

FOOD ADVERTISING AND HEALTH ISSUES : A PERCEPTUAL ANALYSIS OF Y GENERATION

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ABSTRACT

Generation Y is a large, fast-growing segment of the consumer audience and one of the most coveted segments because of its spending power, ability to be trendsetters, receptivity to new products and tremendous potential for becoming lifetime customers. Food industry is relying on advertising using varied appeals such as feelings of being grown-up, power, peer popularity, humour, sports and action-adventure to attract ,purchase and cultivating loyalty. The primary data were obtained from 300 students of University of Jammu in J&K State .The results revealed that advertising moderately makes people health conscious and influence their purchase decision. Students perceive foods to be high in fat/sugar are soft drinks, confectionery and fast food and unhealthy most by female whereas confectionery by male. Diabetes, tooth decay , heart diseases and malnutrition are reported to be the undesirable outcome from consuming unhealthy food.

Key Words: Food advertising, X generation, Perceptual analysis

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1. INTRODUCTION

Today's youth live in a media-saturated environment and vulnerable to the messages and tactics of the food and beverage industry for brand awareness/recognition, brand preference and brand loyalty. While multiple factors influence eating behaviours and food choices of youth, one potent force is food advertising (Story et al, 2002). Food advertising efforts forge long-lasting brand relations with children, youth and parents to create brand loyalty in the future. Today, food and beverage advertisers alone spend between \$10 billion to \$15 billion a year targeting youth (Eggerton, 2007). As the food and drink markets in Western Europe and North America reach saturation levels, multinational suppliers are increasingly looking elsewhere to achieve or improve profitability. The developing world has become the new target. Foreign investment is funding the increased production of fatty and sugary foods as well as providing the marketing support for these products. Frequent exposure to marketing messages, along with changes in social circumstances contribute to rising incidence of obesity and chronic diseases such as cardiovascular disease, cancer, osteoporosis, dental carries and diabetes among the population worldwide. Generation Y is a large, fast-growing segment of the consumer audience and one of the most coveted segments because of its spending power, ability to be trendsetters, receptivity to new products and tremendous potential for becoming lifetime customers (Bush et al, 2004). The fast food multinational giants like Coke, Pepsi, Lay's Chips, Mc Donald's, Dominos, Pizza Hut are focusing their attention and advertising budgets on the youth market, through sponsorship of music events and link-ups with the most attractive and popular movie stars, pop singers and sports celebrities.

REVIEW OF LITERATURE

King (2003) identified several reasons for large food advertising market-Food captures a large percentage of consumer spending and so there is vigorous competition; food is a repeat-purchase item and consumers' views can change quickly and food is one of the most highly branded items, which lends itself to major advertising. Further, there is evidence of behavioural implications of exposure to food advertising. TV is the primary source of advertising used by the food industry (Hastings et al, 2003 and Institute of Medicine of the National Academies, 2006). The product appeals used in advertising food on television are often emotional appeals that associate foods

with happiness and fun, rather than any mention of actual product qualities or nutritional benefit (Buijzen & Valkenburg, 2003; Connor, 2006; Folta et al, 2006 and Institute of Medicine of the National Academies, 2006). Other emotional appeals which have been observed in televised advertisements are feelings of being grown-up, power, peer popularity, humour, sports and action-adventure (Institute of Medicine of the National Academies, 2006 and Kunkel & Gantz, 1992). Television food advertisements have been linked to young consumers food preferences, at both brand and category levels (Hastings et al, 2003 and Zywicki et al, 2004), and to both purchasing and consumption habits (Lobstein & Dibb, 2005). Studies repeatedly show that television advertising is dominated by ads for fatty, sugary foods and soft drinks.

Consumption of advertised foods is higher than consumption of foods that are not advertised (Jeffrey, 1998 and Boynton et al, 2003), and advertising expenditures are generally greatest for the most highly processed and packaged foods (Gallo, 1999). The food advertised on television programming in the UK, USA and many countries is inconsistent with healthy eating recommendations (Dalmeny et al, 2003 and Story & French, 2004). The majority of foods advertised are low in nutrient density and conflict with current recommendations for a healthy diet (Dibb, 1996; Hill & Radimer, 1997; Young Media Australia, 1997; Lewis & Hill, 1998; Byrd-Bredbenner & Grasso, 1999; Hammond et al, 1999; Wilson et al, 1999; Sustain, 2000 and Hastings et al, 2003). Hastings et al (2003) and Kelly & Chapman(2007) reported that the most frequently advertised product categories were breakfast cereals, confectionery, savoury snacks, fast food restaurants, ice-cream, chocolates and soft drinks and ratio of healthy to unhealthy food is 36.3% and 63.7% respectively. Commercials overwhelmingly promote food products that are high in sugar, fat & sodium while neglecting healthy foods high in fibre, vitamins and minerals such as fruits or vegetables (Harrison & Marske, 2005). Weekends had a higher frequency of high-fat/high-sugar advertisements than weekdays for both adolescents and adults viewing hours. Kasser and Linn (2004) found that youth are more harmed by having marketing directed at them and resultant problems are like aggressiveness, materialism, obesity & overly sexualized behaviour. The focuses on impact of food advertising and related health issues on university students' which remained untouched in earlier studies has extensively been analysed with regard to soft drinks, confectionery and fast food

RESEARCH METHODOLOGY

The primary data were obtained from 300 students of University of Jammu and was purified through factor analysis on SPSS (Version 11.5). The process of R-Mode Principle Component Analysis (PCA) with Varimax rotation identified four factors in 'healthcare aspects of advertising'. Further Bartlett's Test of Sphericity, KMO value, Bartlett's test of sphericity and cronbach alpha were within the threshold level. The convergent validity of the data was proved by the positive correlation matrix of the different factors. The content validity of the construct was duly assessed through review of literature, discussion with the subject experts, owners of university canteens & cafeteria etc., for the selection of items in the questionnaire.

DATA ANALYSIS AND INTERPRETATION

Impact of food advertising on youth in the study has been analysed under following sub-heads:

Students perception regarding role of advertising in making people health conscious and influencing their purchase decision.

Table 1 exhibits the mean values of students' perception regarding the role of advertising in making people health conscious and influencing their purchase decision along five demographic variables namely, gender, age, religion, disposable income and parental occupation. For male and female respondents, mean values arrived at is 3.41 and 3.23 respectively. 20-22 age group exhibited higher mean score (3.43) than above 24 age group (3.30) and 22-24 age group (3.26). Among different religions, Muslims (3.49) exhibited higher mean score than other religions. Mean score of students with disposable income of < Rs.500, Rs.500-Rs.1000, Rs.1000-Rs.2000 and above Rs.2000 arrived at 3.02, 3.33, 3.21 and 3.53 respectively. In case of parental occupation category, mean score in descending order came at 3.7(others), 3.42(profession), 3.275(service) and 3.27(business). Overall mean value of 3.29 indicates that students believe that advertising moderately makes people health conscious and influence their purchase decision.

Demographic-wise mean values of advertised food high in fat/sugar

Table 2 exhibits the ranking of various advertised food high in fat/sugar in students' opinion. Students were asked to rank various advertised food high in fat/sugar. The mean values are determined from the ranks so obtained. Students perceive fast food to be high in fat/sugar among all other advertised food products indicated by lowest mean value of 2.33 followed by

confectionery (2.60) and soft drinks (2.74). The mean values of other advertised food like snacks & nuts, dairy products and fruits & vegetables came at 3.56, 4.10 and 5.67 respectively.

Ranking of students perception of advertised food high in fat/sugar

In Table 3, demographic-wise mean values of various advertised food high in fat/sugar has been shown. Gender-wise both male and female indicated lower mean value for fast food as 2.27 and 2.36 respectively. All age groups indicated lowest mean score for fast food followed by soft drink and confectionery. In case of soft drink, 'Hindu' exhibited lower mean value (2.68), and in case of confectionery 'Muslim' exhibited lower mean value (2.47) and in fast food, 'others' exhibited lower mean value (1.5). For fast food, lowest mean value was indicated by students with disposable income of Rs.500-Rs.1000, for confectionery, students with disposable income of Rs.1000-Rs.2000 (2.39) and for soft drink, students with disposable income of above Rs.2000 (2.54). Students belonging to business families consider fast food to be most unhealthy indicated by lowest mean value of 2.51 followed by confectionery (2.60) and soft drink (2.67). Same views are indicated by students whose parents are in service and profession. Students whose parents are pensioners indicated lowest mean score for confectionery (2.20) followed by fast food (2.7). Thus, fast food is considered most unhealthy by female, 20-22 age group, other religion, disposal income Rs.500-Rs.1000 and service class. Soft drink is considered most unhealthy by female, 22-24, Hindu, disposal income above Rs.2000 and professional background. Confectionery is considered most unhealthy by female, above 24 age group, Muslim, Rs.1000-Rs.2000 income and other parental occupation.

Students' perception about consumption of soft drinks, confectionery & fast food for repeated purchase.

Table 4 indicates students perception regarding consumption frequency of soft drink, confectionery and fast food along five demographic variables namely gender, age, religion, disposable income and parental occupation. Overall 96.3% of the respondents consider that these food products are not fit for frequent consumption. Male respondents (98.1%) exhibits more negative behavior than female respondents (95.4%). Older respondents are less favourable than younger respondents in this regard. Religion-wise, 9.1% Sikh respondents consider that soft drink, confectionery and fast food are fit for frequent consumption followed by Hindu (3.7%) and Muslim (1.8%). Students with lower disposable income believe soft drink, confectionery and fast food not fit for frequent consumption than student with higher disposable income. Parental

occupation wise, students whose parents are pensioner regard these food products unfit for frequent consumption followed by service, business and profession.

Demographic-wise mean values of possible health consequences due to frequent consumption of soft drink, confectionery & fast food.

Table.5 indicates ranking of students' perception of possible health consequences due to frequent consumption of soft drink, confectionery and fast food. Mean values have been determined from the ranks assigned by the students on various health consequences resulting from frequent consumption of soft drink, confectionery and fast food. Results revealed that students perceive obesity as the major health concern due to frequent consumption of soft drink, confectionery and fast food indicated by lowest mean value of 2.03 followed by diabetes (2.40) and tooth decay (3.12), heart diseases (3.71) and malnutrition (3.74).

Ranking of possible health consequences due to frequent consumption of soft drink, confectionery & fast food.

Table 6 exhibits mean perception values of possible health consequences due to frequent consumption of soft drink, confectionery and fast food among students along five demographic variables namely, gender, age, religion, disposable income and parental occupation. Mean values of various health consequences came at 2.03 (obesity), 2.40 (diabetes), 3.12 (tooth decay) , 3.74 (malnutrition) and 3.71 (heart diseases). The sub classes which opine obesity is the main health effect following frequent consumption of soft drink, confectionery and fast food than other classes are female (2.02), 20-22 age group (1.92), other (1.75), above Rs.2000 (1.76) and service (1.99). Male respondents (2.39), 20-22 age group (2.27), others (2.25), < Rs.500 (2.25) and parental occupation others (2.0) indicated lower mean score for diabetes than other sub classes. The sub classes which believe that frequent consumption of these food products may lead to tooth decay indicated by lower mean values than other classes are male (3.0), 20-22 age group (3.05), others (3.0), <Rs.500 (2.91) and profession (2.91).

CONCLUSION AND MANAGERIAL IMPLICATION

Students believe that advertising moderately makes people health conscious and influence their purchase decision. Students perceive foods to be high in fat/sugar are soft drinks and confectionery. Fast food is considered most unhealthy by female whereas confectionery by male.

Students with lower disposable income believe soft drink, confectionery and fast food not fit for frequent consumption than student with higher disposable income. Parental occupation wise, students whose parents are pensioner regard sample food products unfit for frequent consumption followed by service, business and profession. Diabetes, tooth decay, heart diseases and malnutrition are reported to be the undesirable outcome from consuming unhealthy food.

On the basis of above findings, following suggestions have been made:

- a. Steps must be initiated by Dean Student Welfare for eliminating commercial influences that promote unhealthy food and beverages in the campus.
- b. Since the intake of junk food & carbonated drinks causes numerous diseases such as obesity, hypertension, breathlessness, asthma, weak bones etc, so it should come with statutory warnings and nutrition advice such as 'intake of this food more than twice a week is not good for health' or 'should not be consumed in place of a balanced meal'.
- c. Health messages in advertisements and on packaging need to be monitored to eliminate misleading promotion.
- d. University can play an active role in making sure that students get healthy diet and assure that foods sold on campus are healthy and meet nutrient standards for calories, fat & sugar. It is very important that university should not stock junk food in their canteen, by getting lured by approach of fast food and soft drink companies.
- e. Advertising covering health issues be primarily focused on female, Sikh, 22-24 years of age with <Rs.500 disposable income and belonging to business and service class through bill boards, hand outs, meetings, TV and newspapers.
- f. Soft drinks, confectionery and fast food low in fat & sugar be developed through collaboration with R&D agencies under the guidance of health and nutrition experts and popularised among students through various media.

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TABLE 1: STUDENTS' PERCEPTION REGARDING ROLE OF ADVERTISING IN MAKING PEOPLE HEALTH CONSCIOUS AND INFLUENCING THEIR PURCHASE DECISION

S.No	Demographic Variable	Sub-Class	N	Mean	Standard Deviation
1.	Gender	Male	104	3.41	0.98
		Female	196	3.23	1.14
		Sub-mean	300	3.29	1.09
2.	Age	20-22	37	3.43	1.07
		22-24	164	3.26	1.13
		Above 24	99	3.30	1.04
		Sub-mean	300	3.29	1.09
3.	Religion	Hindu	219	3.26	1.15
		Muslim	55	3.49	0.84
		Sikh	22	3.09	1.11
		Others	4	3.25	0.50
		Sub-mean	300	3.29	1.09
4.	Disposable income	< Rs.500	48	3.02	1.14
		Rs.500–Rs.1000	133	3.33	1.04
		Rs.1000–Rs.2000	62	3.21	1.13
		Above Rs.2000	57	3.53	1.09
		Sub-mean	300	3.29	1.09
5.	Parental occupation	Business	107	3.27	1.07
		Service	171	3.27	1.13
		Profession	12	3.42	1.08
		Others	10	3.70	0.48
		Sub-mean	300	3.29	1.09

TABLE 2: DEMOGRAPHIC-WISE MEAN VALUES OF ADVERTISED FOOD HIGH IN FAT/SUGAR

S.No	Demographic variable	Sub Class	Soft drinks	Confectionery	Snacks & nuts	Fast food	Dairy Products	Fruits & vegetables
1.	Gender	Male	2.88	2.58	3.41	2.27	4.15	5.70
		Female	2.66	2.61	3.64	2.36	4.08	5.66
		Sub-mean	2.74	2.60	3.56	2.33	4.10	5.67
2.	Age	20-22	2.95	2.73	3.76	2.11	3.97	5.49
		22-24	2.62	2.61	3.5	2.27	4.19	5.81
		Above 24	2.86	2.54	3.59	2.49	4.01	5.52
		Sub-mean	2.74	2.60	3.56	2.33	4.10	5.67
3.	Religion	Hindu	2.68	2.62	3.63	2.27	4.14	5.66
		Muslim	2.85	2.47	3.33	2.47	4.11	5.76
		Sikh	2.86	2.77	3.18	2.64	3.91	5.64
		Others	3.25	2.50	5.00	1.50	3.25	5.50
		Sub-mean	2.74	2.60	3.56	2.33	4.10	5.67
4.	Disposable income	< Rs500	2.75	2.56	3.48	2.54	3.79	5.88
		Rs.500-Rs.1000	2.83	2.67	3.58	2.19	4.14	5.61
		Rs.1000-Rs.2000	2.71	2.39	3.65	2.53	4.00	5.73
		Above Rs.2000	2.54	2.70	3.49	2.25	4.40	5.61
		Sub-mean	2.74	2.60	3.56	2.33	4.10	5.67
5.	Parental occupation	Business	2.67	2.60	3.43	2.51	4.08	5.70
		Service	2.73	2.60	3.67	2.19	4.15	5.67
		Profession	2.67	3.00	3.17	2.33	4.17	5.67
		Others	3.60	2.20	3.50	2.70	3.50	5.50
		Sub-mean	2.74	2.60	3.56	2.33	4.10	5.67

TABLE 3: RANKING OF STUDENTS' PERCEPTION ABOUT ADVERTISED FOOD HIGH IN FAT/SUGAR

S.No	Food products	Rank												Mean	Mean Rank
		1st		2 ND		3 RD		4 TH		5th		6th			
		N	%	N	%	N	%	N	%	N	%	N	%		
1	Soft drinks	64	21.3	87	29	62	20.7	51	17.0	23	7.7	13	4.3	2.74	2
2	Confectionery	94	31.3	46	15.3	85	28.3	36	12.0	39	13	0	0	2.60	3
3	Snacks & nuts	22	7.3	44	14.7	61	20.3	94	31.3	75	25	4	1.3	3.56	4
4	Fast food	94	31.3	95	31.7	57	19.0	37	12.3	7	2.3	10	3.3	2.33	1
5	Dairy products	26	8.7	17	5.7	31	10.3	69	23.0	140	46.7	17	5.7	4.10	5
6	Fruits & vegetables	0	0	11	3.7	4	1.3	13	4.3	16	5.3	256	85.3	5.67	6

TABLE 4: STUDENTS PERCEPTION REGARDING REPEAT PURCHASE BEHAVIOUR OF SOFT DRINKS, CONFECTIONERY & FAST FOOD

S.No	Demographic variable	Sub-class	Yes		No	
			N	%	N	%
1.	Gender	Male	2	1.9	102	98.1
		Female	9	4.6	187	95.4
		Average	11	3.7	289	96.3
2.	Age	20-22	0	0	37	100
		22-24	6	3.7	158	96.3
		Above 24	5	5.1	94	94.9
		Average	11	3.7	289	96.3
3.	Religion	Hindu	8	3.7	211	96.3
		Muslim	1	1.8	54	98.2
		Sikh	2	9.1	20	90.9
		Others	0	0	4	100
		Average	11	3.7	289	96.3
4.	Disposable income	< Rs.500	1	2.1	47	97.9
		Rs.500 – Rs.1000	4	3.0	129	97.0
		Rs.1000 – Rs.2000	4	6.5	58	93.5
		Above Rs.2000	2	3.5	55	96.5
		Average	11	3.7	289	96.3
	Parental occupation	Business	6	5.6	101	94.4
		Service	4	2.3	167	97.7
		Profession	1	8.3	11	91.7
		Others	0	0	10	100
		Average	11	3.7	289	96.3

TABLE5: DEMOGRAPHIC-WISE MEAN VALUES OF POSSIBLE HEALTH CONSEQUENCES DUE TO FREQUENT CONSUMPTION OF SOFT DRINK, CONFECTIONERY & FAST FOOD

S.No	Demographic variable	Sub Class	Obesity	Diabetes	Tooth decay	Malnutrition	Heart diseases
1.	Gender	Male	2.05	2.39	3.00	3.87	3.69
		Female	2.02	2.41	3.18	3.67	3.72
		Sub-mean	2.03	2.40	3.12	3.74	3.71
2.	Age	20-22	1.92	2.27	3.05	4.14	3.62
		22-24	2.10	2.40	3.13	3.71	3.66
		Above 24	1.96	2.46	3.13	3.64	3.82
		Sub-mean	2.03	2.40	3.12	3.74	3.71
3.	Religion	Hindu	1.95	2.43	3.08	3.69	3.86
		Muslim	2.31	2.33	3.24	3.83	2.28
		Sikh	2.20	2.35	3.25	3.95	3.25
		Others	1.75	2.25	3.00	4.25	3.75
		Sub-mean	2.03	2.40	3.12	3.74	3.71
4.	Disposable income	< Rs500	2.23	2.26	2.91	3.64	3.96
		Rs.500-Rs.1000	1.94	2.36	3.22	3.77	3.71
		Rs.1000-Rs.2000	2.33	2.62	3.10	3.47	3.48
		Above Rs.2000	1.76	2.40	3.05	4.05	3.73
		Sub-mean	2.03	2.40	3.12	3.74	3.71
5.	Parental occupation	Business	2.04	2.41	3.18	3.74	3.63
		Service	1.99	2.42	3.10	3.75	3.74
		Profession	2.18	2.45	2.91	3.45	4.00
		Others	2.50	2.00	3.10	3.80	3.60
		Sub-mean	2.03	2.40	3.12	3.74	3.71

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S.No	Demographic variable	Sub Class	Obesity	Diabetes	Tooth decay	Malnutrition	Heart diseases
1.	Gender	Male	2.05	2.39	3.00	3.87	3.69
		Female	2.02	2.41	3.18	3.67	3.72
		Sub-mean	2.03	2.40	3.12	3.74	3.71
2.	Age	20-22	1.92	2.27	3.05	4.14	3.62
		22-24	2.10	2.40	3.13	3.71	3.66
		Above 24	1.96	2.46	3.13	3.64	3.82
		Sub-mean	2.03	2.40	3.12	3.74	3.71
3.	Religion	Hindu	1.95	2.43	3.08	3.69	3.86
		Muslim	2.31	2.33	3.24	3.83	2.28
		Sikh	2.20	2.35	3.25	3.95	3.25
		Others	1.75	2.25	3.00	4.25	3.75
		Sub-mean	2.03	2.40	3.12	3.74	3.71
4.	Disposable income	< Rs500	2.23	2.26	2.91	3.64	3.96
		Rs.500-Rs.1000	1.94	2.36	3.22	3.77	3.71
		Rs.1000-Rs.2000	2.33	2.62	3.10	3.47	3.48
		Above Rs.2000	1.76	2.40	3.05	4.05	3.73
		Sub-mean	2.03	2.40	3.12	3.74	3.71
5.	Parental occupation	Business	2.04	2.41	3.18	3.74	3.63
		Service	1.99	2.42	3.10	3.75	3.74
		Profession	2.18	2.45	2.91	3.45	4.00
		Others	2.50	2.00	3.10	3.80	3.60
		Sub-mean	2.03	2.40	3.12	3.74	3.71

TABLE 6: RANKING OF POSSIBLE HEALTH CONSEQUENCES DUE TO FREQUENT CONSUMPTION OF SOFT DRINK, CONFECTIONERY & FAST FOOD

S. No	Health consequences	Rank										Mean	Mean Rank
		1st		2 ND		3 RD		4 TH		5th			
		N	%	N	%	N	%	N	%	N	%		
1.	Obesity	156	52.0	47	15.7	26	8.7	41	13.7	19	6.3	2.03	1
2.	Diabetes	78	26.0	92	30.7	62	20.7	39	13.0	18	6.0	2.40	2
3	Tooth decay	22	7.3	73	24.3	90	30.0	57	19.0	47	15.7	3.12	3
4.	Malnutrition	17	5.7	31	10.3	71	23.7	61	20.3	109	36.3	3.74	5
5.	Heart diseases	16	5.3	46	15.3	40	13.3	91	30.3	96	32.0	3.71	4