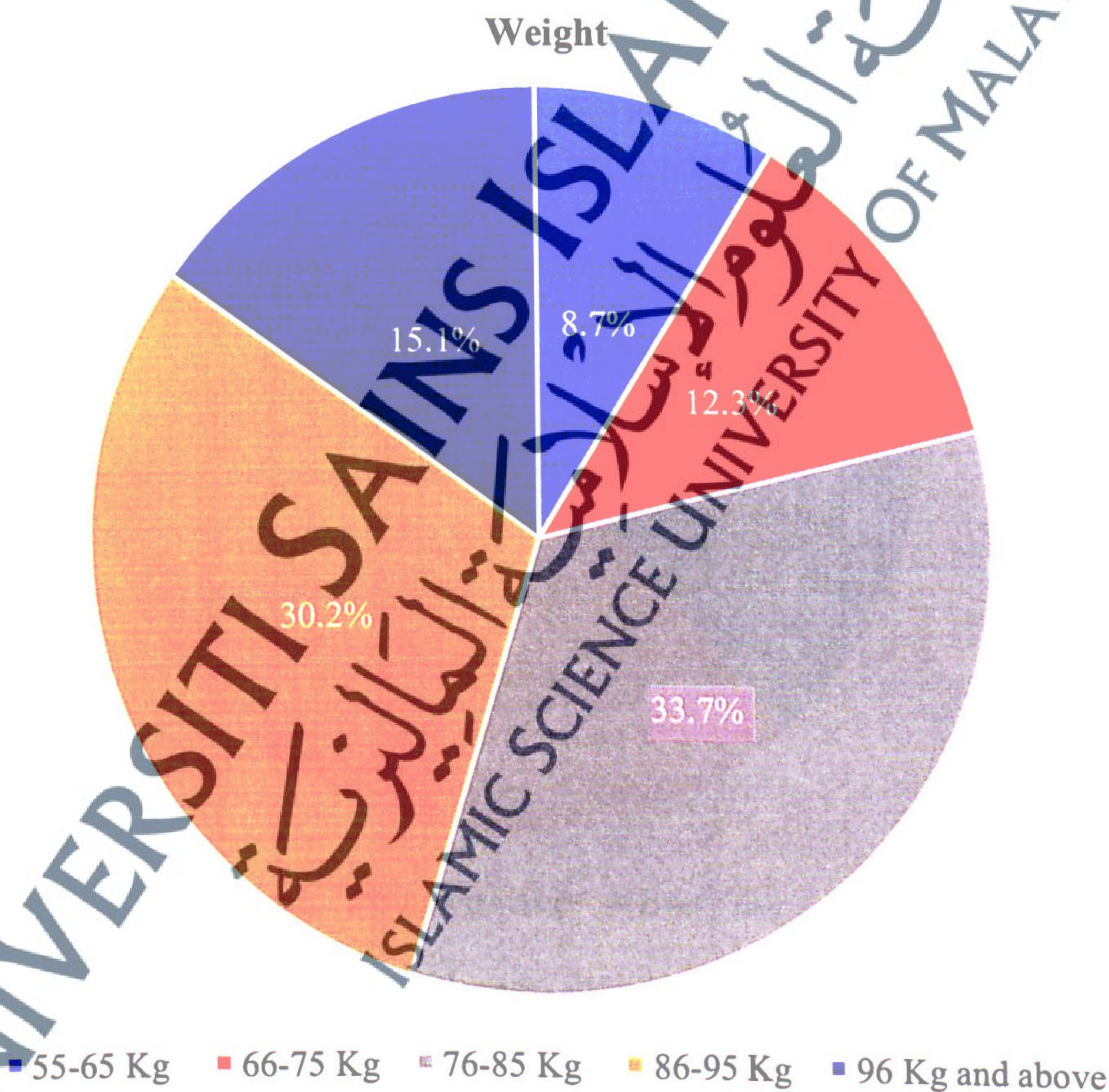
Figure 4.6 Pie Chart for the Weight Change of Respondents



4.2.7 Weight

As shown in Figure 4.7 below, the majority of respondents weigh between 76 and 85 kg, and comprise 85 respondents or 33.7 % while 76 respondents or 30.2% weigh between 86 and 95 kg. A total of 38 respondents or 15.2% weigh 96 kg and above while 31 respondents or 12.5% weigh between 66-75 kg. The remaining 22 respondents or 8.7 % weigh between 55 and 65 kg.

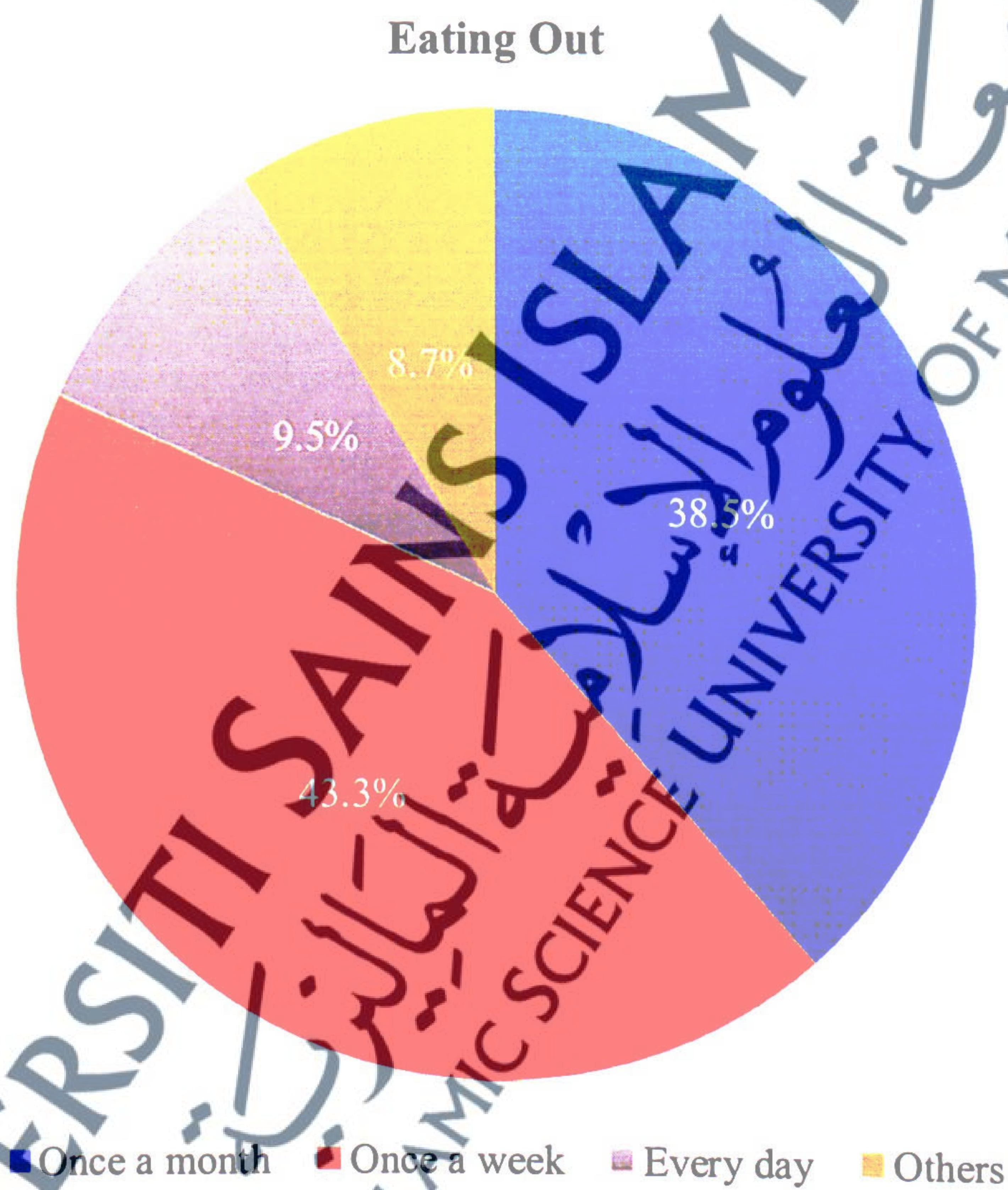
Figure 4.7 Pie Chart for the Weight of Respondents



4.2.8 Eating Out

Figure 4.8, shows that the majority of the respondents (109 or 43.3%) are in the habit of eating out once a week; A total of 97 respondents or 38.5% eat out once a month, whereas, 24 respondents or 9.5% eat out daily. The remaining 22 respondents or 8.7% did not specify their attitude toward eating out.

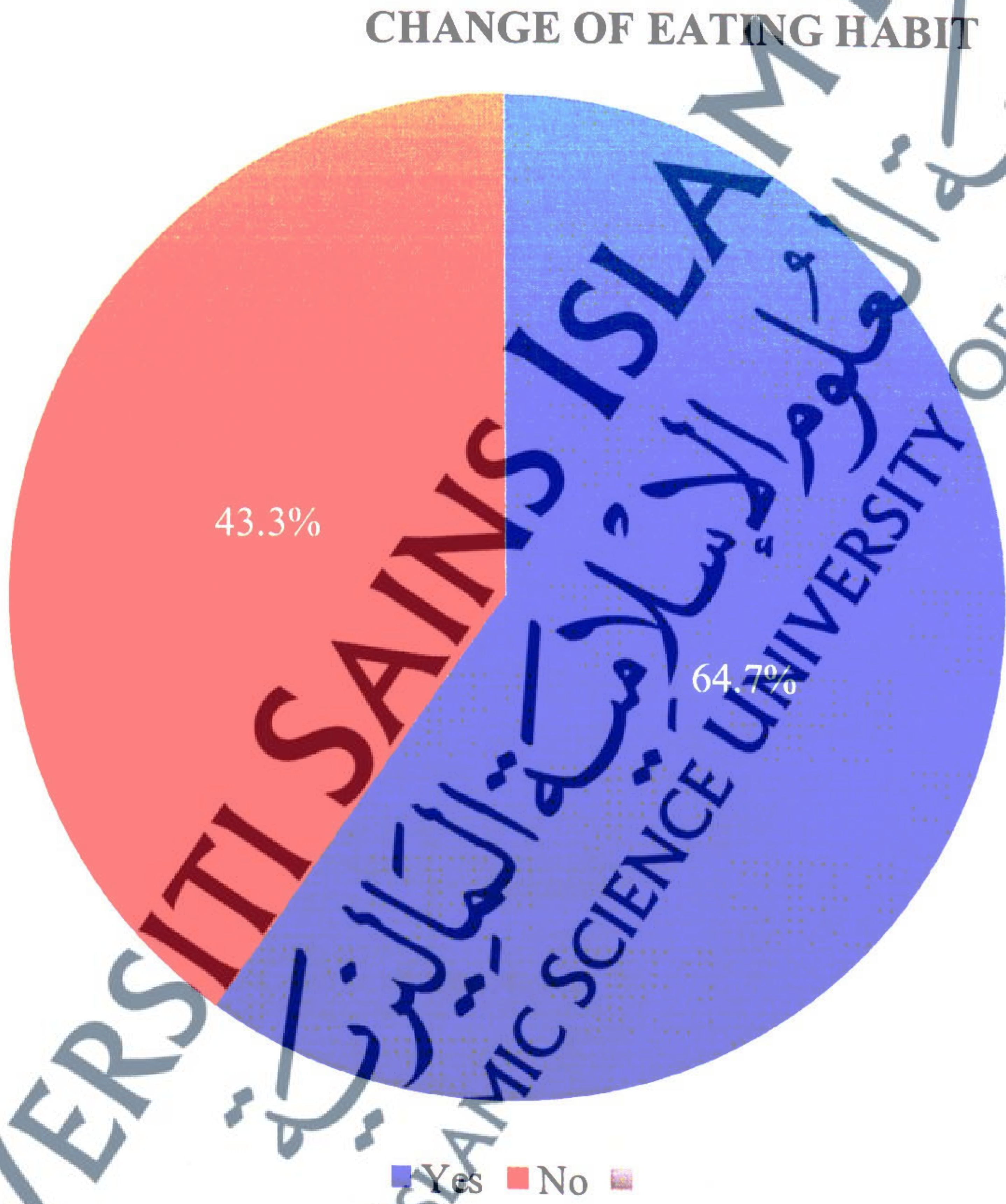
Figure 4.8 Pie Chart of Respondents Eating Out



4.2.9 Changing of Eating Habits

Surprisingly, Libyans resident in Malaysia are changing their eating habits. As shown in Figure 4.9, the majority of respondents (163 or 64.7%) agreed that their eating habits are changing while the remaining 89 respondents or 55.3% did not change their eating habit when staying in Malaysia.

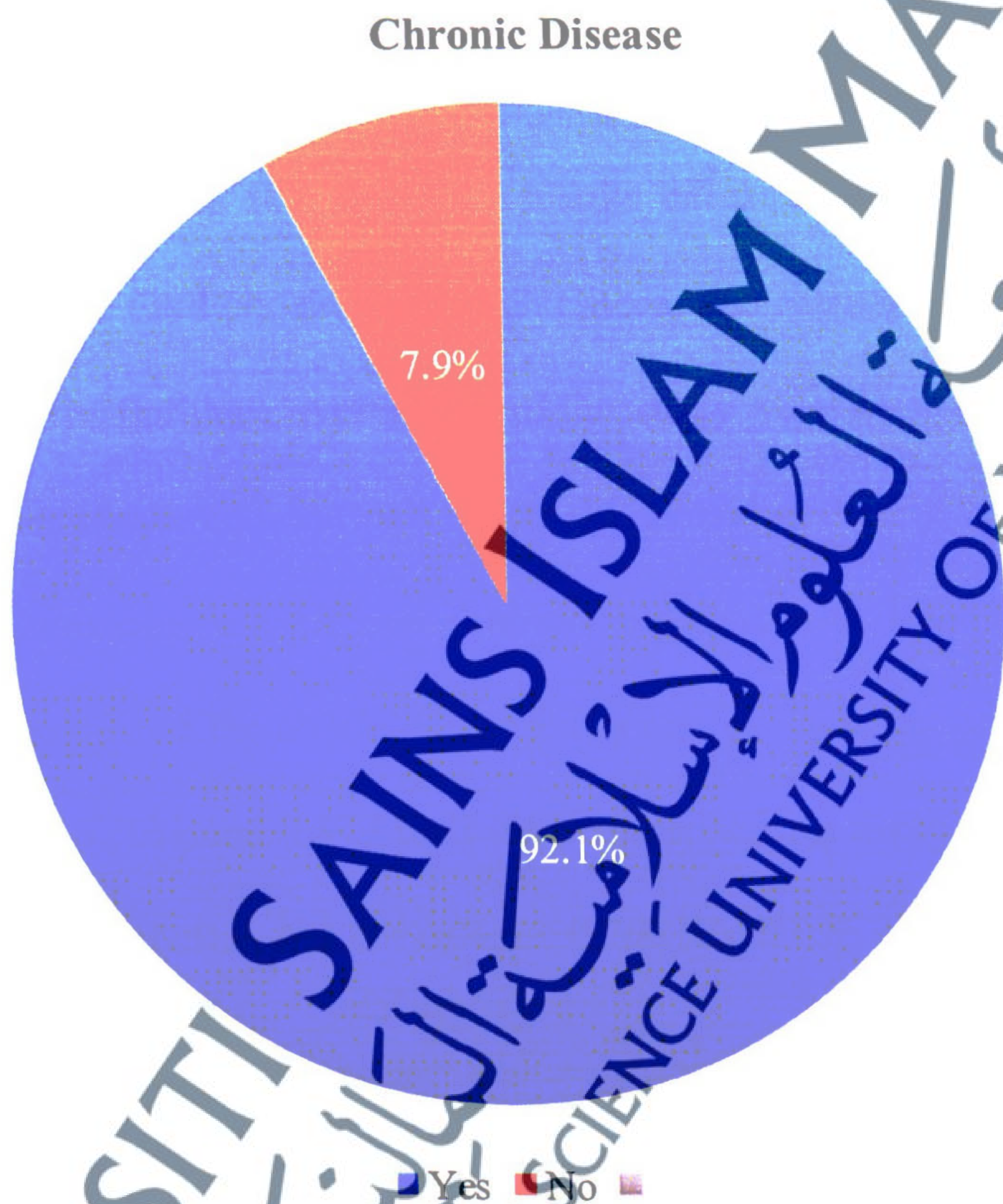
Figure 4.9 Pie Chart of Respondents Changing their Eating Habit



4.2.10 Chronic Disease

However, the majority of the respondents (232 or 92.1%) do not have chronic disease while, the remaining 20 respondents (7.9%) have chronic disease such as diabetes. This result s are presented in Figure 4.10 below.

Figure 4.10 Pie Chart of Respondents regarding Chronic Disease



4.3 DATA CLEANING ANALYSIS

To ensure that the data entered in SPSS statistical software are correct and meet the requirement for the study, skewness and kurtosis were performed in order to screen and clean the analysis of the data. The steps taken involving investigating any missing value of the data collection, assessing normality test, and other analyses.

4.3.1 NORMALITY ANALYSIS

The data were tested for normality in order to know the shape of the data distribution, which should be normally distributed around the predicted dependent variable scores. The results of skewness and kurtosis values were attained in order to identify whether the data are normally distributed or not. Hair et al., (2010) stated that the normal distribution is acceptable when the skewness and kurtosis values are in the ranges of +/- 3 for each variable.

Table 4.3 illustrates the normality results of skewness and kurtosis and the normality values for food choice, food preferences, and related socio cultural aspects. Hence, based on the findings, overall data of this study were normally distributed since the value of skewness and kurtosis is in the range of +/- 3. Nevertheless, the assumptions of normality are still met. Table 4.3 below shows that all the variables are normally distributed and the results of skewness and kurtosis are -0.336 and 1.155 for food Choice, and -0.121 and 0.379 for food preferences. As for the dependent variable socio-cultural, the skewness and kurtosis are 0.203 and 0.026 respectively.

Table 4.3 Normality result of Values for Skewness and Kurtosis (n=252)

Variables	Skewness	Kurtosis
Independent Variables		
Food Choice	-0.336	1.155
Food Preferences	-0.121	0.379
Dependent Variable		
Socio-cultural	0.203	0.026

4.4 RELIABILITY ANALYSIS

Reliability analysis was performed to ensure that the items measure what they are supposed to measure. The result will produce Cronbach’s alpha (α) value whereby the values must be 0.6 and higher for newly-developed instrument and 0.7 and higher for the established instrument. According to Sekaran and Bougie (2010), reliability is used to measure the consistency and stability of the instrument which measures the concept and evaluates the goodness of a measure. The Cronbach’s alpha coefficient can be indicated according to the Rules of thumb by George and Mallery (2003) as shown in Table 4.4 below.

Table 4.4 George and Mallery (2003) Cronbach’s Alpha Coefficient

<u>Cronbach’s Alpha Coefficient</u>	<u>Indicator (Rule of Thumbs)</u>
$\geq .9$	Excellent
$\geq .8$	Good
$\geq .7$	Acceptable
$\geq .6$	Questionable
$\geq .5$	Poor
$\leq .5$	Unacceptable

As presented in Table 4.5 below, the finding of this study shows that only two variables have higher value of reliability analysis than the value of Cronbach’s alpha coefficient greater than 0.7. The Cronbach’s alpha for food choice and socio-cultural are 0.737 and 0.836 respectively. However, for food preferences, the Cronbach’s alpha is 0.564. Even

the value for the food preferences is quite low, but still in an acceptable range of value. Therefore, based on the finding of reliability analysis, the measurements used in this study are reliable and valid for further analyses.

Table 4.5 The Result of Cronbach’s Alpha for the Data of the Study

Variables	Cronbach's Alpha	No of Items
<i>Independent Variables</i>		
Food Choice	0.737	9
Food Preferences	0.564	19
<i>Dependent Variable</i>		
Socio-cultural	0.836	20

4.5 DESCRIPTIVE STATISTICS

Descriptive statistics such as maximum, minimum, means, standard deviations, and variance were obtained for the interval-scaled independent and dependent variables (Sekaran, 2003). Besides, descriptive statistics is a univariate analysis which aims at understanding the nature of any variable and also examining the shape of the data distribution.

4.5.1 FOOD CHOICE ANALYSIS

Table 4.6 indicates the scores of all items in the food choice variable. From the result, it shows that the score for item no. 9 which is *‘I eat food that is Halal and is*

environmentally friendly’ constitute the highest score with (M=4.55, SD=0.799) followed by item no. 4, which is *‘I eat food that has a pleasant texture, smells nice and tastes good’* with (M=4.12, SD=0.920) whereby item no. 1 which is *‘I eat nutritious food to keep me healthy’* signified (M=3.96, SD=0.903). However, mean and standard deviation for item no. 7, which is *‘I eat food that has low calories, low fat and helps me to control my weight’* portrays the lowest score of (M=3.15, SD=1.021).

Table 4.6 Descriptive Statistics for Food Choice Variable (n=252)

No.	Items	Mean	Standard Deviation
1.	I eat nutritious food to keep me healthy	3.96	0.903
2	The food that I eat helps me to reduce my stress, keeps me awake and makes me feel good	3.57	0.832
3	The food that I eat is easy to prepare and easy to find in shops/supermarkets	3.48	1.120
4	I eat food that has a pleasant texture, smells nice and tastes good	4.12	0.920
5	The food that I eat contains natural ingredients and no additives	3.50	0.980
6	The food that I eat is cheap, not expensive and value for money	3.53	1.015
7	I eat food that has low calories, low fat and helps me to control my weight	3.15	1.021
8	I eat food that is familiar which I usually take	3.88	0.895
9	I eat food that is <i>Halal</i> and is environmentally friendly	4.55	0.799

Nevertheless, all the items in the food choice variable represent a higher mean which indicated that the majority of the respondents seem agreed with the items in the

food choice. This can be seen as rated out of 5-point Likert scale rating, still the lowest score is more than the average point of the rating.

Research Question 1

What is the food choice that is most rated by Libyan residents in Malaysia?

Based on the result, the researcher found that most of the Libyan residents in the Klang Valley area considered *Halal* and hygiene or green food as their favorite choice of food. This was represented by the item '*I eat food that is Halal and is environmentally friendly*' which was agreed to most by them. Hence, the level of food choice that is most rated by Libyans who are resident in Malaysia is *Halal* and environmentally friendly food.

4.5.2 FOOD PREFERENCES ANALYSIS

Table 4.7 shows the scores of all items in the food preference variable. From the result, it can be seen that the score for item no. 9 which is '*I like to eat grapes*' portrays the highest score with (M=4.03, SD=1.011). It is followed by item no. 5m which is '*I like to drink mineral water*' with (M=4.01, SD=1.113) and item no. 18 which is '*I like to eat bananas*', which scored (M=3.90, SD=1.056). Conversely, mean and standard deviation for item no. 13, which is '*I like to take Diet Cola Drinks with less sugar*' shows the lowest score of (M=2.24, SD=1.187).

Table 4.7 Descriptive Statistics for the Food Preferences Variable (n=252)

No.	Items	Mean	Standard Deviation
1	I like to eat raw or steamed broccoli	2.96	1.213
2	I like to eat French fries	3.19	1.127
3	I like to take soft drinks (made with sugar)	2.55	1.253
4	I like to eat nuts or peanut butter	2.69	1.140
5	I like to drink mineral water	4.01	1.113
6	I like to eat low-fat yogurt	3.54	1.185
7	I like to eat unsweetened or artificially sweetened tea	2.69	1.253
8	I like to eat carrot sticks with low-fat dressing	3.01	1.035
9	I like to eat grapes	4.03	1.011
10	I like to eat glazed donut	3.06	1.020
11	I like to drink low-fat unflavored milk	3.33	1.323
12	I like to eat cookies	3.42	0.922
13	I like to take Diet Cola Drinks (less sugar)	2.24	1.187
14	I like to drink Lemonade	3.82	1.039
15	I like to drink coffee with less sugar	3.23	1.298
16	I like to eat pizza with meat topping	2.96	1.222
17	I like to drink low-fat chocolate milk	2.57	1.210
18	I like to eat bananas	3.90	1.056
19	I like to take tea sweetened with sugar	3.40	1.260

However, the majority of the food preferences are acceptable by the respondents as the scores that surpass the average score are more. Besides, the individual score for each item, shows the categorical preferences of the food by the respondents. These categories of food represent the nutrient value and the composition of the calories intake by the respondents. According to McGuerty (2014) food can be categorized into four groups namely; energy-dense foods, energy dilute foods, Sugar-sweetened beverages and unsweetened beverages. Table 4.8 shows the categories of food preferences.

Table 4.8 Categories of Food Preferences

Energy-dense	Energy-dilute	Sugar-sweetened	unsweetened foods	beverages
French fries	Steamed broccoli	Soft drinks		Mineral water
Nuts	Low-fat yoghurt	Lemonade		Unsweetened tea
Glazed donut	Carrot stick	Low-fat chocolate milk		Low-fat milk
Cookies	Grapes	Tea sweetened with sugar		Diet
cola with less sugar				
Pizza with meat topping	Bananaa			Coffee with less sugar

As shown in Table 4.9, all the items in food preferences (no.1 to no. 19) were well categorized according to their nutrient value and the composition of the calories. It is important to know and understand the composition of food intake in order to measure the needs and necessity of the human body. The excessive habits of eating in particular energy-dense foods and sugar-sweetened beverages can result in chronic disease and unhealthy lifestyle (McGuerty, 2014).

Table 4.9 Descriptive Statistics for Food Preferences Categories

No.	Items	Mean	Standard Deviation
1	Energy-dense food	3.0659	0.63518
2	Energy-dilute food	3.4881	0.60832
3	Sugar-sweetened beverage	3.0873	0.63263
4	Unsweetened beverage	3.1008	0.71199

Based on the above result, the respondents preferred more energy-dilute foods with (M=3.4881, SD=0.60832) compared to other categories of food. Energy-dilute foods can be described as foods that contain high water like fruits and vegetables which are needed for human body to keep healthy. In contrast, energy-dense foods are those foods which are high in calories, energies and big fat, whilst, sugar-sweetened beverages continue to be typically explained as beverages comprising added caloric sweeteners such as sucrose, high-fructose corn syrup (HFCS), or fruit-juice concentrates, which include but are not limited to soft drinks, fruit drinks, sports drinks, energy and vitamin water drinks. Conversely, unsweetened beverages are those that represent non-caloric drinks such as diet sodas, unsweetened tea and so on (McGuerty, 2014).

Research Question 2

What is the most food preferred among Libyan residents in Malaysia?

Based on the result above, the researcher found that food preferences by item that was mostly consumed by Libyan residents in Klang Valley area was grapes according to the result in Table 4.7 item no. 9, which states that ‘*I like to eat grapes*’ was most agreed by the respondent. Surprisingly, this is supported by the result for the categories of food preferences, which proved that the respondents prefer the energy dilute food and grapes belongs to this category.

4.5.3 SOCIO-CULTURAL ANALYSIS

Table 4.10 shows the scores of all items in socio-cultural. The result shows that the scores for item no.1 which is ‘*I love making friends*’ represents the highest score with (M=3.75, SD=1.001). The second highest item of socio-cultural interest is item no.12, which is, ‘*I can understand what is required at university/workplace*’ with (M=3.69, SD=0.879) and followed by item no. 19, which is, ‘*I understand cultural differences*’ which scored (M=3.60, SD=0.872). However, mean and standard deviation for item no. 10 which is: ‘*I love to live away from family members overseas/independently from my parents*’ shows the lowest score of (M=2.05, SD=1.246).

Research Question 3

What is the level of socio-cultural adaptation practiced by Libyans that are living in Malaysia?

From the result above, it is seen that Libyans love to make friends when staying in Malaysia. This practice offers a high level of socio-cultural interest by

Libyan and they are able to understand the requirements of their workplace and universities as well as the cultural differences in Malaysia. The researcher found that most of the items in socio-cultural adaptation in Malaysia are agreed to by Libyans as the majority of the scores are above average.

Table 4.10 Descriptive Statistics for Socio-cultural Variable (n=252)

No.	Items	Mean	Standard Deviation
1	I love making friends	3.75	1.001
2.	I love going to social events/gatherings/functions	3.56	1.018
3	I easily get used to the local food	2.62	1.089
4	I can deal with people in authority	2.92	1.099
5	I can adapt to local accommodation	3.15	0.947
6	I can communicate with people of a different ethnic group	3.47	0.979
7	I like relating to members of the opposite sex	2.13	1.127
8	I like going to coffee shops/food stalls/restaurants/fast food outlets	2.53	1.165
9	I can understand the local ascent/language	2.36	1.022
10	I love to live away from family members overseas/independently from my parents	2.05	1.246
11	I can adapt to local etiquette	3.45	0.933
12	I can understand what is required at university/workplace	3.69	0.879
13	I love to deal with foreign staff at the university/workplace	3.27	1.029
14	I like to understand the local political system	3.19	1.095

15	I like to understand the locals' world view	3.41	0.996
16	I like to take a local perspective on the culture	3.50	0.992
17	I understand the local value system	3.27	0.845
18	I see things from the locals' point of view	3.13	0.837
19	I understand cultural differences	3.60	0.872
20	I am being able to see two sides of an intercultural issues	3.17	1.003

4.6 INFERENCEAL STATISTICS

The inferenceal statistics also known as bivariate analysis is aimed at seeing the relationship between variables. These statistics can be measured through many methods such as correlation, regression and so forth. Most popular correlation analysis uses Pearson correlation coefficient which is suitable for interval- and ratio-scaled variables whereby Spearman Rank or the Kendall's Tau coefficients are appropriate when variables are measured on an ordinal scale. Any bivariate correlation can be obtained by clicking the relevant menu in SPSS, identifying the variables, and seeking the appropriate parametric or nonparametric statistics. If correlations were higher (e.g., 0.75 and above), the data might be suspect whether or not the correlated variables are two different and distinct variables and would have doubted the validity of the measures (Sekaran, 2003). Hence, this study used inferenceal statistics to explain the existence of relationship among variables.

4.6.1 CORRELATION ANALYSIS

The correlation analysis is used to investigate the association between two variables in a linear technique. A Pearson Product-Moment Correlation Coefficient describes the relationship between two continuous variables and is available through analysis and correlate menus in SPSS (Coakes & Ong, 2010). For this study, the researcher used simple bivariate correlation which is also referred to as zero-order correlation between two continuous variables and is the most common measure of linear relationship. Therefore, the Pearson Product-Moment Correlation Coefficient was used to analyze the relationship between food choice and preferences and socio-cultural among Libyan residents in the Klang Valley, Malaysia. The guidelines of the correlation can be seen in Table 4.11 below, while the correlation analysis between the dependent and independent variables is shown in Table 4.12.

Table 4.11 Rules of Thumb of the Correlation Coefficient based on Cohen (1988)

Small correlation	$r = -0.10$ to -0.29 and $+0.10$ to $+0.29$
Medium correlation	$r = -0.30$ to -0.49 and $+0.30$ to $+0.49$
Large correlation	$r = -0.50$ to -1.00 and $+0.50$ to $+1.00$

Table 4.12 Correlation Analysis for Independent Variables and Dependent

Variable

	Food Choice	Food Preferences	Socio-cultural
Food Choice	1.000		
Food Preferences	0.219**	1.000	
Socio-cultural	0.268**	0.278**	1.000

Note: **. Correlation is significant at the level 0.01 level (2-tailed)

Based on Table 4.13, the relationship between food choice and preferences and socio-cultural was investigated by using Pearson Product-Moment Correlation Coefficient analysis. From the table, it can be seen that the correlation between food choice and socio-cultural is ($r=0.268$) which indicates that there is a significant relationship between food choice and socio-cultural. Similarly, the correlation between food preferences and socio-cultural is significant at ($r=0.278$). Consequently, there is a relationship between food choice and preferences and socio-cultural among Libyan residents in Malaysia.

Table 4.13 Correlation Analysis for Food Choice, Food Preferences and Socio-cultural

Variables	Dependent Variable Socio-cultural
Independent Variable	
Food Choice	0.268**
Food Preferences	0.278**

Note: **. Correlation is significant at the level 0.01 level (2-tailed)

4.6.2 MULTIPLE REGRESSION ANALYSIS

Multiple regression analysis is also known as predictors, it can be defined as an influential technique used in forecasting the unknown value of a variable from the known value of two or more variables. Generally, the multiple regression equation of Y on $X_1, X_2, \dots, X_k$ is given by:

$$Y = b_0 + b_1 X_1 + b_2 X_2 + \dots + b_k X_k$$

Particularly, multiple regression analysis is used to predict the value of Y for given values of $X_1, X_2, \dots, X_k$. By multiple regression, the models will be with just one dependent and two or more independent variables. The variable the value of which is to be predicted is known as the dependent variable and the ones whose known values are used for prediction are known as independent variables. Furthermore, multiple regression analysis is used when one is interested in predicting a continuous dependent variable from a number of independent variables. If dependent variable is dichotomous, then logistic regression should be used (Freedman, 2005).

Moreover, the result of normality distribution can be seen through graphic representation of regression assumptions. The Central Limit Theorem (CLT) implies that with a “large” sample, the regression solution and associated tests will be robust to departures from Normality. If one has a small to moderate sample size, then tests of normality may have low power to detect departures from Normality. To compound this problem, with small to moderate sample sizes, one cannot be certain that the properties of the CLT will make the results robust to departures from Normality (Freedman, 2005).

Table 4.14 below summarizes the results of the relationship between food choice and preferences and socio-cultural. From the findings, the food choice indicates ($\beta=0.217$ and $p\text{-value}= .000 < 0.05$), which means that 21.7 % of the variance can be explained in the relationship and it has a strong positive significant relationship with the model. Additionally, food preferences signify ($\beta=0.230$, and $p\text{-value}= .000 < 0.05$) which constitutes 23 % explains the variance in the model and it has a strong positive significant relationship. Besides, the R^2 of the relationship is 0.122 and the significant F change shows .000 which indicates very high level of confidence level. At the same time, the Durbin Watson indicates 1.774, which explains there is a positive correlation in the mentioned relationship. Therefore, food choice and food preferences have a very strong direct significant relationship with socio-cultural.

Table 4.14 Summary of the Relationship between Food Choice, Food Preferences and Socio-cultural

Dependent Variable	Socio-cultural	
	Standard β	Sig.
Independent Variables		
Food Choice	0.217	.000***
Food Preferences	0.230	.000***
R		0.349

R ²	0.122
Adjusted R ²	0.115
F Change	17.308
Significant F Change	.000
Durbin Watson	1.774

Notes: ***significance at the 0.01 level; **significance at the 0.05 level; * significance at the 0.1 level

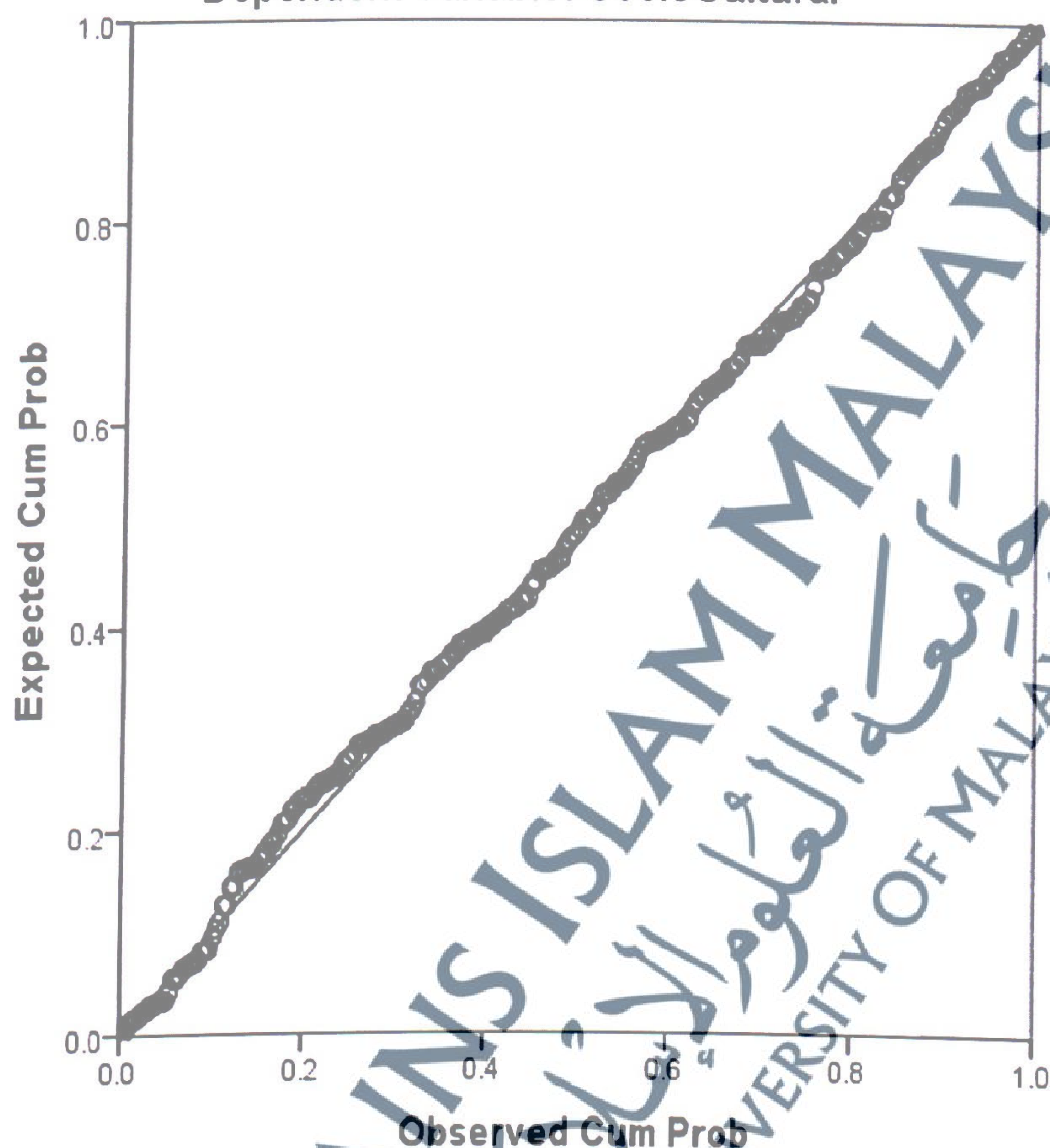
This is a Normal probability-probability (P-P) plot based on the standardized residuals. On the X axis is the Observed Cumulative Probability based on the percentiles in the frequency distribution of the residuals. The Y axis is based on taking the Standardized Residual (Z-score) and computing the cumulative density (Percentile; Probability of that Value or below) from the NORMAL distribution. If the residuals are

Normally distributed the values should fall on the diagonal line of identity. From Figure 4.11 below, it is clear that the variables are normally plotted, which portrays that there is linear regression among the variables and the data are normally distributed.

Figure 4.11 Normal P-P Plot of the Relationship between Food Choice, Food Preferences and Socio-cultural

Normal P-P Plot of Regression Standardized Residual

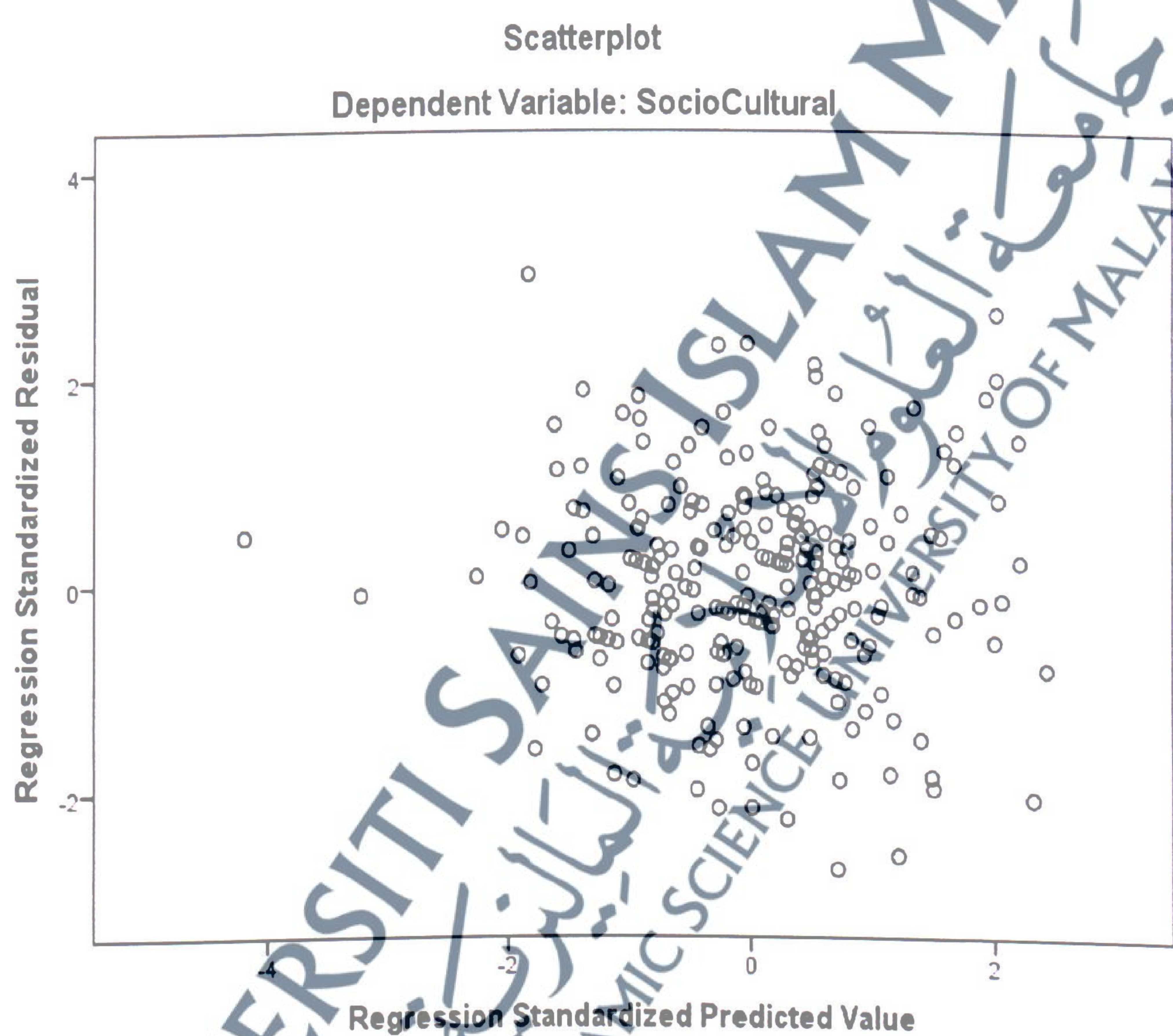
Dependent Variable: SocioCultural



The following is a Scatter plot of the standardized residuals on the Y-axis and the standardized predicted values on the X-axis. The residual by predicted plot is an extremely useful plot for assessing regression assumptions. The choice of which type of residual to use is debatable, but some statisticians prefer raw; some prefer standardized; some prefer studentized. In practice graphically, the difference is minor. The predicted value (or standardized predicted value) is on the X-axis. With the simple, one predictor model [$\hat{Y}_i = 2.62 + 0.32X_{1i}$], the predicted value is a linear transformation of X_1 . So whether one X_1 uses $\hat{Y}$ or does not matter; but, as one progresses to multiple regression, the Residual by Predicted plot is an

efficient way to assess assumptions in a single plot. Hence, scatter plot shown in Figure 4.12 also explains that the variables of independent and dependent in this study are relevant to each other, which scatter close to one another and thus prove that the data are scattered normally.

Figure 4.12 Scatter plot of the Relationship between Food Choice, Food Preferences and Socio-cultural



Is there any significant relationship between the food choice and socio-cultural among Libyan residents in Malaysia?

From the above result, it shows that there is a significant relationship between the food choice and socio-cultural among Libyans living in the Klang Valley, Malaysia. Both findings in the correlation and regression analysis show that food choice has positive relationship with socio-cultural with ($r=0.268$) and ($\beta=0.217$, $p=.000 < 0.05$) respectively. Thus, this result establishes the importance of choice of food which contributes to the social-cultural adaptation among people that migrate from their home country.

Research Question 5

Is there any significant relationship between the food preferences and socio-cultural among Libyan residents in Malaysia?

Based on the above result, there is a significant relationship between food preferences and socio-cultural among Libyan residents in Malaysia. This is supported by the findings in both correlation and regression analysis which show that food preferences have a significant positive relationship with socio-cultural as ($r=0.278$) and ($\beta=0.230$, $p=.000 < 0.05$) respectively. Therefore, immigrant people that are staying in another country are expected to prefer their own food, but there are more likely to be modifications due to the integration into the conventional civilization of the host countries which lead them to socialize with the people (McArthur et al., 2001).

4.7 RESULT OF FOOD CALORIE INTAKE

Maintaining a healthy diet is principally the consumption of natural, fresh and healthful foods for everyday meal intake and this diet must be balanced to offer a adequate necessary nutrients. The foods preferred must be typically low in fats, sodium and refined sugars. Daily calories are the number of calories people require to consume daily which hinges on numerous influences, comprising age, size, height, gender, daily routine, and complete broad health (Nordqvist, 2016). Also, it has been revealed recently that elements like the way and manner individuals eat influences people's level of calorie intake.

Therefore, it has been observed that the longer people chomp food, the more the calories their body absorb. A study conducted by Purdue University, West Lafayette, Indiana, revealed that, when a group of people were requested to chomp almonds, and the volume of fecal fat and energy lost was calculated. The groups chomped the almonds either 10 times, 25 times or 40 times. And the outcome showed that the people who chomped the almonds more were able to absorb the smaller particles into the system at a quicker speed, while those groups who chomped a lesser amount of almonds were not able to retain the larger particles in their body (Mattes, 2013). According to

Mattes (2013) the *“Particle size [affects the] bio accessibility of the energy of the food that is being consumed. The more you chew, the less is lost and more is retained in the body”*.

On the other hand, Libyan residents in Klang Valley consume many carbohydrate foods and sometimes complex carbohydrate concentrated diets. Hence, complex carbohydrates are majorly favored by Libyans, because the meals have the ability to

further break down into glucose gradually than ordinary carbohydrates and therefore deliver a slow balanced flow of energy during the daytime. Besides, this food naturally offers numerous vitamins and minerals required for energy generation. The foods include Rice, Pasta, Macaroni, Cereals and Breads. Also, other food consumed mostly are; Beans, Potatoes, Wheat Flour, Eggs, Fruits and Vegetables, thus, some of these foods have been mentioned in Chapter Two of this thesis.

Similarly, for the purpose of calorie test and to measure the extent of calories intake of Libyans residents in Klang Valley, the typical meal consumed by Libyans for breakfast, lunch and dinner were used. Conversely, Libyans usually take a light breakfast, heavy lunch and light or heavy dinner, which might be taken latey sometimes. The following popular foods were used for the test: Bread, Rice, Pasta, Chicken, and Tuna. Moreover, the observation of the daily menu was done for three consecutive days to ascertain the degree of calories intake by Libyans who reside the in Klang Valley, Malaysia.

4.7.1 THREE DAYS CALORIE INTAKE ANALYSIS AND BREAKDOWN OF DAILY LIBYAN MENU

According to the United States Department of Agriculture (USDA), the calorie content of carbohydrate, protein and fat is as follows: Carbohydrates - 4 calories per gram; Protein - 4 calories per gram; Fats - 9 calories per gram, and alcohol contains - 7 calories per gram. The researcher measured the calories of some of the foods and used the USDA estimation to calculate the calories. Likewise, some of the information of the menu was based on calorie's king estimation which was done by imputing the food items in the search website (www.calorieking.com) to enumerate the calories and nutrition

information of the food, for example, Tea, Coffee, Milk, Orange juice, Apple juice, Mango juice, and Pepsi cola information was obtained through this website. Table 4.15 below shows the USDA method of calorie calculation.

Table 4.15: Food Calories Estimation

Food Category	Cals/gm
1 gm Carbohydrate	4
1 gm Protein	4
1 gm Fat	9
Alcohol	7

Day 1

4.7.1.1 Breakfast: (Bread and Tuna Sandwich)

Table 4.16: Breakfast Nutrients Composition (Day 1)

Food Items	Calories (Kcal)	Fat (g)	Protein (g)	Carbohydrates (g)
118 grams of bread with tuna	472	16.71	36.6	12.50
I cup of tea/ coffee (Sweetened with sugar)	47	0	0.02	12.51
1 medium size of banana (5.5 oz)	90	0.3	1.1	23.07
Total	609	17.1	37.72	48.08

Table 4.16 above shows that in breakfast a total number of 609 calories are taken per day by Libyan residents, while fat, protein and carbohydrates intake are 17.1, 37.72 and 48.08, respectively.

4.7.1.2 Lunch: (Chicken Rice)

Table 4.17: Lunch Nutrients Composition (Day 1)

Food Items	Calories (Kcal)	Fat (g)	Protein (g)	Carbohydrates (g)
220 grams of cooked rice	880	6.5	8	84.9
86.4grams of Chicken (cooked cutlet with cherry tomatoes, garlic, chili peppers & 2 table spoons of cooking oil)	141	3.1	27.6	0
44 grams of onion	28	2.03	1.43	4.05
55.6 grams of cooked beans	60	0.25	4.34	11.8
40.9 grams of potatoes	42	0.5	0.9	9.8
1 cup of orange juice	85	0.2	1.69	21.2
<i>Total</i>	1,236	12.58	43.93	131.75

Table 4.17 above shows that for lunch a total number of 1,236 calories are taken per day by Libyan residents in Klang Valley area, while fat, protein and carbohydrates intake are 12.58, 43.93 and 131.75, respectively.

4.7.1.3 Dinner: (Chicken Pasta)

Table 4.18: Dinner Nutrients Composition (Day 1)

Food Items	Calories (Kcal)	Fat (g)	Protein (g)	Carbohydrates (g)
134.5 grams of cooked Pasta	538	2.5	10.8	51.9

86.4 grams of Chicken (cooked cutlet with shopped tomatoes, Garlic, Chili peppers & 2 table spoon of Cooking Oil)	141	3.1	27.6	0
53.1 grams of Onion	34	2.06	1.50	4.25
Soup (6 oz)	53	0.49	1.41	11.73
40.9 grams of Potatoes	42	0.5	0.9	9.8
1 Cup of Apple Juice	117	0.27	0.15	28.87
<i>Total</i>	925	18.5	42.36	106.55

Table 4.18 above shows that, for dinner meal a total number of 925 calories are taken daily by Libyan residents in Klang Valley, while fat, protein and carbohydrates intake are 18.5, 42.36 and 106.55 respectively.

4.7.1.4 Total Daily Menu (Day 1)

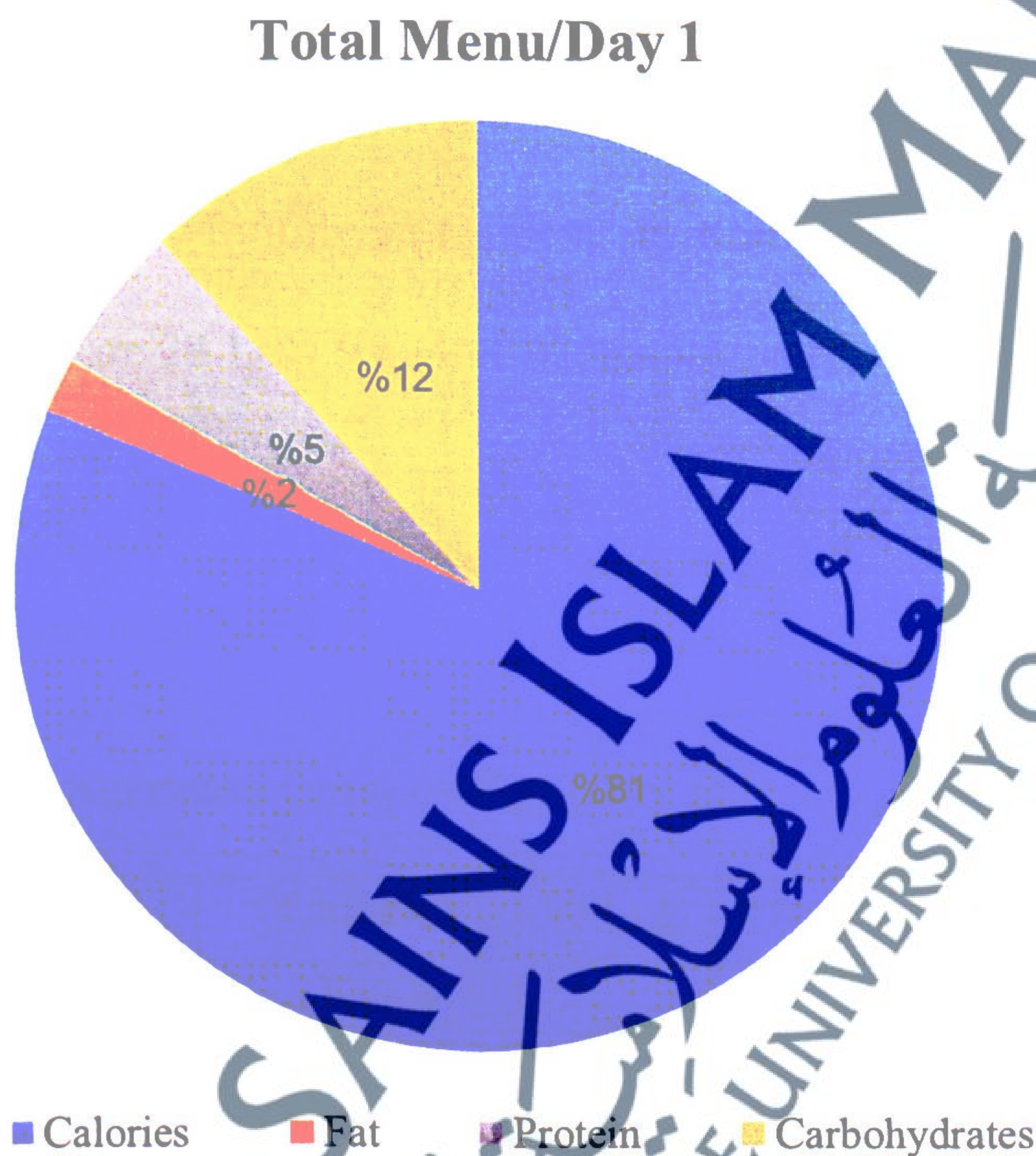
Table 4.19: The Total Daily Menu for Day 1

Menu	Calories (Kcal)	Fat (g)	Protein (g)	Carbohydrates (g)
Breakfast	609	17.1	37.72	48.08
Lunch	1,236	12.58	43.93	131.75
Dinner	925	18.5	42.36	106.55
<i>Total</i>	2,770	48.18	124.01	286.38

From the Table 4.19 above in the breakdown of daily food intake by Libyan residents in Klang Valley, it shows that an average total of 2,770 calories are taken per day in the whole meal for all Libyans in Klang Valley, while fat, protein and

Carbohydrates intake are 48.18, 124.01 and 286.38, respectively. This result as depicted in the pie chart below shows that 81 % calories, 12 % carbohydrate, 5 % protein, and 2% fat are daily ingested by Libyan residents in Klang Valley area of Malaysia.

Fig 4.13: Pie Chart of Total Daily Menu for Day 1



Day 2

4.7.1.5 Breakfast: (Toasted Bread with Cheese and Egg)

Table 4.20: Breakfast Nutrients Composition for Day 2

Food Items	Calories (Kcal)	Fat (g)	Protein (g)	Carbohydrates (g)
2 slices toasted bread with cheese and 1 boiled egg	600	23.1	22	60

I cup of coffee latte (sweetened with sugar and milk)	100	5	5	10
1 small size of orange (4.6 oz)	45	0	0.9	11.3
Total	745	28.1	27.9	81.03

Table 4.20 above shows that in breakfast for the second day a total number of 745 calories are taken per day by Libyan residents in Klang Valley, while fat, protein and carbohydrates intake are 28.1, 27.9 and 81.03, respectively.

4.7.1.6 Lunch: (Rice with Beef)

Table 4.21: Lunch Nutrients Composition (Day 2)

Food Items	Calories (Kcal)	Fat (g)	Protein (g)	Carbohydrates (g)
220 grams of cooked rice	880	6.5	8	84.9
2 pieces of lamb (cooked with cherry tomatoes, garlic, chili peppers & 2 table spoons of cooking oil)	102	8.4	6.3	0
44 grams of onion	28	2.03	1.43	4.05
(salata) mixed vegetable salad with olive oil and salt	114	9.6	1.5	10.8
40.9 grams of potatoes	42	0.5	0.9	9.8
1 cup of orange juice	85	0.2	1.69	21.2
Total	1,251	27.23	19.82	131.2

Table 4.21 above shows that a total number of 1,251 calories are taken by Libyan residents in Klang Valley for second day lunch, while fat, protein and carbohydrates intake are 27.23, 19.82 and 131.2, respectively.

4.7.1.7 Dinner: (Couscous)

Table 4.22: Dinner Nutrients Composition for Day 2

Food Items	Calories (Kcal)	Fat (g)	Protein (g)	Carbohydrates (g)
107 grams of cooked couscous	428	0.3	5.9	36.5
86.4 grams of chicken (cooked cutlet with chopped tomatoes, garlic, chili peppers & 2 table spoons of cooking oil)	141	3.1	27.6	0
53.1 grams of Onion	34	2.06	1.50	4.25
55.6 grams of cooked beans	60	0.25	4.34	11.8
40.9 grams of potatoes	42	0.5	0.9	9.8
2 cup of pepsi cola	126	0	0	33.8
Total	831	6.75	40.24	96.15

Table 4.22 above shows that for the second day dinner meal, a total number of 831 calories are taken daily by Libyan residents in Klang Valley, while fat, protein and carbohydrates intake are 6.75, 40.24 and 96.15, respectively.

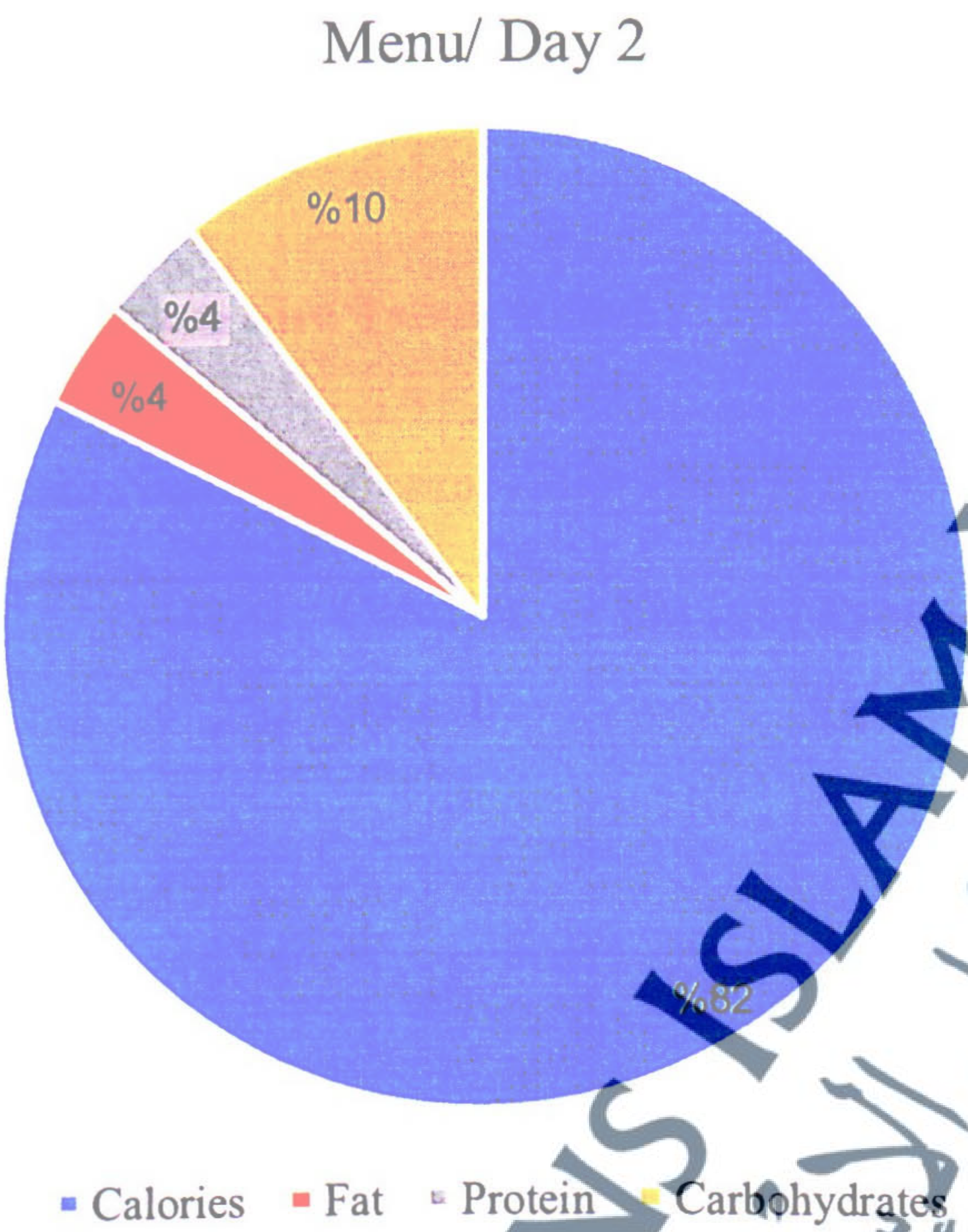
4.7.1.8 Total Daily Menu for Day 2

Table 4.23: The Total Daily Menu for Day 2

Menu	Calories (Kcal)	Fat (g)	Protein (g)	Carbohydrates (g)
Breakfast	745	28.1	27.9	81.03
Lunch	1251	27.23	19.82	131.2
Dinner	831	6.75	40.24	96.15
Total	2,827	62.08	87.99	308.38

From Table 4.23 above in the daily food intake by Libyan residents in Klang Valley for the second, it shows that an average total of 2,827 calories are taken for the whole meal in the second day by all Libyans in Klang Valley, while fat, protein and carbohydrates intake are 62.08, 87.99 and 308.38, respectively. This result as represented in the pie chart below demonstrates that 82 % calories, 10 carbohydrate, 4% each for protein fat are gulped daily by Libyan residents in Klang Vallea area of Malaysia.

Fig 4.14: Pie Chart of Total Daily Menu for Day 2



Day 3

4.7.1.8 Breakfast: (Ranch Grilled Chicken Snack Wrap)

Table 4.24: Breakfast Nutrients Composition for Day 3

Food Items	Calories (Kcal)	Fat (g)	Protein (g)	Carbohydrates (g)
1 ranch grilled chicken snack wrap	350	13	19	25
I cup of milk	122	4.9	8.1	12.4
1 small size apple (6 oz)	80	0.3	0.4	21.1
Total	552	18.2	27.5	58.5

Table 4.24 above shows that in breakfast for the third day a total number of 552 calories are taken per day by Libyan residents in Klang Valley, while fat, protein and carbohydrates intake are 18.2, 27.5 and 58.5, respectively.

4.7.1.9 Lunch: (Chicken Sish Taouk Kebab)

Table 4.25: Lunch Nutrients Composition (Day 3)

Food Items	Calories (Kcal)	Fat (g)	Protein (g)	Carbohydrates (g)
Chicken sish taouk kebab with Arab bread	510	11.5	37.0	14.2
(Salata) mixed vegetable salad with olive oil and salt	114	9.6	1.5	10.8
French fries (1 oz)	89	4.6	1.1	10.9
1 cup of Arab tea with sugar and mint leave	87	0	0	15.0
Total	800	25.7	39.6	50.9

Table 4.25 above shows that a total number of 800 calories are taken by Libyan residents in Klang Valley for lunch in the third day, while fat, protein and carbohydrates intake are 25.7, 39.6 and 50.9 respectively.

4.7.1.10 Dinner: (Bazeen, made from Barley Flour)

Table 4.26: Dinner Nutrients Composition for Day 3

Food Items	Calories (Kcal)	Fat (g)	Protein (g)	Carbohydrates (g)
A mold size of cooked wheat flour (Bazeen)	750	9.8	10.1	90.5
Some pieces of Lamb (cooked with cherry tomatoes, Garlic, Chili peppers & 2 table spoon of Cooking Oil)	230	17.6	10.7	0
20 grams of Onion	14	0.7	0.5	1.25
1 boiled egg	70	5	6	0
40.9 grams of Potatoes	42	0.5	0.9	9.8
1 cup of Mango/Orange Juice	78	0.1	0.1	19.2
Total	1,184	38.1	28.3	120.25

Table 4.26 above shows that, in the third day at dinner the total number of calories taken by Libyan residents in Klang Valley are 1,184, while fat, protein and carbohydrates intake are 38.1, 28.3 and 120.25, respectively.

4.7.1.11 Total Daily Menu for Day 3

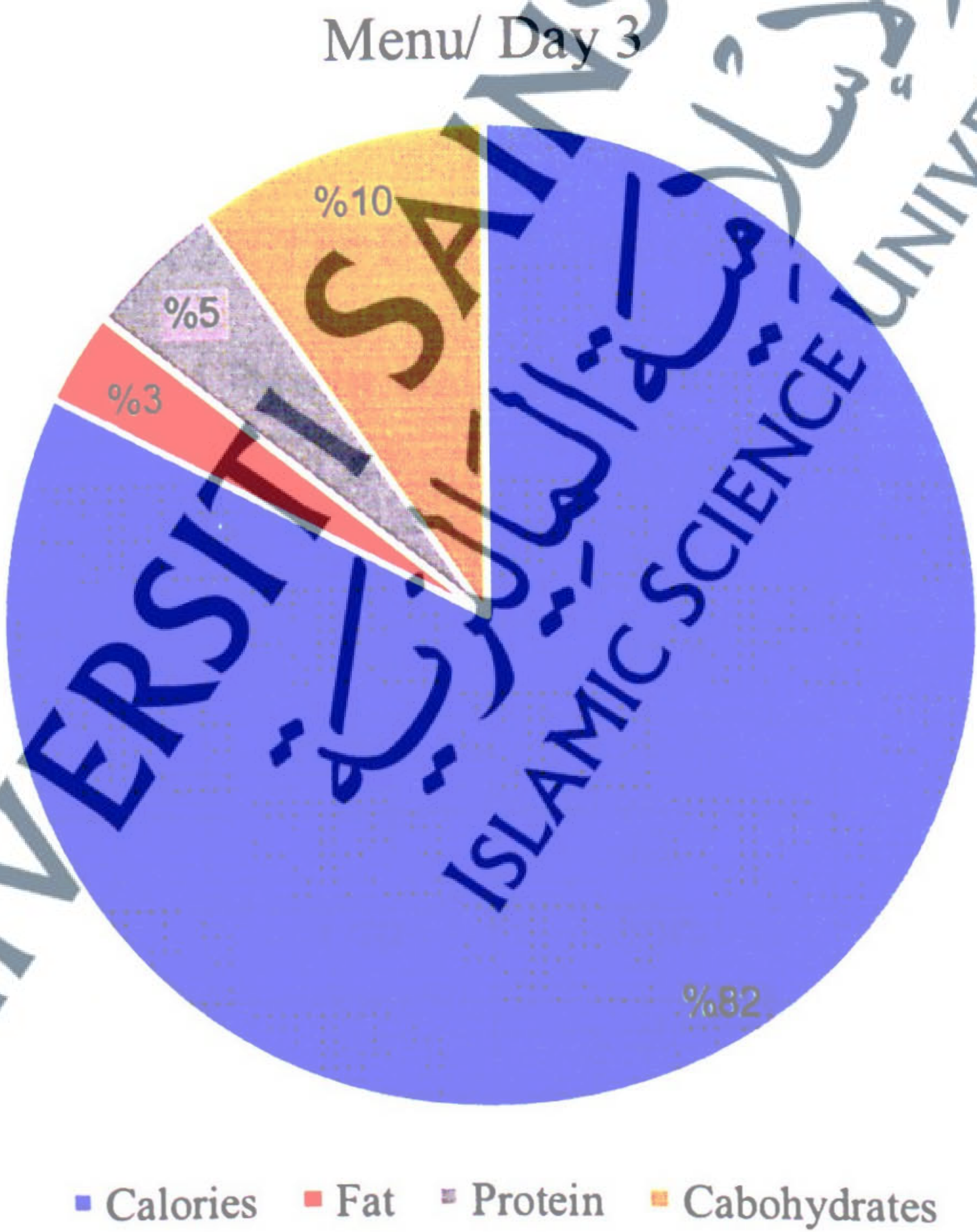
Table 4.27: The Total Daily Menu for Day 3

Menu	Calories (Kcal)	Fat (g)	Protein (g)	Carbohydrates (g)
Breakfast	552	18.2	27.5	58.5

Lunch	800	25.7	39.6	50.9
Dinner	1,184	38.1	28.3	120.25
<i>Total</i>	2,536	82	95.4	229.65

From the Table 4.27 above, the daily food intake by Libyan residents in Klang Valley for the third time shows that, an average total of 2,536 calories are taken for the whole meal in the third day by all Libyans in the Klang Valley, while fat, protein and carbohydrates intake are 82, 95.4 and 229.65, respectively. This result as illustrated in the pie chart below establishes that 82 %, 10 % carbohydrate, 5 % protein and 3 % fat are consumed daily by Libyan residents the Klang Valley area of Malaysia.

Fig 4.15: Pie Chart of Total Daily Menu for Day 3



4.8 BODY MASS INDEX (BMI)

Body Mass Index (BMI) is a measure of body fat based on weight and height, which is a measurement to determine the weight categories of a person. These classes range from underweight which includes BMI that is less than 18.5, normal BMI between 18.5 and 24.9, overweight, which is BMI between 25 and 29.9, and obese, individuals with BMI of 30 and above. For BMI analysis, 10 % of the respondents (i.e. 25 Libyan respondents' from 252 questionnaires collected) were used to determine the BMI and to identify their category. This was carried out to ascertain whether Libyans are maintaining healthy living while in Malaysia from food consumption. To achieve this, metric formula developed by Adolphe Quetelet was used because it is easy and straightforward to apply. Table 4.28 below shows the BMI categories of respondents.

BMI Formula = Weight in Kilograms/ Height in meters²

Table 4.28: The BMI of Respondents

S/N	Weight (W)	Height H)	BMI (W/H ²)	Age	Category
1	60.1	1.60	18.8	18yr.& below	Normal
2	61.8	1.70	18.2	18yr.& below	Underweight
3	62.7	1.69	18.6	18yr.& below	Normal
4	63.2	1.60	19.75	19-29 yrs.	Normal
5	65.4	1.75	18.7	19-29 yrs.	Normal
6	68	1.70	20	30-40 yrs.	Normal
7	70	1.69	20.7	40-50 yrs.	Normal
8	71.4	1.50	23.8	40-50 yrs.	Normal
9	73	1.65	22.1	40-50 yrs.	Normal
10	75	1.71	22	51 & above	Normal
11	77	1.51	25.5	19-29 yrs.	Overweight

12	78	1.73	23	30-40 yrs.	Normal
13	82	1.67	25	19-29 yrs.	Overweight
14	84.1	1.63	25.6	19-29 yrs.	Overweight
15	85	1.70	25	19-29 yrs.	Overweight
16	86	1.67	26	19-29 yrs.	Overweight
17	86.5	1.71	25.3	30-40 yrs.	Overweight
18	88	1.69	26	30-40 yrs.	Overweight
19	90	1.75	26	30-40 yrs.	Overweight
20	94	1.68	28	30-40 yrs.	Overweight
21	96	1.75	27	40-50 yrs.	Overweight
22	97	1.73	28	51 & above	Overweight
23	99	1.66	30	19-29 yrs.	Obese
24	105.1	1.70	31	30-40 yrs.	Obese
25	107	1.70	31.5	30-40 yrs.	Obese

From the analysis above in Table 4.28, it is shown that out of the 25 respondents' BMI calculated, 11 individuals were overweight (i.e. 25 and 29.9 BMI), and their corresponding ages were 19-29 years (5 overweight persons), 30-40 years (4 overweight persons) 40-50 years and 50 years and above (1 person each), while 10 respondents' were within normal BMI (i.e. 18.5 and 24.9 BMI) with corresponding ages between 18 years and above, 19-29 years and 30-40 years having 2 normal persons each, 41-50 years had 3 normal persons and 51 years and above had 1 person . Whereas, the remaining result shows that three respondents' were obese (i.e. 30 and above BMI) with corresponding age of 19-29 years and 30-40 years. Lastly, one respondent was underweight (i.e. 18 and below BMI) with corresponding age of 18 years and below.

4.9 DISCUSSION

The findings of this study showed that Libyan residents in Malaysia choose to eat *Halal* and green vegetables as their food choice as shown in Table 4.6. It is a responsibility of Muslims to consume for sustenance, to uphold decent health, and not living for eating alone. Allah says in the Qur'an "And We did not make them bodies not eat the food, and they were not to abide (forever)" (Surat Al-Anbiya: 21). Usually, a Muslim eats to preserve a strong and good physical shape in order to have the ability to increase knowledge and strength for the well-being of humanity (American Dietetic Association and American Diabetes Association, 1996). As known to all Muslims, eating is well-thought-out as a matter of worship of God, similar to prayers, fasting, and other acts of religious devotion. Hence, Arabs are always particular in choosing their food as most of them are really strong in Islamic beliefs and faith.

The results of this research established that Libyans the living in the Klang Valley area of Malaysia love to eat grapes (Table 4.7) as an individual food and the majority of them prefer to consume energy dilute food (Table 4.9) like fruits and vegetables. This is supported by Packard and McWilliams (1993) whereby fresh fruits most often are served for dessert and occasionally milk pudding seasoned with rose water or orange water among Arabs. Besides, labouli and fattoush are well-known to Arabs as their favorite salads. Vegetables are usually served by Arabs, customarily in sumptuous arrangements that necessitate extensive stretch, likewise they are well-preserved as binds. Preferred vegetables in Arab countries are eggplant, okra, green beans, cucumber, and tomatoes. In particular, the most popular vegetable in Arab food is spinach because of its imaginary nutritional significance. Besides, onions and leeks are basic ingredients; squash is famous and used as much as onions. Different fruits are consumed for desserts and snacks and

also popular because they are used to prepare jelly and syrups (Mermelstein, 1999; Kritzman, 1999).

The findings of this study indicate that Libyans like to socialize and make friends with community while staying in the Klang Valley area of Malaysia as shown in Table 4.10. It shows that Libyans have high level of socio-cultural responsibility as they are able to understand the requirements of their workplace and universities and also try to adapt to the cultural differences in Malaysia. It has been proven in the study of Kittler and Sucher (2001) that food plays a central role in the lives of Libyan families, especially in the celebration of special occasions (often religious) and in the observance of certain events like weddings and births. Love and care are found to be interrelated with food and its offering of a variety of food with different cooking styles and adaptation in Libyan menu which originated mainly from the customs of the Mediterranean, North Africa (Tunisian food), and the Middle East (Egyptian food).

The findings showed that there are significant relationships between food choice and socio-cultural beliefs among Libyans living in Malaysia. Similarly, there is also significant relationship between food preferences and socio-cultural beliefs among Libyan residents in the Klang Valley in Malaysia. The study conducted by Wądołowska et al. (2008) supported the finding that food preferences interrelate with diverse food choices and is associated with socio-demographic profiles of individuals like age, economic status, education, gender, area of residence and size of the place of residence, which in turn interrelates with the incidence of food intake. Besides, it has been found that people who have dissimilar food choice initiatives vary in preferences for certain food products. Likewise, food preferences have been closely related to cultural progression since olden times (Wright et al., 2001; Montanari, 2006). The cultural

similarities pronounce the significance of a particular society when discussion arises on food likings.

The demographic profiles in Table 4.2 reveal that the majority of Libyans who are living in the Klang Valley are changing their eating habits which contribute to their weight gains. Similar to a study conducted by Zajonc (1965), which stated that people are easily being influenced by how other individuals in the environment behave while eating. The simple observation of other people's conduct influences people's fondness for a food product. This can be well-thought-out to be a social acceleration effect, which merely specifies the influence the presence of others have on people's behavior.

Nevertheless, locality solely is not the single factor influencing the changing of eating habits. Demographic factors like age, gender, income or level of education also work together with those changes. Also, this is closely related to the earlier stated cultural factors. For instance, level of education will certainly influence what type of social ambiance we reside in, and then again influence what kind of food we are open to (Bourdieu, 1995). Besides, previous studies revealed that women are inclined to favor additional vegetables and less energy concentrated food than men (Cooke & Wardle, 2005; Wądołowska et al., 2008). Also, females have a lesser degree of animal product intake than males (Kubberød et al., 2002), a resilient inclination to avoid fats from meats (Goldberg & Strycker, 2002) or fats overall (Johansen et al., 2011). Ares and Gámbaro (2007) revealed that gender and age groups have diverse preference patterns for purposeful food perceptions as well as diverse healthy food lifestyles in particular (Carillo et al., 2011; Wądołowska et al., 2008).

As a result, food lifestyles are characteristically traditional whereby individual, social, and circumstantial influences interplay. Once people move from one society to another, alterations in traditions and food making competencies may change the foods they consume. Several researches have been undertaken regarding food routines and changes in food eating forms of settlers who have established in different countries. In the United States for instance, many settlers like Chinese, Indian, Korean, Japanese, Vietnams, and Hispanic have altered their food eating patterns (McArthur et al., 2001; Gordon et al., 2000; Chavez et al., 1994). Likewise, Libyan living in the Klang Valley area of Malaysia revealed that their eating habits have changed from regularly eating at home to eating out once a week as shown in Table 4.2.

Additionally, communal situation and household play a huge part in food consumption (Tuorila, 2007). Much of food consumption happens in the existence of others, and cultural powers serve as a controller to how much we consume, when we eat and what we eat. Food is a kind of social altercation that is of huge significance in various cultures (Askegaard & Madsen, 1998; Nestle et al., 1998; Rozin, 1996). On the other hand, societies use the classes and guidelines of their cultures, subcultures or ethnic groups to choose what is tolerable and preferable to eat (Nestle et al., 1998). Thus, understanding these guidelines begins early in life and exercises an influential strength once it comes to food choice and preferences during the course of human survivals. The adjoining reference groups like family and peers offer numerous chances for exhibiting and strengthening the communal food choices as well as sensory likes and dislikes (Mela, 1999). Thus, demographic factors are much more influential in changing the eating habit among people in societies around the world.

The calorie intake analysis of the food intake of Libyan residents in the Klang Valley for three days found that their dietary habit was in conformity with the normal limits required. This is because, excess intake of calories above the daily disbursement of energy leads to weight gain and can ultimately lead to overweight and obesity and this can escalate the risk of developing high cholesterol, asthma, hypertension, respiratory ailments, orthopedic problems, depression and diabetes, arthritis, and an overall poor health record (Bishop et al., 2005). The average calories intake by Libyans daily for the three days were 2,770, 2,827 and 2,536, respectively, which was not considered to be too high. This quantity was within the recommended calories needed for a healthy body system. Hence, this finding is corroborated by the United State Department of Agriculture (USDA) suggestion on daily human dietary consumption that, the calorie intake for women aged between 19 and 51 years varies from 2200-2400 calories daily. Usually, younger women need more calories than older women. On the other hand, men aged between 19 and 51 years of age needed more and required to take more than 2,200-2,400 calories per day.

Lastly, the BMI analysis showed that majority of the observed respondents who are Libyan living in Klang Valley were slightly overweight while others are within the normal range of BMI, and few respondents are obese as shown in Table 4.28. But only one individual was observed to be underweight. Those who were overweight and obese might be as a result of change in eating patterns while in Malaysia as earlier shown in the food menu discussion. Generally, the respondents who have normal BMI were considered to be in good state of health, while those respondents who were observed to be obese and overweight were not regarded as maintaining good health, which might be as a result of calorie intake, this likely occurred because of their changing patterns of eating and might be the reason, while a few of the respondents reported chronic diseases such as high blood

pressure, diabetics, high cholesterol, etc. Although the calorie intake of Libyans in this study was within normal range as stated above, there is need for proper care of food intakes and eating patterns to be able to maintain good health.

