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Dates Consumption in Malaysia

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Abstract

The aim of this study is to analyse and identify date consumption patterns by region in Malaysia. In addition, this study also will identify demand on dates in Malaysia. Currently, there is a lack of study on prophetic food, especially in Malaysia. The data were collected through survey questionnaires. The sample size of this study was 1739 respondents from various socioeconomic backgrounds, profession, and level of education. The survey was conducted in several states in Peninsular Malaysia in June 2015. Descriptive statistics and crosstab have been used to find the

results. The findings showed that Selangor had the most date consumers. The reason is that Selangor is an urban state, and the level of income of respondents from this state is higher compared to other states. Moreover, the level of education and awareness among respondents in Selangor are better compared to other states. This study also showed that people tend to consume dates not only because of religion, but also because of health factors. Findings of the study can be used to formulate and develop systematic supply chain in the dates market.

Keywords: *Dates, Consumption, Region, Malaysia.*

Introduction

The date fruit (*Phoenix Dactylifera L.*) is among the main fruit crops of the Middle East. It is a fruit known for its rich nutrient value, and its consumption is recommended by the Prophet Muhammad (*pbuh*). He (*pbuh*) said, “*There is a tree among the trees which is similar to a Muslim (in goodness), and that is the date palm tree.*” (Al-Bukhari: 5448). Besides that, the hadith also states the benefits of consuming dates, “*He who eats seven 'Ajwa dates every morning, will not be affected by poison or magic on the day he eats them.*” (Al-Bukhari: 5445). The date fruit is a source of food, providing fibre, carbohydrates, minerals and vitamins (Baloch et al., 2006; Al-Farsi et al., 2005).

The date palm (*Phoenix dactylifera L.*) is considered a symbol of life in the desert because it tolerates high temperatures, drought, and salinity more than others fruit crop species. It is one of the oldest trees from which man has derived benefit, and it has been cultivated since ancient times. The only indigenous wild desert plant successfully domesticated in its native harsh environments appears to be the date palm (Zohary and Hopf, 2000).

Saudi Arabia sees a surplus in the production of dates (Al-Abbad et al. 2011). Due to several reasons, the Malaysian climate is not suitable to promote date growth. However, in recent years, growing efforts have been made to realize the possibility of planting dates in Malaysia due to the increasing demand by local Muslim consumers. Date fruit is well accepted by Muslims in Malaysia not only during the holy month of Ramadhan, but also throughout the year. The popularity of the fruit stems from the Prophet Muhammad’s recommendation to consume dates, in addition to the benefits of the fruit itself. Nowadays, people are aware of the nutrition and health benefits of consuming dates.

Due to high demand for dates, Malaysia has seen an increase in date export volume, especially during the *Ramadhan* festival. It is easy to purchase dates in

Malaysia as they are readily available at shops and supermarkets in various shapes and sizes. However, little study has been about dates consumption by region in Malaysia. Such study is significant in order to identify the demand of dates from consumers’ in Malaysia. Besides that, this study will provide information and data on how Malaysian consumes dates.

A study by Quah and Tan (2010) shows that the food consumption pattern of a consumer changes as he becomes more educated and more conscious about health and wellness issues, particularly those related to food choices and diet. As such, this development leads to the prospect of higher demand for premium food such as date fruit. There is a lack of data and information about the consumption of dates based on region. Thus, comparisons can be made between states in Malaysia to disaggregate date consumption patterns.

Literature review

Consumer behaviour

One of the main concepts in the study of consumer behaviour is the attitude (Foxall, Castro, James, Schrezenmaier, 1998; Evans, Petty, See, 2009; Fishbein, Azjen, 1975). Loudon and Della Bitta (1993) define attitude as “an enduring organization of motivational, emotional, perceptual and cognitive process with respect to some aspects of an individual’s world”. Consumer behaviour will link to purchasing patterns. Consumers evaluate products based on their attributes and infer product quality from a variety of informational cues or stimuli, including intrinsic cues (e.g., product performance) and extrinsic cues (e.g., brand name, product origin) (Han and Terpstra 1988; Peter and Olson, 2008).

Consumer behaviour has always been of great interest to marketers. The knowledge of consumer behaviour helps the marketer to understand how consumers think, feel, and choose products, brands, and the like. The factors influencing consumers behaviour are culture, family, social, society, age,

groups, friends, environment, and psychological factors (Brosekhan and Velayutham, n.d). In addition, Brosekhan and Velayutham suggest that “consumer behaviour refer all the mental and physical activities that consumer performs to fulfil their needs and wants and all these mental and physical activities use the product”.

In this study, consumption of dates relates to the consumer behaviour. As consumer purchases dates, it can be categorized under the sense of humans. There are many factors motivating purchasing behaviour, such as: 1) personal (demographic factors, etc.); 2) psychological (motives, perception, perceived behavioural control (ability and knowledge, attitudes, personality, etc.); and 3) social (social norm, etc.).

Dates Consumption

The date fruit is mentioned 20 times in the Quran using several terms such as *nakhil*, *al-nakhl*, *rutob*, and *nakhlah* (Sumaiyah et al., 2014). Dates are considered as prophetic food as they are mentioned in two fundamental resources in Islam: the Quran and Hadith. For instance, dates are mentioned in the Quran, Surah al-An’am verse 141: “*It is He Who produce the gardens, with trellises and without, and dates, and tilth with produce of all kinds, and olives and pomegranates, similar (in kind) and different (in variety): eat of their fruit in their season, but render the dues that are proper on by excess: for Allah love not, the wasters*”.

Global production and consumption of dates products have been increasing particularly in most of the developing countries, driven by economic growth and rising income levels (Gerosa and Skoet, 2012). A study by Quah and Tan (2010) shows that food consumption pattern changes as the consumer becomes more educated and more conscious about health and wellness issues, particularly those related to food choices and diet. As such, this development leads to the prospect of higher demand for premium food such as dates.

Studies have shown that date fruit is rich in carbohydrates. These carbohydrates are simple sugars, absorbed and used by the cells shortly after consumption. Dates contain vitamin B, iron, minerals, calcium, magnesium, and potassium. Numerous studies have been conducted on different varieties of date fruit, and many of their nutritional and health benefits have been determined (Al-Shahib, Marshall, 2003; Vaezi, 2004; Baliga, Kandathil, Bhat, Vayalil, 2011).

Date fruit contains saturated and unsaturated fatty acids such as oleic, linoleic, linolenic acids and fatty acids. In addition, to providing and reserving energy, dates also contribute to the prostaglandin

provision (Baliga, Kandathil, Bhat, Vayalil, 2011). Therefore, date fruit can be helpful in saving energy and strengthening uterus muscles. It also contains hormones, which help the uterus stretch and be prepared for child delivery (Kordi et al., 2014).

Methodology

For the purpose of this study, the purposive sampling method was used to collect data. A total number 2000 of questionnaires was distributed, but only 1739 completed survey questionnaires could be used. They were distributed in eight states identified by two criteria: monthly household income and population size. Kuala Lumpur, Putrajaya and Selangor represented the highest income states, while Kedah, Perlis, Kelantan captured the lowest income population states. Two states that represented middle-income states were Negeri Sembilan and Pahang. Thus, based on the total number of populations, stratified by high, middle, and low income, 30 districts were selected for questionnaire distributions. Enumerators were appointed to distribute the survey questionnaires and were briefed on the research objectives and procedures of survey questionnaires distribution.

The survey questionnaire was divided into two main sections. The first section contained questions on respondents’ demographic background and general questions on consumption of date fruit. This study is interested in describing the consumption of dates by region in Malaysia. The techniques of analysis used in this study are descriptive (frequencies) and crosstab. Crosstab or Cross tabulation is used to aggregate and jointly display the distribution of two or more variables by tabulating a result against the other in 2-dimensional grids. It uses a process of creating contingency tables from the multivariate frequency distribution of variables, presented in a matrix format. Crosstab is widely used in survey results to find out interrelationships and interactions between variables (Research Optimus, 2018).

Result and Discussion

Respondents’ Profile

Table 1 (see below) shows the summary of statistics for the demographic characteristics collected from the respondents. The majority of respondents lived in Selangor, followed by Federal Territory. Both of these states had higher respondents due to the high density of people living in this state. The Department of Statistics Malaysia recorded that both states have large population; Selangor’s total of population is around 5.46 million, while Kuala Lumpur’s is 1.67 million (DOS, 2015). Kedah had the least respondents. The age groups of 31-35 and 36-40 made up most of the sample, while teenagers and pensioners were the smallest. Females were

highly represented in the sample, and most respondents were married. Tertiary education was the most common level of education. As much as 48.2 percent of total respondents obtained a monthly income of RM3,001-RM4,500. The respondents can be summarized as working, educated, and married adults who earn a modest income.

Table 1: Summary of statistics for the demographic characteristics. (N = 1739)

Factor	Response	f	%
States	Negeri Sembilan	119	6.8
	Pahang	175	10.1
	Putrajaya	15	.9
	Federal Territory	259	14.9
	Selangor	692	39.8
	Kelantan	193	11.1
	Perlis	49	2.8
	Kedah	237	13.6
Age	16-20	66	3.6
	21-25	127	6.9
	26-30	113	6.1
	31-35	495	26.7
	36-40	750	43.1
	41-45	85	4.6
	46-50	63	3.4
	More than 50	40	2.2
Gender	Male	237	12.8
	Female	1502	86.4
Marital Status	Single	214	11.5
	Married	1523	87.6
	Divorce	2	.1
Level of Education	LCE/SRP/PMR and below	22	1.2
	SPM	474	25.6
	STPM/STAM	241	13.0
	Diploma	882	50.7
	Degree and above	120	6.5
Monthly Income	Less than RM900	149	8.0
	RM900-RM1500	154	8.3
	RM1501-RM3000	197	10.6
	RM3001-RM4500	779	44.8
	RM4501-RM6000	312	16.8
	More than RM6000	148	8.0

Table 2: Cross tabulation and total frequency of dates consumers by state

States	Do you eat dates?			
	Yes	No	Frequency	Percentage
Negeri Sembilan	99	20	119	6.8
Pahang	169	6	175	10.1
Putrajaya	14	1	15	.9
Kuala Lumpur	234	25	259	14.9
Selangor	663	29	692	39.8
Kelantan	188	5	193	11.1
Perlis	49	0	49	2.8
Kedah	227	10	237	13.6
Total	1643	96	1739	100.0

Percentage	94.5	5.5	
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Table 2 (see above) shows the findings of the study. According to the question “do you eat dates”, the total of 1739 respondents participated in this study. From this total, about 94.2 per cent of respondents answered that they eat dates. From the crosstabulation analysis, the largest number of respondents who answered ‘Yes’ was from Selangor, accounting for as much as 663 of the respondents. Meanwhile, the second highest state was Kuala Lumpur; a total of 234 respondents answered ‘Yes’ to the question. Both states recorded the highest number of date consumers, as they have a large population, better profession, and higher level of education and income relative to other states. However, Kedah had the third largest date consumers (227 respondents), as consumers from this state have higher awareness to consume dates compared to other regions.

Table 3: Total frequency of why people consume dates

Reason	Valid		Missing		Total
	f	%	f	%	
Delicious taste	743	42.7	996	57.3	1739
My family also eats dates	585	33.6	1152	66.2	1739
Because of its health benefit	1131	65.6	608	35.0	1739
A practice in my locality to eat dates	211	12.1	1526	87.8	1739
Others	112	6.4	1625	93.4	1739

Based on Table 3 (see above), the most common reason for people to consume dates was *because of its health benefits*. A total of 1131 respondents agreed that they consume dates because of the inherent health benefits. The second highest was *delicious taste*, chosen by a total of 743 respondents. The third highest reason was *my family also eats dates* (585 from 1739 respondents). Meanwhile, 211 of respondents chose *practice in the locality to eat dates* as their reason to consume. The least common reason for Malaysians to consume dates was because of *others*, totalling only to 112 respondents. From this analysis, it can be concluded that people tend to consume dates because of its health benefits to human body. This is similar with findings from previous studies stating that dates is a good source

of food, providing fibre, carbohydrates, minerals, and vitamins (Baloch et al., 2006; Al-Farsi et al., 2005).

Table 4: Cross tabulation and total frequency of date purchasers

States	Do you buy dates?			
	Yes	No	f	%
Negeri Sembilan	93	26	119	6.8
Pahang	157	18	175	10.1
Putrajaya	11	4	15	.9
Kuala Lumpur	154	105	259	14.9
Selangor	564	128	692	39.8
Kelantan	161	32	193	11.1
Perlis	42	7	49	2.8
Kedah	209	28	237	13.6
Total	1391	348	1739	100.0
Percentage	80.0	20.0		

Based on Table 4 (see above), a total of 1391 participating respondents answered ‘Yes’ to the question. Meanwhile, 348 respondents answered ‘No’. The results showed that Selangor recorded the most date purchasers, amounting to 564 respondents. The second highest was from Kedah with a total of 209 respondents. Besides that, an analysis was also conducted on consumers who do not buy dates. The results showed that the highest number of non-purchasers came from Selangor (128 respondents), while the second highest state was Kuala Lumpur (105 respondents). They perhaps do not buy dates since their families have bought the fruit. In addition, people are not buying dates because they do not prefer it.

Table 5: Total frequency of why people buy dates

Reason	Valid		Missing		Total
	f	%	f	%	
Delicious taste	677	38.9	1062	61.1	1739
Advertisement	72	4.1	1664	95.7	1739
Family practice	573	32.9	1165	67.0	1739
Belief	475	27.3	1264	72.7	1739
Health reason	861	49.5	878	50.5	1739
Souvenir or gift	66	3.8	1672	96.1	1739
Affordable price	104	6.0	1635	94.0	1739

Based on Table 5 (see above), among the reasons people buy dates were *delicious taste*, *advertisement*, *family practice*, *belief (religious)*, *health*, *souvenir or gift*, and *affordable price*. Respondents of this study tended to choose *health* as their reason to purchase dates (861 respondents) Meanwhile, the second highest reason was its *delicious taste*. As much as 677 from 1739 respondents chose this reason. Others reason to buy dates were *because of family practice* (573 of respondents), *belief* (475 respondents), *affordable price* (104 respondents), *advertisement* (72 respondents), and *souvenir or gift* (66 of respondents). All of these factors have contributed to the reason why people buy date fruit.

Conclusions

In conclusion, a descriptive analysis was conducted using frequency and crosstab. The results showed that Selangor had the most date consumers in Malaysia. It also had a higher share of total respondents in this study due to its large population. The results were based on several questions, namely *do people consume dates*, *why they consume dates*, *do people buy dates*, and *why people buy dates*. All these questions were used to analyse the study. Thus, the findings showed that Selangor had the most date consumers. The reason is that Selangor is an urban state, and the level of income of respondents from this state is higher compared to other states. Moreover, the level of education and awareness among respondents in Selangor are better compared to other states. This study also showed that people tend to consume dates not only because of religion, but also because of health factor.

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