

STUDY ON FOOD PREFERENCE OF CONSUMERS IN CENTRAL GUJARAT

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Abstract—Food is essential part of life. The need for food is one of the most basic of man's drives. With development of society, technology, communication and media food preference is become one of the important areas for researcher. There are various factors related to social, cultural, personal and environmental affect on food choice. The present study tries to investigate the food preference. To fulfill the objectives the descriptive research design was employed. The structured questionnaire was used to collect the data. The data were collected from the regions of central Gujarat. The total 150 respondents were surveyed. The study found that cereals and cereal substitute products, pulses & their products, green vegetables are preferred to consume in lunch time and dinner time. Milk and milk products, fruits preferred to consume in morning. The beverages, refreshments, processed foods, ready to eat/cook foods, fresh juice preferred to eat between lunch and dinner.

Keywords: Food Preference, Factors affecting food Preference, Food Choice, Food Buying Behaviour.

1. INTRODUCTION

Food is an important to human life. It provides energy for various functions; development and helps in maintain life. Food preference refers to the way in which people choose from among available comestibles on the basis of biological or economical perceptions including taste, value, purity, ease or difficulty of preparation and the availability of fuel and other preparation tools (Smith. M, 2006). The selection and consumption of food has always been matter subject to a complex network of cultural and individual factors (Grunert, 2003). Consumer preference greatly influenced by the factors such as economic, demographic, psychological, sociological, etc. consumer preferences are reflected in terms of product benefit, functions, characteristics and performance criteria (Rajakumari,2010). The demographic factors of the customers play an important role in buying and spending decisions of fast foods. (R. Lalnunthara, 2018). Food consumption pattern in India are rapidly changing from cereal based food products to high value food products and slowly from fresh, unprocessed, unbranded food products to processed, packed and branded products (K.C. Mittal, 2011)..The present study tries to investigate the food consumption pattern and food preference.

2. REVIEW OF LITERATURE

Reetika Gupta, (2014) studied on “A study of consumer behavior towards Branded food products in Urban and Rural areas in India” where 300 respondents were surveyed (150 from rural and 150 from urban) found that “Consumers prefer those food products which have reasonable price, good quality and satisfy their needs and wants. They also found consumers influenced by TV advertisements and Non performance of products, price of competitors' product and non availability of products are the factors affecting behavior towards branded food products.

Rajiv Vyas, (2016) found that most of the respondents aware about branded packed food items. The correlation between income and all branded food products are almost perfectly correlated. In case of wheat flour it is highest and for sugar it is lowest. Correlation between educational qualification of consumers as well as occupation of consumer and all branded and packed food products are almost perfectly positively correlated.

Kenrett Y. Jefferson-Moore, (2014) conducted study where forty five participants covering five focus group were participate whom series of structured, open-ended questions were asked and found that consumers focus on better nutrition, fresher, better quality, better taste while selecting food items. They also examine factors playing role in decision to buy local food and found that healthy, affordable, community-support, quality, taste, color, nutrition, price, and freshness are important factors.

Suprakash Chakma, (2015) studied on “ identification of food habit of urban and rural people in the southern district of Bangladesh” where 200 households surveyed with questionnaire and found that both rural and urban areas carbohydrate based food items were major food items and processed and snacks and candies were lower in consumption. The urban area had higher consumption in case of fruits and vegetables, beverages compared to rural area where as rural area have higher consumption of fish products, cooked fish, meat product, milk, dairy products, carbohydrates, processed foods and snacks.

Gunjan Malik et.al, (2013) studied on “ Food Habit of People in Haryana” where semi-structured interview were conducted with 120 household using simple random sampling and found that 53.33 percent Haryana people preferred less spicy food followed by 31.67 percent people moderately spicy. 86.67 percent people takes two meals a day , 73.33 percent people prefer to eat at home followed by 10.83 percent people fast food junction.

3. RESEARCH METHODOLOGY

The present study aims to understand the food preference of consumers in south Gujarat for broad food categories. (Cereals and cereal substitute, Pulses & their products, Milk and Milk Products, Fruits, Egg, Fish & Meat, Green Vegetables, Beverages, Refreshments, Processed Foods, Ready to Eat/Cook foods, Fresh Juice). The study tries to focus on frequency of consumption and preferred time for consumption of broad category of food items. To fulfill the objectives the descriptive research design was employed. The primary data were collected from the central Gujarat regions. The structured questionnaire was used as data collection instrument. The questionnaire was contained questions related to demographic profile of consumers, food item consumption frequency, preferred time for consumption, type of purchase (branded or unbranded). The questionnaire was translated in local language (Gujarati). The 150 consumers were surveyed. The collected data were coded and transferred to computer file and data were analyzed with help of computer software. The frequency, percentage, chi-square test and one way ANOVA were utilized to analyze the data.

4. DATA ANALYSIS

4.1 Demographic Profile of Respondents

The respondents were investigated for their demographic profile (including gender, education, occupation and marital status). Out of 150 respondents surveyed, 136 (90.7 percent) were male and 14 (9.3 percent) were female. In case of education level of respondents, out of 150 respondents surveyed 45 (30 percent) were educated up to under graduate level followed by 39 (26 percent) respondents up to primary level, 38 (25.3 percent) respondents educated up to HSC/Diploma level and 26 (17.3 percent) respondents were educated up to SSC/ITI level. In case of occupation it was found that 45 (30 percent) respondents were engaged in farming & live stock followed by 35 (23.3 percent) were engaged in government job, 27 (18 percent) were engaged in private job, 22(14.7 percent) were engaged with business, 13 (8.7 percent) were students and 8 (5.3 percent) were labour. Out of 150 respondents 128 (85.3 percent) were married and 22 (14.7) percent were unmarried.

4.2 Food Consumption Practices

The respondents were asked to mark their food consumption practices for broad 10 food items categories based on consumption frequency (Every day, Every Next Day, Twice in Week, Weekly, Fortnightly, Not taken). Te percentage of responses were calculated and shown in below table.

Table 1: Food consumption Practices

S. n	Parameters	Every day	Every Next Day	Twice in Week	Weekly	Fortnightly	Not Consuming
1	Cereals and cereal substitute	90.7	5.3	2.7	1.3	0	0
2	Pulses & their products	45.3	39.3	12.7	2	0.7	0
3	Milk and Milk Products	92	4	3.3	0.7	0	0
4	Fruits	34.7	16.7	27.4	10	10	1.2
5	Egg, Fish & Meat	4	1.3	10	10.7	16.7	57.3
6	Green Vegetables	82	14.7	2	0	1.3	0
7	Beverages, Refreshments	10.7	4.7	24	17.3	19.3	24
8	Processed Foods	7.3	4	24.7	18.7	14.7	30.6
9	Ready to Eat/Cook foods	12	2.7	12.7	15.3	21.3	36
10	Fresh Juice	11.3	9.3	19.3	16	18	26.1

The above table depicts the food consumption practices (frequency) for broad ten food categories. Out of surveyed 150 respondents, 90.7 percent consume cereals and cereal substitute on everyday basis followed by 5.3 percent on every next day, 2.7 percent consume twice in week and 1.3 percent on weekly basis. In case of pulses & their products 45.3 percent consume on everyday basis followed by 39.3 percent on every next day followed by 12.7 percent twice in a week and 2 percent on weekly mode. In case of milk and milk product 92 percent respondents consume on everyday followed by 4 percent on every next day, 3.3 percent consume twice in a week. In case of fruits 34.7 percent respondents consume on everyday followed by , 27.4 percent consume twice in a week ,16.7 percent on every next day, 10 percent consume on weekly basis and 10 percent on fortnightly basis. In case of egg, fish & meat, 16.7 percent respondents consume fortnightly followed by 10.7 percent on weekly basis, 10 percent on twice in week basis, 4 percent on everyday basis and 1.3 percent consume on every next day. However 57.3 percent respondents did not consume egg, fish & meat. In case of green vegetables 82 percent respondents consume on everyday basis followed by 14.7 percent on every next day. In case of beverages, refreshments 24 percent respondents consume them twice in week followed by 19.3 percent fortnightly basis, 17.3 percent consume twice in a week, 10.7 percent consume on everyday basis. However 24 percent respondents were not consuming beverages, refreshments. In case of processed food 24.7 percent consume twice in a week followed by18.7 percent on weekly basis and 14.7 percent consume on fortnightly and 30.6 percent respondents did not consume processed foods. In case of ready to eat/cook foods found that 21.3 percent respondents consume them fortnightly followed by 15.3 percent consume weekly, 12.7 percent on weekly basis, 12 percent on everyday basis. However 36 percent respondents were not consume Ready to Eat/Cook foods. In case of fresh juice 19.3 percent respondents consume on twice in week followed by 19 percent fortnightly, 16 percent weekly basis, 11.3 percent on everyday basis and 9.3 percent on every next day. However 26.1 percent respondents were not consuming the fresh juice.

4.3 Time preference for food Choice

The respondents were asked for preferred time for consuming the broad category of food items. The respondents were asked to give their answer for the major food consuming time of the day (Breakfast, lunch, between lunch & Dinner, Dinner and after dinner) on multiple response basis.

Table-2 : Time preference for food choice

S.N	Parameters	Breakfast	Lunch	Between Lunch and Dinner	Dinner	After Dinner
1	Cereals and cereal substitute	25.33	98.67	2.67	96.00	0.00
2	Pulses & their products	2.00	86.00	3.33	82.00	0.00
3	Milk and Milk Products	82.00	15.33	10.00	27.33	30.00
4	Fruits	44.67	4.00	44.00	6.67	18.67
5	Egg, Fish & Meat	3.33	8.67	0.67	36.67	0.67
6	Green Vegetables	8.00	92.00	0.00	97.33	0.67
7	Beverages, Refreshments	4.67	4.67	47.33	2.67	14.67
8	Processed Foods	7.33	12.67	34.67	14.67	4.00
9	Ready to Eat/Cook foods	7.33	12.00	29.33	15.33	2.67
10	Fresh Juice	23.33	6.67	35.33	4.00	6.67
11	Tea/Coffee	97.33	4.00	78.67	0.67	1.33

The above table depicts the time preference for major food items. In case of cereals and cereal substitutes 25.33 percent respondents consume during breakfast and 98.97 percent respondents consume during lunch time and 96 percent during dinner time. In case of pulses and its products 86 percent preferred to consume in lunch time and 82 percent preferred to consume in dinner time. In case of milk and milk products 82 percent respondents preferred to consume in breakfast, 30 percent respondents preferred to have after dinner. In case of fruits 44.67 percent respondents preferred in breakfast and 44 percent preferred to consume between lunch and dinner. In case of egg, fish & meat 36.67 percent preferred to consume in dinner and 8.67 percent preferred to eat in lunch. In case of green vegetable 92 percent preferred to consume in lunch time and 97.33 percent preferred to consume in dinner time. In case of beverages 47.33 percent preferred to consume between lunch and dinner and 14.67 percent preferred to consume after dinner. In case of processed foods 34.67 percent respondents preferred to eat between lunch and dinner. In case of ready to eat/cook foods 29.33 percent respondents preferred to eat between lunch and dinner.

4.4 Food Preference for Branded or Unbranded

The respondents were asked whether they prefer to buy branded or unbranded food items for following food items on dichotomous way (yes/no).

Table-3 : Food Preference for Branded or Unbranded

S.N	Items	Branded	Unbranded
1	Milk	62	38
2	Sugar	64.7	35.3
3	Salt	84	16
4	Spices (Chilli, Turmeric and others)	74.7	25.3
5	Edible Oil	88.7	11.3
6	Pulses	77.3	22.7
7	Rice	72.7	27.3
8	Wheat/ Atta	74.7	25.3

The above table depicts the respondents preference for branded or unbranded food items, in case of milk out of surveyed 150 respondents 62 percent preferred branded whereas 38 percent respondents preferred unbranded. In case of sugar 64.7 percent preferred to buy branded and 35.3 percent preferred to buy unbranded. The 84 percent of respondents preferred to buy branded salt and 16 percent preferred to buy unbranded salt. 74.7 percent respondents buy branded spices whereas 25.3 percent preferred unbranded. In case of edible oil 88.7 percent respondents preferred branded whereas 11.3 percent preferred unbranded. In case of pulses 77.3 percent respondents preferred to purchase branded and 22.7 percent respondents purchase unbranded. In case of rice 72.7 percent respondents preferred branded whereas 27.3 percent preferred unbranded rice. In case of wheat and atta 74.7 percent respondents preferred to purchase branded and 25.3 percent preferred to purchase unbranded.

4.5 Gender and Branded/Unbranded (Chi square Test)

The respondents were asked for their preference for branded or unbranded food items and the chi square test was performed and the null hypothesis was designed as follow:

H_0 = There is no association between gender and food item preference for branded and unbranded

H_1 = There is association between gender and food item preference for branded and unbranded

Table-4 : Gender and Branded/Unbranded (Chi square Test)

S.N	Items	Chi Square Value	P value	Comment on H_0
1	Milk	0.583	0.569	Accepted
2	Sugar	2.994	0.140	Accepted
3	Salt	0.034	1.000	Accepted
4	Spices (Chilli, Turmeric and others)	0.996	0.520	Accepted
5	Edible Oil	0.270	1.000	Accepted
6	Pulses	0.307	0.522	Accepted
7	Rice	0.193	1.000	Accepted
8	Wheat/ Atta	0.996	0.520	Accepted

*Significance level 5 percent

**Significance level 1 percent

Above table shows chi square test between gender and preference of food items (branded/unbranded) and there were no significant association found between gender and food item preference for branded and unbranded at 5 percent significance level.

4.6 One way ANOVA test

To know whether the food item preference for branded and unbranded differ across the education groups in study area for collected data, one – way ANOVA test was applied and following hypothesis was constructed:

H_0 = There is no significant difference for food item preference for branded and unbranded across education groups.

H_1 = There is significant difference for food item preference for branded and unbranded across education groups.

Table-5 : One way ANOVA test for branded and unbranded food items and education groups

S.N	Items	F Value	P Value	Comment on Ho
1	Milk	0.572	0.721	Accepted
2	Sugar	0.956	0.447	Accepted
3	Salt	0.517	0.736	Accepted
4	Spices (Chilli, Turmeric and others)	1.612	0.160	Accepted
5	Edible Oil	4.712	0.001**	Rejected
6	Pulses	4.444	0.001**	Rejected
7	Rice	5.415	0.000**	Rejected
8	Wheat/ Atta	3.591	0.004**	Rejected

*Significance level 5 percent

**Significance level 1 percent

Above table depicts the one way ANOVA test for food item preference for branded and unbranded across education groups, and there was significant difference found for edible oil ($F= 4.712$, $p=0.001$), Pulses ($F=4.444$, $p= 0.001$), Rice ($F=5.415$, $p=0.000$), Wheat/Atta ($F= 3.591$, $p=0.004$) at 1 percent significance level across education groups. There were no significant difference found for Milk ($F= 0.572$, $p=0.721$), for Sugar ($F= 0.956$, $p=0.447$), Salt ($F=0.517$, $p= 0.736$), and spices ($F=1.612$, $p=0.160$) across education groups.

Table-6 : One way ANOVA test for branded and unbranded food items and occupation groups

S.N	Items	F Value	P Value	Comment on Ho
1	Milk	4.323	0.001**	Rejected
2	Sugar	5.639	0.000**	Rejected
3	Salt	5.928	0.000**	Rejected
4	Spices (Chilli, Turmeric and others)	9.822	0.000**	Rejected
5	Edible Oil	10.791	0.000**	Rejected
6	Pulses	7.522	0.000**	Rejected
7	Rice	9.601	0.000**	Rejected
8	Wheat/ Atta	17.306	0.000**	Rejected

*Significance level 5 percent

**Significance level 1 percent

Above table depicts the one way ANOVA test for food item preference for branded and unbranded across occupation groups, and there was significant difference found for Milk ($F= 4.323$, $p=0.001$) , for Sugar ($F= 5.539$, $p=0.000$), Salt ($F= 5.928$, $p= 0.000$), spices ($F= 9.822$, $p=0.000$), edible oil ($F= 10.791$, $p=0.000$), Pulses ($F=7.522$, $p= 0.000$), Rice ($F=9.601$, $p=0.000$) and Wheat/Atta ($F= 17.306$, $p=0.000$) at 1 percent significance level across occupation groups.

5. CONCLUSION AND IMPLICATIONS

The food is important to human and the present study was carried out to understand the food preference for consumers of central Gujarat. The 150 respondents were surveyed from the central Gujarat region and found that majority of respondents like to consume cereals and its substitutes and green vegetables on every day basis, in case of pulses consumers like to consume on everyday or every next day. In case of preferred time of consumption cereals and its substitutes, pulses and their products and green vegetables preferred to consume in lunch and dinner time. The milk and milk products, tea/coffee are preferred to consume in morning by majority of respondents. The beverages, refreshments, processed foods, ready to eat/cook foods and fresh juice preferred to consume between lunch and dinner time by maximum respondents. Respondents preferred branded milk, sugar, salt, spices, edible oil, pulses, rice and atta (flour) in study area. There is no association found between gender and food item preference for branded and unbranded. There was significant difference found for edible oil, Pulses, Rice, and Wheat/Atta across education group. There was significant difference found for Milk, sugar, salt, spices, edible oil, pulses, rice and atta across occupation groups. The marketers may take into account to design marketing and communication strategies.

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