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RESEARCH ARTICLE

AN ANALYSIS OF TRADITIONAL FOOD ON HEALTH IMPACT

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ABSTRACT

Dietary choice remains the basis for maintaining a healthy lifestyle and well-being. The South Indian traditional foods are based on Siddha system of medicine, which in natural way aims in achieving physical and mental wellness. The systematic consumption of traditional functional food provides an excellent preventive measure to ward off many diseases. Due to industrialization and market economics; food in traditional food systems derived from local, natural environments is declining in use. This research analyzed the impact of respondent's food habits on their health and to give insight on benefits of consuming traditional foods. In this research it is found that the majority of the consumers have good opinion on taste of traditional food compare to other foods. There is a positive correlation in doing regular exercises with health condition and there is a positive and strong relationship between the consumption of junk food and health related issues faced by the consumers.

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INTRODUCTION

Siddha a system of traditional medicine, originated in ancient Tamilnadu, South India. The Siddha system is based on ancient medicinal practices, alchemy and spiritual disciplines and mysticism. Its origin goes back to 10,000–4000 BC. "Unave Marundu" means "food is medicine" is a classical discovery of Siddha system of medicine. The same quote "Let food be thy medicine and medicine be thy food" is attributed by Hippocrates in the modern literature. However, the concept of "UnaveMarundu" is at least 3500 years before Hippocrates (460–370 BC). Currently, the same old concept of "Unave Marundu" is re-researched as functional foods. Food plays an important role has absolutely recognized by the postmodern "preventive medicine" concept of the Western medicine. For maintaining a healthy life and well-being, dietary choice remains the basis. The South Indian traditional foods are based on Siddha system of medicine, which in natural way aims in achieving physical and mental wellness. To ward off many diseases, the systematic consumption of traditional functional food provides an excellent preventive measure. This research aimed to analyze importance of consuming traditional food for our healthy life and negative impact of consuming junk foods.

Objectives of the study

- To identify the significant impact of consumption of traditional food and junk food on health condition of consumers.
- To find the significant association between frequency in doing exercises and health related problem faced by the consumers.

METHODOLOGY

This research is a descriptive study. This paper records food habit of over a 50 respondents of various age, sex, income groups, occupation, and different areas at Chennai city. The survey questionnaire was prepared using multiple choice and open ended questions. The primary data was collected by personal interview method. Survey participants were selected by simple random sampling method.

Hypothesis setting

- **H₁₁**: There is an association between consumers' frequency in doing exercises and health related problem faced by them.
- **H₁₂**: There is an association between consumers' consumption of junk food and health related issues faced by them.
- **H₁₃**: There is a significant impact of consumption of traditional food on health related issues of consumers.

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RESEARCH METHODOLOGY

The statistical tools applied for the study are frequencies, descriptive, chi-square, bivariate correlation and multiple regression analysis.

Data analysis and interpretation

Frequencies

Inference

From the Table 1, it is inferred that the male and female are equally distributed for the study. It also found that 34% of the respondents are between the age group of 36 and 45 years, 26% of the respondents are occupied with government and private employees, 30% of the respondent's family income is between Rs. 30,001 and Rs. 40, 000 and 44% of the respondents are residing in urban area.

Inference

From the Table 2, it has been observed that 32% of the respondents consume palayasaadam, 44% of the respondents consume traditional food for once in a week, 50% of respondents said that they are aware of the traditional food through media, 48% of the respondents said that they occasionally consume junk food and 30% of them said that they prefer other junk food items for consumption.

Descriptive Statistics

From the Table 3, based on mean value of consumers' opinion about taste of traditional food compare to other foods is 4.00, which means that majority of the consumers have good opinion on taste of traditional food compare to other foods. It is also found that the mean value of health related issues faced by consumers after consuming traditional food is 1.62, which shows that the consumers have not at all faced and minimally with health related issues after consuming traditional food. In addition, the mean value of consumers' satisfaction towards fitness after consuming traditional food is 3.98, which is clearly learnt that the consumers are highly satisfied with their fitness after consuming traditional food. Hence, it is concluded that traditional food has a greater impact over the good health of consumers.

Chi-Square

This test is administered to ascertain the association between the consumers' frequency in doing exercises and health related problem faced by them.

- **H₀₁:** There is no association between consumers' frequency in doing exercises and health related problem faced by them.
- **H₁₁:** There is an association of consumers' frequency in doing exercises and health related problem faced by them.

From the Table 4, it is inferred since the P value is less than 0.01; the alternate hypothesis is accepted at 1 percent and 5% level of significance which means that there is an association between. Health related problems and frequency in doing exercises and the type of exercises preferred by the consumers.

Hence, it is concluded that if the consumers frequently do exercises they would not face any health related issues.

Correlation

In order to find the significant relationship between consumers' consumption of junk food and health related issues faced by them, correlation is used.

- **H₀₂:** There is no significant relationship between consumers' consumption of junk food and health related issues faced by them.
- **H₁₂:** There is an association between consumers' consumption of junk food and health related issues faced by them.

Table 5 shows, since the P value is less than 0.01, the null hypothesis are rejected at 1 percent level of significance. Hence it is concluded that there is a positive and strong relationship between the consumption of junk food and health related issues faced by the consumers (0.795). This implies that as the level of consumption of junk food increases the health related issues faced by the consumer also increases.

Regression

Table-6

In order to find the impact of traditional food on health related issues of customers', regression analysis is used.

- **H₀₃:** There is no significant impact of consumption of traditional food on health related issues of consumers.
- **H₁₃:** There is a significant impact of consumption of traditional food on health related issues of consumers.

Dependent variable (Y) =Health Related Issues Faced by Consumers

Independent/predictor variable =Frequency in Consuming Traditional Food (X1) and Satisfaction of Fitness(X2)

Since the p value is less than 0.01, the null hypothesis is rejected at 1 percent level of significance. Hence the linear combination of frequency in consuming traditional food and satisfaction of fitness is significantly related to health related issues of the consumers and has a negative/inverse impact over it (F = 70.011 and P = <0.001 **). The health related issues of the consumers can be predicted at R² = 0.749. In this model, the value of R² denotes that 74.9% of the observed variability health related issues of the consumers can be significantly explained by their frequency in consuming traditional food and satisfaction of fitness after consuming traditional food. The remaining 25.1% is not explained which means that the rest 25.1% of the variation of health related issues of the consumers is related to other variables which are not depicted in this model. The Ordinary Least Squares (OLS) equation for predicting health related issues of the consumers is:

Health related issues of the consumers

$$(Y) = -0.327X1 - 0.603X2$$

Table 1. Demographic Characteristics of the Respondents

Sl.No.	Particulars	No. of Respondents	Percentage
	Gender		
	Male	25	50
	Female	25	50
	Total	50	100
1	Age		
	Below 25 yrs	8	16
	25-35 yrs	5	10
	36-45yrs	17	34
	46-55 yrs	13	26
	56 and above	7	14
	Total	50	100
2	Occupation		
	Student	8	16
	House wife	10	20
	Government employee	13	26
	Private employee	13	26
	Own business	6	12
	Total	50	100
3	Family income (in rupees)		
	Below 20, 000	5	10
	20, 000 – 30, 000	14	28
	30, 001 – 40, 000	15	30
	40, 001 – 50, 000	10	20
	51, 000 and above	6	12
	Total	50	100
4	Residing area		
	Urban	22	44
	Semi-urban	17	34
	Rural	11	22
	Total	50	100

[Source: Primary data]

Table 2. Consumption of Traditional Food and Junk Food by the Respondents

Sl.No.	Particulars	No. of Respondents	Percentage
1	Consumption of traditional food items		
	Palayasaadam (fermented rice water)	16	32
	Neeragaram	5	10
	Porridge (Kambu, Raagikoozh)*	11	22
	Millets food(saamai, varagu, thinai)*	7	17
	Rice varieties(hand pounded rice,red rice)	3	6
	Snacks (Sesame, Groundnutladduetc)	8	16
	Total	50	100
2	Frequency in consuming traditional food		
	Daily	16	32
	Weekly	22	44
	15 days once	7	14
	Monthly once	3	6
	Occasionally	2	4
	Total	50	100
3	Awareness about traditional food		
	Ancient beliefs	12	24
	Family custom	6	12
	Relatives & friends	7	14
	Through media (TV, internet, newspapers, social media etc)	25	50
	Total	50	100
4	Frequency in consuming junk food		
	Daily	4	8
	Weekly	6	12
	15 days once	8	16
	Monthly once	8	16
	Occasionally	24	48
	Total	50	100
5	Consumption of junk food items		
	Pizza	7	14
	Noodles	5	10
	Burger	4	8
	Chat items	8	16
	Snacks	11	22
	Others	15	30
	Total	50	100

[Source: Primary data]

Note :*(Kambu-Pearl millet, Raagi- Finger millet, Saamai- Little millet, Varagu- Kodo millet, Thinai-Foxtail millet).

Table 3.

Sl. No.	Factors	Mean	Standard Deviation
1	Opinion about taste of traditional food compare to other foods	4.00	0.948
2	Health related issues faced by consumers after consuming traditional food	1.62	1.086
3	Consumers' satisfaction towards fitness after consuming traditional food	3.98	1.078

Table 4. Frequent Exercises and Health Related Problem

Factors	Chi-Square Value	P value	Conclusion
Frequency in doing exercises	17.763	0.000**	Accepted at 1% level
Type of exercises	9.909	0.042*	Accepted at 5% level

[Source: Primary data]

Note:

** Denotes significant at 1% level.

* Denotes significant at 5% level.

Table 5. Consumers' Consumption of Junk Food and Health Related Issues

Variables	Consumption of junk food	Health related issues after consuming junk food
Consumption of junk food	1	0.795**
Health related issues after consuming junk food	0.795**	1

[Source: Primary data] Note: ** Denotes correlation is significant at 1% level.

Table 6. Predictor Variables of Multiple Regression Analysis

Multiple R value	R Square value	Adjusted R ² value	F value	Standard Error	P value
0.865	0.749	0.738	70.011	0.556	<0.001**

Table 7. Co-efficient between Customers' Health Related Issues and Consumption of Traditional Food

Variables	USC	SE	SC	t value	P value
(Constant)	5.306	0.325		16.343	0.000**
Frequency in Consuming Traditional Food	-0.327	0.123	-0.312	-2.657	0.011*
Satisfaction of Fitness	-0.603	0.118	-0.599	-5.097	0.000**

[Source: Primary data]

Note: ** Denotes significant at 1% level; * Denotes significant at 5% level.

The co-efficient of X1 is -0.327 which represents the negative relationship between frequencies in consuming traditional food and health related issues of the consumers. The estimated negative sign indicates that for each additional unit of frequency in consuming traditional food of consumers, there is a 0.327 unit decrease in the health related issues of the consumers and it is significant at 5% level. The co-efficient of X1 is -0.603 which represents the negative relationship between satisfaction of fitness and health related issues of the consumers. The estimated negative sign indicates that for each additional unit of satisfaction of fitness after consuming traditional food, there is a 0.603 unit decrease in the health related issues of the consumers and it is significant at 1% level.

DISCUSSION

This report focuses on dietary intake of people especially at Chennai city. The percentage of people's daily energy derived from market food is more than double that from traditional food, while nutrient density of traditional food systems is superior to that of the composite of market food consumed. Based on the descriptive analysis, it is found that the majority of the consumers have good opinion on taste of traditional food taste of traditional food compare to other foods, consumers have minimally faced health related issues after consuming traditional food and they are highly satisfied with their fitness after consuming. Based on the chi-square, it is found that if the consumers frequently do exercises they would not face any health related issues.

And they are highly satisfied with their fitness after consuming traditional food. Based on the chi-square, it is found that if the consumers frequently do exercises they would not face any health related issues. On the basis of correlation analysis, it is clearly shown that there is a positive and strong relationship between the consumption of junk food and health related issues faced by the consumers. The regression analysis has proven that there is a significant and negative impact of consumption of traditional food on health related issues of consumers.

Conclusion

This research analyzed the impact of respondent's food habits on their health and to give insight on benefits of consuming traditional foods. Old age people consume more traditional food than younger members. It is suggested that traditional food consumption habits has a role in the prevention of certain diseases and maintain good health in Society. Our traditional foods importance on health is largely ignored by our conventional foods. The present paper gives more insight on the importance of Traditional food comparative with junk food for our longevity and health.

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