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FOOD ADVERTISEMENTS' LINK WITH INTENDED FOOD CHOICES DETERMINANTS

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Abstract

Food companies consider a range of factors when developing products, including nutrition. taste. convenience, and affordability. They have a major role in shaping what is available in the market. Overall, food companies have a significant impact on the food choices, both in terms of what is available in the market and how those products are marketed and promoted to the consumers. As a result, it is important for consumers to be aware of these influences and to make informed choices about the food they eat. This study sampled 300 participants filling the standard 29-questioned Food Choice Questionnaire (1) to understand if Health would be a determinant in their food choice. Five themes were generated to support the fact that different approaches are being made to push health and nutritional content alongside sensory appeal. The quantitative result was analysed to show 95% regarded sensory taste as the most important factor, followed by health and convenience at 91% each, in making food choices. The subtle shift towards fortification could be attributed to the rising rates of malnutrition in Pakistan or consumer demands.



1. Introduction

Advertisement is one of the most productive tools in marketing companies that has developed emotions with consumers and it also motivates consumers to buy a certain product. Promotion and marketing of unhealthy food and beverages to children, through television advertisement, has been used continuously for the identification in broad and overall evidence shows a negative effect on children's knowledge about healthy and unhealthy food, their quality of diet, food preferences, consumption and health (Czoli et al., 2020). Adolescents are the key audience for food advertisers. The advertisement of unhealthy food and beverages greatly impacts their dietary patterns, as food choices impacts a variety of reasons, a complex set of feelings, attitude, values, mood and emotions. Advertisements of the products like fast food; snack is more likely to be meant for younger audience and motivates them to try their products and to buy more frequently. Food marketers have always shown interest in youth as consumers because of their spending power, their purchasing influence, and as future adult consumers. They also try to develop a sense of familiarity with children through their advertisement so that they would buy their products more often. In the United States (US), marketing expenses targeted at adolescents exceed \$1 billion annually. Mostly these advertisements promoted high fats, sugar, salt (HFSS) foods leading to childhood obesity and associated diseases which has caused an alarmingly high rates of obesity globally. Regardless of knowing these health risks Lahori youth were more compelled to eat HFSS foods (Elliott et al., 2022). Multiple marketing strategies were used by food companies to engage their audiences and to coerce them in order to sell their product globally. Television media has effected more viciously than digital media although according to new demographics more revenue has been generated on the latter as new strategies and media influences have been surfacing (Liem & Russell, 2019). In addition to this, adolescents have made progress and have become a direct consumer by gaining the ability to buy whatever they want with their own money and because of this, it is very crucial to have a check-in on food advertisements and to know about the policies which are aimed for the protection of youth from unhealthy food advertisements (Marty et al., 2021). This project has aimed to present a conceptual model based on the perspective to understand the factors that influence the food preferences and choices of adolescents. It also has an aim to explore the different buying motives and methodologies that marketing industries have adopted over time.

Table 1: Demographics

Variables		Frequency	Percent	Mean	Standard deviation
Gender	Male	52	17.3		
	Female	248	82.7		
Programs	Nutrition sciences	65	21.7		

	Doctor of	89	29.7		
	Physiotherapy (DPT)				
	Textile designing	31	10.3		
	Media and	15	5.0		
	Communication				
	Business	20	6.7		
	Administration				
	Food Science	17	5.7		
	Computer Science	41	13.7		
	Liberal Arts	3	1.0		
	Social Sciences	19	6.3		
Age	18.00	22	7.3	21.0167	1.71645
	19.00	44	14.7		
	20.00	56	18.7		
	21.00	56	18.7		
	22.00	54	18.0		
	23.00	43	14.3		
	24.00	25	8.3		

2. Methodology

A Cross-sectional study which was carried out through a survey by using the Food Choice Questionnaire (FCQ), conducted on students of University of Management and Technology, Lahore. Young adults in the age range 15 to 24 (11) were selected. Both males and females participated. Students from all degree programs participated and a total of 300 surveys were filled. The consisting of 36 questions questionnaire, distributed on campus and in classrooms by hand in hard form, were all analysed according to the 9 themes consisting of health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity and ethical concerns to access

the buying motives of students. A scale of 4 choices were given scoring 1) not important at all 2) a little important 3) moderately important 4) very important. Participants were recruited by an amicable approach and verbal consent was obtained. The participants were given 5-7 minutes to complete the questionnaire and were later collected. The data of sample which is N=300, was entered into the SPSS datasheet. The variables chosen for the purpose to analyse data were age, gender, programs, name and question responses obtained from the questionnaire. Data analysis was done according to the respective factors under which the specific number of questions lie (Ahmad, 2020). Frequency and percentage of responses were

obtained and made tables accordingly. As for the other variables, descriptive analysis was run and obtained frequency and percentage of each. Then the data of responses from questions were added factor wise and average was derived of all 9 factors. Average from all 9 factors later on was altered into binary system which arranged our average of 2.1-4 as "2" and < or =2 as "1" by recoding into binary factors. Henceforth, analysis was applied on nine binary factors to gain percentages and frequency of each factor. Afterwards, the relationship of two variables gender and 9 binary factors was attained through chi squared test and acquired frequency, percentages and P value of preference of factors in accordance with male and female. Lastly, T test was applied on binary factors and P value from it was computed. Names of the food companies were not disclosed at the time of data collection to reduce biased opinions from the respondents as well as to avoid copyright claims. General images of the food products were provided at the time of data collection to give an overall idea of the categories involved in the study.

3. Results

There can be seen a high percentage of females (82.7%) in our sample, whereas males have a percentage of 17.3%. Majority of the students are from Physiotherapy and Nutrition with a percentage of 29.7% and 21.7% respectively. Data from students of ages 21 and 20 have the higher

percentage in the sample which is 18.7% for both. The factor considered most important amongst the subjects was sensory appeal with the percentage of 95. Convenience (91.3%), the second most important factor, took lead from health by only 0.3%. 91% of the sample voted factor 1 health as important making it the third most significant factor chosen by the subjects. The least important factor was mood which has higher percent of 55% voted as not important, all other factors of the questionnaire are marked important according to table 2. Factor 2 Mood has a p value <0.05 (p value=0.023) which indicates significance between variables. The result indicates that 48% of the females and 30.8% males marked factor 2 as important. Factor 6 Price (p value=0.007) and factor 7 Weight control (p value=0.005) also shows statistical significance between variables gender and factors. This data illustrates that 86.3% females and 71.2% males chose factor 6 as important. As for the factor 7, 78.2% females and 59.6% males gave this factor importance. It has been found that factor 3 Convenience with p value=0.001 which is <0.05 displays significance with age and explains that mean age 21.11 of the sample voted factor 3 as important and has significant association. Factor 8 Familiarity (p value=0.002) also exhibits statistical significance with mean age 21.17 of the sample and chose this factor important.

Table 2: Frequency and Percentage of Factors/Food choice determinants from questionnaire

Factors/Food choice determinants	F (%)	
	Important	Not Important
Health	273(91.0)	27(9.0)

Mood	135(45.0)	165(55.0)	
Convenience	274(91.3)	26(8.7)	
Sensory Appeal	285(95.0)	15(5.0)	
Natural Content	245(81.7)	55(18.3)	
Price	251(83.7)	49(16.3)	
Weight Control	225(75.0)	75(25.0)	
Familiarity	235(78.3)	65(21.7)	
Ethical Concern	222(74.0)	78(26.0)	

3.1 Conceptual Framework

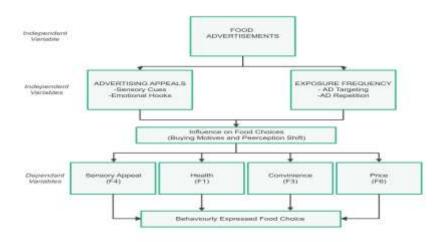


Figure 1: Food Advertisement

4. Discussion

A study conducted in Poland suggested that different generations of consumers considered different food determinants as their priority. The crucial factors in food selection were product quality (69.0%), price (68.6%), and information about the product's composition (41.0%). Older cohorts (Baby Boomers and Generation X) prioritized food quality, while younger generations (Generation Y and Generation Z) emphasized price (Makowska *et al.*, 2024). The factors that influence

the choice for fast food include; social factors, nutritional status, and fast-food consumption in a sample of higher education students in Portugal. The factors that most influenced the choice of fast food were ease or convenience of preparation (59.9%), price (48.5%), and flavor (28.3%). There were also differences between sexes and between those attending public and private higher education institutions regarding whether they usually consume fast food or not (Oliveira & Raposo, 2024).

The results of the generalized ordered logit model of a study conducted in Mashhad-Iran showed that the increase in age, household income, healthy product awareness level, having a special diet, attention to the food freshness, the level of advertising and nutritional knowledge increased people's desire to buy healthy food (Firoozzare *et al.*, 2024). According to table 3 that shows factor 1 (Health) and factor 7 (Weight Control), majority of

individuals with 40.7% placed the highest importance in presence of vitamins and minerals with only 6.3% regarding it as a non-crucial factor. Healthiness and nutritious appeal of the food item was favoured by 53% and 54.7% of the sample respectively. 55% of the sample preferred the food item to have skin, teeth, hair, nails benefit while 34% found it moderately important to have fibre and roughage.

Table 3: Health and Weight control

		e		
Questions:	Not important at	A little	Moderately	Very important
	all	important	important	
Contains lots of vitamins and minerals	19 (6.3)	58 (19.3)	101 (33.7)	122 (40.7)
Keeps me healthy	18 (6.0)	48 (16.0)	75 (25.0)	159 (53.0)
Is nutritious	16 (5.3)	41 (13.7)	78 (26.0)	164 (54.7)
Is high in protein	25 (8.3)	63 (21.0)	92 (30.7)	120 (40.0)
Is good for skin/teeth/hair/nails etc	32 (10.7)	48 (16.0)	65 (21.7)	165 (55.0)
Is high in fiber and roughage	40 (13.3)	65 (21.7)	102 (34.0)	93 (31.0)
Is low in calories	49 (16.3)	83 (27.7)	70(23.3)	98 (32.7)
Helps me control weight	56 (18.7)	60 (20.0)	80 (26.7)	104 (34.7)
Is low in fat	42 (14.0)	71 (23.7)	101 (33.7)	86 (28.7)

32% placed high importance in the items being low in calories, with only 16.3% disregarding it. 34% wanted the food to control their weight and 33.7% placed moderate importance in items being low fat and 28% placing highest importance in it. According to table 4, about 34.7% want food to help them cope with stress, 31.3% and 40% of the sample

turn to food to cope with life and relaxing. 34% want food to keep them alert and awake while around 45% and 47% want it to help them cheer up and feeling good respectively. Only 9% of the sample voted for non-importance in the food item being a usual meal/snack in daily routine and 33% voted for a little importance in it. About 52% of the sample

was preferred the food to smell nice, 43% and 52% preferred the food items to look nice and have a pleasant texture and a whopping 75% wanted the

food to taste good. Around 33% of the sample placed moderate importance of the item containing no additives.

Table 4: Mood and Familiarity, Sensory Appeal and Natural content

Questions:	Not important	A little	Moderately	Very important
	at all	important	important	
Helps me cope with stress	46 (15.3)	57 (19.0)	93 (31.0)	104 (34.7)
Helps me cope with life	30 (10.0)	86 (28.7)	94 (31.3)	90 (30.0)
Helps me relax	31 (10.3)	52 (17.3)	96 (32.0)	121 (40.3)
Keeps me awake/alert	41 (13.7)	78 (26.0)	102 (34.0)	79 (26.3)
Cheers me up	23 (7.7)	57 (19.0)	85 (28.3)	135 (45.0)
Makes me feel good	18 (6.0)	46 (15.3)	94 (31.3)	142 (47.3)
Is what I usually eat	27 (9.0)	92 (30.7)	111 (37.0)	70 (23.3)
Is familiar	29 (9.7)	68 (22.7)	96 (32.0)	107 (35.7)
Is like the food I ate when I was a child	66 (22.0)	99 (33.0)	66 (22.0)	69 (23.0)
Smells nice	19 (6.3)	46 (15.3)	79 (26.3)	156 (52.0)
Looks nice	19 (6.3)	68 (22.7)	82 (27.3)	131 (43.7)
Has a pleasant texture	20 (6.7)	55 (18.3)	97 (32.3)	128 (52.7)
Tastes good	10 (3.3)	22 (7.3)	43 (14.3)	225 (75.0)
Contains no additives	43 (14.3)	73 (24.3)	101 (33.7)	83 (27.7)
Contains natural ingredients	20 (6.7)	55 (18.3)	74 (24.7)	151 (50.3)
Contains no artificial ingredients	56 (18.7)	67 (22.3)	77 (25.7)	100 (33.3)

Only 6.7% placed no importance at all in natural ingredients meanwhile 50% of the sample found it very important for it to be all natural. Only 18.7% didn't place any importance in the presence of artificial ingredients. Only 9.7% gave no importance to easy preparation. 44.7% wanted the

food to be cooked easily with 33% wanting short cooking time. 57% wanted the items to be readily in shops and supermarkets. Only 9.3% chose low importance for the items bring pricey. Only 34% wanted the food items to be cheap and 42% of the sample opted for good value for money. According

to factor 9 Ethical Concern, the sample voted 27% in the favour of the items being from subjective politically approved countries. 38% wanted the items to be clearly marked with the country of origin

and 32% placed moderate importance in the item being packed with eco-friendly. This was interpreted by table 5 showing factors 3 (Convenience), 6 (Price) and 9 (Ethical Concern).

Table 5: Convenience, Price and Ethical Concern

Questions:	Not important	A little	Moderately	Very important
	at all	important	important	
Easy to prepare	29 (9.7)	92 (30.7)	80 (26.7)	99 (33.0)
Can be cooked simply	27 (9.0)	50 (16.7)	89 (29.7)	134 (44.7)
Takes no time to prepare	39 (13.0)	73 (24.3)	88 (29.3)	100 (33.3)
Can be bought in shops close to where I live or work	18 (6.0)	31 (10.3)	79 (26.3)	172 (57.3)
Easily available in shops and supermarkets	18 (6.0)	31 (10.3)	79 (26.3)	172 (57.3)
Is not expensive	28 (9.3)	67 (22.3)	90 (30.0)	115 (38.3)
Is cheap	45 (15.0)	64 (21.3)	89 (29.7)	102(34.0)
Is good value for money	18 (6.0)	66 (22.0)	89 (29.7)	127 (42.3)
Comes from countries I approve	87 (29.0)	83 (27.7)	65 (21.7)	65 (21.7)
of politically				
Has the country of origin clearly marked	26 (8.7)	58 (19.3)	102(34.0)	114 (38.0)
Is packaged in an environmentally friendly way	50 (16.7)	74 (24.7)	98 (32.7)	78 (26.0)

5. Conclusion

The findings suggest that there is a growing emphasis on health and nutrition in the food advertising industry inPakistan, and that young adults are increasingly prioritizing Health (F1) along with Sensory Appeal (F4) and convenience (F3) and Price (F6) when making food choices. Future implications and recommendations suggest; the increased availability of fortified foods could have a positive impact on public health in Pakistan,

particularly in addressing micronutrient deficiencies. Given the rising prevalence of vitamin and micro-deficiencies in Pakistan and consumers become more health-conscious and demand healthier food options, food companies may invest in fortification and enrichment of their products, as well as developing new, healthier product lines.

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