

Consumer Awareness and Acceptance of Sarda and Bobby Muskmelon

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Abstract: *Cucumis melo L.* is underdeveloped fruit of the Reticulatus type, usually called muskmelon belongs to the family Cucurbitaceae. The study was undertaken to evaluate the consumer awareness and acceptance of sarda and bobby melon. Questionnaires were used in the form of google forms to collect the data from 200 respondents. The results were analysed with the help of inferential and descriptive statistics. More than one-half of the respondents were female. Most of the respondents had education upto graduation level, belong to 20-29 age group and half of the respondents were married. About 75% know that sarda and bobby melon existed and consumed these varieties. The remaining 25% lacks the perception and awareness of both sarda and bobby muskmelon. This knowledge of the sarda and bobby melon fruit is likely due to being commonly present among marketers.

Keywords: Awareness, Bobby, Consumption, *Cucumis melo.*, Fruit, Nutrition, Sarda.

1. Introduction

Cucumis melo L. from the Reticulatus type, usually called muskmelon belongs to the family Cucurbitaceae. (Ahmed et al. 2009) It is known by different names such as Chiral, Sweet melon, Kalinga, Chira, Kharbooj, etc. (Parle et al. 2016) Muskmelon is a rich wellspring of nutrient C, β -carotene that is vitamin A, starches, sugars, protein, and furthermore little amount of vitamin B6, B2, B1 and K, niacin. Furthermore, this fruit contains more than 90% water, folic acid, and potassium just as various other human wellbeing bioactive mixes (Raji et al. 2014). Muskmelon seeds are promising substitutes for various nuts in milk beverages (Vishwakarma et al. 2017). Sarda and bobby melon are two varieties of muskmelon grown in Kapurthala district of Punjab region in India (Kaur et al. 2017). In case of both the varieties, very less research has been done so the data related to consumer awareness and acceptance is available in very less amount. This study was carried out to evaluate to factors which affects the consumer awareness and acceptance of both sarda and bobby melon, and also the comparison between the characteristics and consumption of sarda and bobby melon.

2. Material and Methods

The study was undertaken in the Kapurthala which is north western geopolitical zone of Punjab. Muskmelons were

selected from this region because it is the major contributor for the growth of Sarda and Bobby muskmelon. Sampling involved selection of Muskmelon varieties from local farmer's market. To know about awareness regarding varieties of muskmelon around 200 respondents were selected. Google forms were generated and consigned to individual. To assess the socioeconomic characteristics and knowledge of consumption, existence, acceptance of both varieties for respondent's descriptive statistics was used. To examine the relationship between respondent's socioeconomic characteristics and acceptance and awareness of Bobby and Sarda muskmelon, Chi-square analysis was used. (AdeOluwa et al 2016).

3. Result and Discussions

Table 1
Respondent's Socioeconomic characteristics

Characteristic	Frequency	Percentage
Age		
<20	26	13.1
20-29	100	50.3
30-39	41	20.6
40-49	17	8.5
>49	15	7.5
Sex		
Male	92	46.0
Female	108	54.0
Education		
Primary	12	6.0
Secondary	48	24.0
Graduation	107	53.5
Post-graduation	30	15.0
Doctorate	3	1.5
No former education	0	0
Marital status		
Single	106	54.1
Married	88	44.9
Other	2	1.0

The table shows the socio-economic characteristics of the respondents. About 1/2 of the respondents were females. Most of the respondents had education upto graduation level, and belong to 20-29 age group and half of the respondents were married. Appearance of Bobby melon is similar to cantaloupe but sarda melon is different (Kaur et al. 2017). The flesh and seeds of both the varieties are edible and are valuable food whereas the rind is inedible (Lester et al. 1997). The existence and preference of other more popular muskmelons may be the

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reason for the lack of perception and awareness of both sarda and bobby muskmelon.

The characteristics of melons were based on the awareness and consumption of respondents towards both the varieties are given in the table below.

Table 2
Respondent's Awareness and consumption of muskmelons

Characteristic	Frequency	Percentage
Place from where they buy fruits		
Natural or speciality stores	48	24.2
Large/corporate food stores	43	21.7
Small/ locally owned food stores	71	35.9
Local farmer's market/ open air market	36	18.2
Consumption of muskmelon		
Yes	175	88.8
No	14	7.1
Maybe	8	4.1
Know about health benefits of muskmelon from		
Internet	101	50.8
Word of mouth	79	39.7
Newspaper articles and writeups by dieticians	57	28.6
Handouts and under the influence of other consumers	17	8.5
Don't Know		
Money spent on buying muskmelon		
≤ 500	132	66.0
> 500	68	34.0
Reason for including muskmelon in diet		
To fill nutritional gap	113	57.1
To enhance metabolic activity	101	51.0
To enhance immunity of the body	110	55.6
To complete diet intake of the diet	105	53.0
To enhance growth and development of the body	87	43.9
To enhance stamina and energy	75	37.9
Do not consume	20	10.1
Part of muskmelon consumed		
Pulp/flesh	177	88.5
Juice	133	66.5
seeds	93	46.5

Table 3
Respondent's Awareness and consumption of muskmelons

Characteristic	Frequency	Percentage
Awareness of sarda melon		
Yes	149	76.0
No	29	14.8
Maybe	18	9.2
Consumption of sarda melon		
Yes	152	76.4
No	24	12.6
Maybe	22	11.1
Likeness appearance of sarda melon		
Not at all – 0 – 1	22	11.0
2 – 3	69	34.5
Too much – 4 – 5	109	54.5
Likeness taste of sarda melon		
Not at all – 0 – 1	18	9.0
2 – 3	48	24.0
Too much – 4 – 5	134	67.0
Likeness colour of sarda muskmelon		
Not at all – 0 – 1	17	6.0
2 – 3	57	28.5
Too much – 4 – 5	126	63.0
Likeness of smell of sarda muskmelon		
Not at all – 0 – 1	18	9.0
2 – 3	65	32.5
Too much – 4 – 5	117	58.5

Awareness of health benefits of sarda melon		
Not at all – 0 – 1	23	11.5
2 – 3	58	29.0
Too much – 4 – 5	119	59.5
Number of members in the respondent's family consuming sarda melon		
0-1	7	3.6
2-3	38	19.3
4 and more	132	67.0

Table 4
Respondent's Awareness and consumption of muskmelons

Characteristic	Frequency	Percentage
Awareness of Bobby melon		
Yes	159	79.9
No	25	12.6
Maybe	15	7.5
Consumption of Bobby melon		
Yes	159	80.7
No	25	12.7
Maybe	13	6.6
Likeness appearance of Bobby melon		
Not at all – 0 – 1	28	14.0
2 – 3	59	29.5
Too much – 4 – 5	113	56.5
Likeness taste of Bobby melon		
Not at all – 0 – 1	27	13.5
2 – 3	44	22.0
Too much – 4 – 5	129	64.5
Likeness colour of Bobby muskmelon		
Not at all – 0 – 1	21	10.5
2 – 3	56	28.0
Too much – 4 – 5	123	61.5
Likeness of smell of Bobby muskmelon		
Not at all – 0 – 1	22	11.0
2 – 3	44	22.0
Too much – 4 – 5	134	67.0
Awareness of health benefits of Bobby melon		
Not at all – 0 – 1	22	11.0
2 – 3	60	30.0
Too much – 4 – 5	118	59.0
Number of members in the respondent's family consuming Bobby melon		
0-1	1	0.5
2-3	44	22.4
4 and more	130	66.3
none	21	10.7

Most respondents have consumed muskmelon and bought their fruits from locally owned food stores. Almost 80% of respondents have the knowledge about the health benefits of muskmelon and this was the main reason for the consumption of muskmelon too. More than half of the respondents spent less than or up to Rs. 500/- per month on muskmelon. Four or more family member of more than half of the respondents eat both the varieties of muskmelon which shows huge consumption of the fruit. The most consumable part is flesh of muskmelon followed by juice and least was seeds according to respondents.

People were well aware of both the varieties of muskmelon but consumption and awareness of bobby melon was more than sarda melon. More than half of the people liked the appearance, taste, colour, and smell of both the melons. Whereas, appearance and smell of bobby melon is more liked by respondents than that of sarda melon. On the other hand, taste and colour of sarda melon was highly liked by the respondents as compared to bobby melon.

Those who have consumed muskmelon, on asking about the motivation behind buying bobby or sarda melon, nearly half of the respondents described nutrition information, tv commercials and media, packaging, reasonable price, quality, variety and taste as the reason. Consumption preference of sarda is higher than bobby melon. More than half of the respondents think rind and pomace as the waste generated after usage or consumption of muskmelon whereas one-fourth of the respondents believe seed is also generated as waste. Nearly 75% of respondents think waste from muskmelon can be used to produce new by-products and have consumed the products produced from muskmelon. Many respondents described fertilizers, manure, bioactive compounds for pharmaceutical industries, decorates, flavour and aroma agents, antioxidants, natural colourants, dietary nutrients, flour, biogas production, compost, cosmetics, wine production, muffin, jellies and other bakery products as the by-products which can be produced from muskmelon waste.

The socioeconomic characteristics such as age ($\chi^2 = 123.1$, p -value < 0.00001), sex ($\chi^2 = 101.848$, p -value < 0.00001), marital status ($\chi^2 = 89.818$, p -value < 0.00001) and, educational status ($\chi^2 = 170.15$, p -value < 0.00001) were not related to consumer acceptance and awareness of sarda and bobby melon, allowing

the acceptance of null hypothesis. Due to the presence nutrients in very high quantity and low price, the consumption of both sarda and bobby muskmelon should be encouraged.

4. Conclusion

This paper presented a study on consumer awareness and acceptance of Sarda and Bobby Muskmelon.

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