

## The Effects Of Media And Advertisements On Food Purchasing And Consumption In Physical Education And Sports School Students (Turkey-The Akdeniz University Case)

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### ABSTRACT

The study investigates the effects of media and advertisements on food purchasing and consumption in physical education and sports school students. 160 woman (mean age=21,52±1,9) and 248 man (mean age=22,14±2,2) totally 408 students of Turkey, Antalya Akdeniz University School of Physical education and sport, participate to the study. Research is aimed at case identifying and used questionnaire was prepared for the purpose of the study. % 79,4 of individuals follow the news, information and developments about 'healthy nutrition, sport nutrition, adequate and balanced nutrition, supplements, and new products' which are located in media and advertisements. The mass media which are mostly used and causing individuals to modify the nutrition habits are respectively internet, television and newspaper. % 60,5 of individuals finding reliable, information in the media and advertising and % 51,6 of them reports that they modify their nutrition habits influenced by these information. Milk and milk products, meat, chicken, fish, vegetables and fruits are most purchased food groups and fast food, chips, confectionaries are given up food groups, affected by these information. Studies show that, media and advertisements have effect on nutrition habits and product purchase. All occupational groups have to work for information which contained in advertisements and mass media to be reliable, scientific, real and clear. Also, inter-professional cooperation should be carried out.

### INTRODUCTION

Nowadays, the use of the media in searching for and communicating information on health and nutrition has increased, as in many other fields. An increase has been experienced in the number of published news/information/developments related to nutrition and health, and this increase has brought with it information pollution and confusion. While some information is shared correctly and reliably by experts on the subject, others are unscientific and based solely on commercial concerns, and may mislead people. The media and advertisements are one of the most important environmental influences affecting the health and eating behaviors of individuals (Aktaş, Arnas, 2006; Harris et al., 2009; Scully et al., 2009; Mink et al., 2010; Cebirbay and Aktaş, 2011). Bad dietary habits associated with many health problems such as coronary heart disease, some types of cancer, diabetes, hypertension, obesity, etc., threaten particularly children and adolescents, the adults of the future. Studies show that especially television advertisements change the dietary habits of children and direct them to products with higher fat, sugar and salt content (Aktaş, Arnas, 2006). In contrast to their negative aspect, mass media also have a positive aspect that directs people to positive health behaviors (Çobaner, Ardiç and Köksoy, 2013). It is of prime importance for the development of positive health behavior in individuals that news articles/information/developments related to health and nutrition and published or broadcast on mass media, should be trustworthy and based on scientific facts, and monitored beforehand. The aim of this study is to investigate the influence of the media and advertisements on the food purchase and consumption habits of the students of Akdeniz University, School of Physical Education and Sports.

### THE STUDY

This study was conducted between the dates of January 2015 – May 2015, with the voluntary participation of 160 women (mean age=21.52±1.9) and 248 men (mean age=22.14±2.2), making up a total of 408 students studying at the School of Physical Education and Sports of the Akdeniz University in Turkey, during the 2014-2015 education year. The investigation was aimed at determining the facts, and a goal-oriented questionnaire prepared for the study was used. Definitive statistical methods such as frequency (f), percentage (%), etc., were used in the evaluation of data, and a chi-square test was applied to determine the relation between the genders.

### FINDINGS

A total of 408 students, of whom 160 were female (39.22 %) and 248 were male (60.78 %), participated voluntarily in the study. Table 1 shows the frequency of the participating individuals in following the news on "healthy eating, sports diets, sufficient and balanced diets, dietary supplements, new products" published on media and advertisements. 79.4 % of the participants follow the news, information and developments on

“healthy eating, sports diets, sufficient and balanced diets, dietary supplements, new products” published on media and advertisements. There is no statistically significant difference in following frequency between men and women ( $\chi^2 = 5.96, p > 0.05$ ). (Table 1)

**Table 1. The frequency of the participating individuals in following the news on “healthy eating, sports diets, sufficient and balanced diets, dietary supplements, new products” published on media and advertisements**

	Female (n=160)		Male (n=248)		Total (n=408)		$\chi^2$
	f	%	f	%	f	%	
Yes	53	33,1	89	35,9	142	34,8	5,96
No	25	15,6	59	23,8	84	20,6	
Sometimes	82	51,3	100	40,3	182	44,6	

$p > 0,05$

The mass medium most frequently used by both male and female participants in following news/information/developments in nutrition is the internet, with television in second and the press in third place. 58.5 % of the women and 61.9 % of the men find the news/information given on the media trustworthy, and according to both groups, the most reliable mass medium is the internet.

34.0% of the women and 35.8% of the men follow the developments related to nutrition included in the media for healthy living, while 17.4% of the women and 30.5% of the men do so to increase sports performance, 17.0% of the women and 7.1% of the men, to lose weight, 4.1% of the women and 11.7% of the men, to gain weight, 12.0% of the women and 3.7% of the men, to learn new recipes, and 15.5% of the women and 11.2% of the men, because it is interesting. There is statistically significant differences between the genders in the answers on increasing sports performance ( $\chi^2 = 28.385, p < 0.05$ ), losing weight ( $\chi^2 = 22.661, p < 0.05$ ), gaining weight ( $\chi^2 = 14.963, p < 0.05$ ), learning new recipes ( $\chi^2 = 21.966, p < 0.05$ ), and because it is interesting ( $\chi^2 = 4.014, p < 0.05$ ) (Table 2).

**Table 2. The reason of the participating individuals in following the news on nutrition published on media and advertisements**

	Female (n=135)		Male (n=189)		Total (n=324)		$\chi^2$
	f	% <sup>a</sup>	f	%	f	%	
Healthy living	108	34,0	156	35,8	264	35,1	0,337
Increase sports performance	55	17,4	133	30,5	188	25,0	28,385*
Lose weight	54	17,0	31	7,1	85	11,3	22,661*
Gain weight	13	4,1	51	11,7	64	8,5	14,963*
Learn new recipes	38	12,0	16	3,7	54	7,2	21,966*
To be interesting	49	15,5	49	11,2	98	13,0	4,014*
Total**	<b>317</b>	<b>100</b>	<b>436</b>	<b>100</b>	<b>753</b>	<b>100</b>	

<sup>a</sup>: The percentage column

\*\*A total of more than one answer

\* $p < 0,01$

By answering ‘yes’ or ‘maybe’, 51.8% of the women and 51.3% of the men have indicated that they have changed their eating habits through following news/information/developments included in the media and advertisements. There is no statistically significant difference between men and women in changing eating habits or trying a new product ( $\chi^2 = 0.06, p > 0.05$ ) (Table 3).

**Table 3. The changing of eating habits of the participating individuals in following the news on nutrition published on media and advertisements**

	Female (n=135)		Male (n=189)		Total (n=324)		$\chi^2$
	f	%	f	%	f	%	
Yes	32	23,7	46	24,3	78	24,1	0,06
No	65	48,1	92	48,7	157	48,5	
Sometimes	38	28,1	51	27,0	89	27,5	

p>0,05

The ranking of mass media tools most effective in triggering eating habit changes again puts the internet in first, television in second and the press in third place. Food groups purchased under the influence of the media and advertisements were respectively herbal teas, yoghurt and similar products, vegetables, fruit and milk and milk products in women, and meat, poultry, fish, milk and milk products, dietary supplements, vegetables and fruit in men. Food groups the consumption of which was stopped under the influence of the media and advertisements were respectively fast food, crisps, candies, ketchup-mayonnaise, fats and margarines in women, and crisps, fast food, ketchup-mayonnaise and candies in men.

### CONCLUSIONS

According to the results of the investigation, a large percentage of the participants follow news/information/developments related to nutrition through the mass media. The most commonly used mass medium is the internet, with television in second and the press in third place. In previous studies, television has been found to be the most commonly used medium (McKay et al., 2006; Yılmaz et al., 2007; Aksoydan et al., 2010; Cebirbay and Aktaş, 2011). With the development and prevalence of internet technologies, new media and social media concepts have gained importance in the communication of information in the fields of health and nutrition. In Turkey, the number of people using the internet to search for information on health is increasing at a remarkable rate (Çobaner, Ardiç and Köksoy, 2013).

58.5 % of the women and 61.9 % of the men find the news/information given on the media trustworthy, and the most reliable mass medium according to both groups is the.

A large proportion of the participants have indicated that they have changed their eating habits under the influence of the media and advertisements. In the ranking of mass media that influence change the most, internet is again in the first place, with television ranking second and the press, third. In this study, it has been observed that the participants were positively influenced by the media and advertisements, and men and women have specified that they have purchased healthy foods such as milk, yoghurt, meat, vegetables and fruit more under the influence of the media and advertisements, and have stopped using products that are considered unhealthy, such as fast food, crisps, candies, ketchup-mayonnaise, etc..

It is of prime importance that media and advertisements that influence individuals and trigger behavior changes should be reliable, scientific and comprehensible. The media and advertisements create an environment that, on one hand, provides significant opportunities for protecting and improving the health and increasing the health related knowledge of individuals, while on the other hand, also provides the chance of providing uncontrolled, false information (Çobaner, Ardiç and Köksoy, 2013). The media may be used to communicate with a large number of people, but its strengths and weaknesses should be well investigated (Güler, 2006). In order to provide correct information to people on subjects related to nutrition, there must be media – scientist collaboration, support must be obtained from experts on the subject, risks must be minimized and information must be provided in simple terms that can be understood by the layman (Fernandez-Celemin and Jung, 2006). Furthermore, in order to avoid confusion, a consensus must be reached among scientists before information is disclosed to the public. The supervision of the media and advertisements is important for accessing reliable information. However, emphasis should be placed on dietetics in formal and non-formal education, thereby providing individuals with the opportunity to reach correct decisions by making informed choices (Aktaş, Arnas, 2006; Sabbağ and Akın, 2012).

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