

## INFLUENCE OF FOOD LABELING AWARENESS ON HEALTHY BEHAVIOR OF GEORGIAN CONSUMERS

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### Abstract

*The current study evaluates the development and perspective implication of social marketing interventions for empowering healthy life and well-being of the population in Georgia. The objective of the research is to analyze the impact of food labeling for healthy behavior change of Georgian consumers. The study revealed the strong correlation between awareness and education of consumer on food labeling and healthy behavior changing. One of the important factors of changing healthy behavior are increasing awareness and knowledge in food labeling among the general publics. Despite that Association Agreement with Europe requires implementation of new obligations regarding food security and nutrition policy Georgia faces challenges in this regard. The majority of the consumers are not satisfied with the food labeling in the local market. It is urgent to provide such public health policy, that has the effect of improving the availability, affordability and appropriateness of healthy behavior of the consumers. Consolidated work of government, business and civil society should be guaranteed for encouraging healthy behavior for the well being of the population. Social marketing promotion strategies such advertising, public relations and sales promotion have a positive role to encourage of consumer attention on food labeling.*

**Key words:** food labeling, healthy behavior, knowledge, marketing research

**JEL Classification:** M31

### I. INTRODUCTION

Many factors affecting the changes of physical, mental and social status of the population. Modern marketing became as social values-driven action, rather than a specific company's customer-oriented strategy (Blair, 1995). It focuses on the target audience, the long-term demand for the public utility customer behavior command. Social marketing is the use of marketing concepts in a program designed to influence the voluntary behavior of target audiences in order to improve health in the society (Andreasen, 2002). Using marketing tools for the social marketing campaigns, making health facilities more accessible and attractive for the population (Andreasen, 2006). Social marketing is focused on people, their wants and needs, aspirations, lifestyle and freedom of choice aiming aggregate behavior change (Lefebvre, 2013). Public health issues are so complex that no single agency is able to provide effective activities resolving existing problems. Why is important collaboration and partnership between different stakeholders (local, international, government, private sectors, media and individuals). No wonder some social marketers even deem partnership as one of the "additional social marketing Ps" (Weinreich, 2011). Social marketing implications are very popular for the public health empowering. Health Belief Model (HBN) is one of the most widely used conceptual frameworks for understanding health behavior. The Health Belief model is a framework for motivating people to take positive, health actions in order to avoid a negative health consequence (Orji et al., 2012). Health belief model states, that the perception of personal health behavior threat is itself influenced by general health values, which include interest and concern about health specific health beliefs about vulnerability to a particular health treat beliefs about the consequences of the health problem (Lee and Kotler, 2011).

Healthy eating is a target behavior of social marketing - new social product, which significant for the society and serve for the wellbeing of the population (Cheng et al., 2011; Donovan, 2011). There are many factors, that contribute why individuals behave a certain way, it is important to facilitate a desired change among a group of people. It should be noted, that behavior change refers to human actions that transform or modify overtime. While always complex and often unpredictable, one useful way of viewing behavior change is also series of stages that people move through (A Guide to Health Promotion through Social Marketing, 2013). There's a lack of appreciation among government and private sector, many campaigns often are unable to use social marketing approaches due to not well understanding the importance of the issue. There are many academic publications on the public health topic, social marketing experts have underlined that simply providing nutrition information without helping consumers interpret the information is unlikely to effectively encourage most consumers to make healthier choices (Hieke and Harris, 2016). Social marketing uses traditional

marketing instruments to promote healthy attitudes and behaviors (Glanz at al., 2008; Gordon at al., 2006). One of the important factors of changing healthy behavior are increasing awareness and knowledge in food labeling among the general public.

Labeling provides consumers with information they are entitled to, and as labeling interventions are being pursued, they should be implemented in the most useful and cost-effective manner. Food labeling can help the consumers in the case, if they have the knowledge or motivation to use the information, which may or may not be in a format they can understand (Rotfeld, 2009). For improving the healthy choice of the consumer, it is important to get consumer into the habit of checking the label. Social marketing interventions and initiatives, that focus on food and nutrition skills not only improve knowledge, competence and attitudes, but may amplify the impact of other policies, such as nutrition labeling, and help to reduce inequalities. Many investigations in this field demonstrated, that successful habit change depended on a deep understanding the target audience. They are influenced by many sectors of society, including families, community organizations, health care providers, faith-based institutions, businesses, government agencies, the media, and schools (Wechsler at al., 2004). Barriers faced consumer in this regard are the following: education level, low awareness of food labeling, low income and time scarcity. The ability to choose prepackaged food based on information obtained on its label requires knowledge and ability to read, understand and interpret information (Sunelle at al., 2010). The challenges of Social Marketing issues were analyzed at the Marketing Department of Tbilisi State University (Todua, 2012; Todua and Jashi, 2013). Research on the attitude of Georgian consumers to foods was investigated too (Todua, Babilua and Dochviri, 2013; Todua and Dotchviri, 2015a; Todua and Dotchviri, 2015b; Todua, Gogitidze and Phutkaradze, 2015; Todua, Mghebrishvili and Urotadze, 2016; Mghebrishvili and Urotadze, 2016). Despite some works undertaken by Georgian scientists on the Social Marketing, it is necessary to conduct a comprehensive research on this issue. The given study about the influence of food labeling awareness of Georgian consumers will good contributing to improve food labeling, provide education, as well develop policy on food labeling.

**II. RESEARCH METHODOLOGY**

The objective of the research is to explore how food labeling facilitates Georgian consumers` understanding the various forms of food labeling and assist consumers to make purchasing decisions. Preliminary survey was conducted through focus groups and in- depth interviews. Along with research methodology we used variance analysis method – ANOVA (Malhotra, 1999; Purtukhia, 2012). Numerous hypotheses were formulated, focusing on the relationship between food labeling awareness and healthy behavior of consumers.

- H1: Food labeling awareness positively impacts on consumer to healthy behavior;
- H2: Education positively impacts food labeling awareness of consumers;
- H3: Income is an important factor for awareness of food labeling by consumers;
- H4: Food labeling awareness impacts of purchasing decision of consumers on healthy behavior.

Based on this the survey results were analyzed using statistical software SPSS for windows. The Confidence interval is 95%.The survey was carried out with 1200 respondents aged18 years and more, which represent 10 % of the total population of Georgia. The survey covered the geographical area of Georgia's largest cities: Tbilisi, Kutaisi, Batumi, Signaghi, Gori, Zugdidi, Senaki. Among the respondents, 60% were women, and 40% - men with high and special professional education.

**III. DISCUSSION**

The above mentioned hypotheses were tested using the SPSS statistical software. Conducted analysis of variance in order to verify the hypothesis of interest. One and Two Way ANOVA F-Tests used to understand the interaction between the independent variables and the dependent variables. At first, investigated how the awareness influences on changing of consumer healthy behavior. The findings indicate the coefficient of awareness is significant at the 5% level, meaning awareness is a significant determinant of consumers` healthy behavior. (F=16.089, p=0.000) H1 has been supported, thus it indicates that the consumer has more information on healthy behavior, if one is more awareness about food labeling (see Table 1).

**Table 1. Impact of Awareness of Food Labeling on Consumers Healthy Behavior**

Estimated Marginal Means					
Dependent Variable: <i>healthy behavior</i>					
	Sum of Squares	df	Mean Square	F	p
Awareness	20.627	4	5.157	16.089	.000
Error	239.110	746	.321		

P<0.05 means that the differences between the groups studied are statistically significant.

Source: own elaboration.

One Way ANOVA F-Test has been used to check education level impacts on consumers' awareness on food labeling (see Table 2). The results suggest that education plays an important role in awareness of consumers (F=1.555, p=0.170). High and vocational education consumers are relatively more informed about food labeling.

**Table 2. Impact of Education on Food Labeling Awareness of Consumers**

Estimated Marginal Means					
Dependent Variable: <i>Food Labeling awareness</i>					
	Sum of Squares	df	Mean Square	F	p
Education	2.493	5	.499	1.555	.017
Error	239.110	746	.321		

P<0.05 means that the differences between the groups studied are statistically significant.  
Source: own elaboration.

In order to test the third hypothesis employed both ANOVA and the Pearson Correlation Coefficient. The ANOVA test illustrates that income is an important factor with regards to awareness about food labeling by consumers. F-test = 3.643 (p=0.049) is significant at the 5 % level. Consumer's incomes influence on the awareness on food labeling (see Table 3).

**Table 3. Impact of Income on Food Labeling Awareness of Consumers**

Estimated Marginal Means					
Dependent Variable: <i>Food Labeling awareness</i>					
	Sum of Squares	df	Mean Square	F	p
Income	.824	4	.206	3.643	.049
Error	239.110	746	.321		

P<0.05 means that the differences between the groups studied are statistically significant.  
Source: own elaboration.

Analysis of the relationship between awareness about food Labeling and the consumer purchasing of healthy behavior revealed that the relationship is significant at the 5% level. Based on F-statistics (F=4.064, p=0.001) the H4 hypothesis is supported awareness food labeling influence on purchasing decision of consumers to change healthy behavior. This relationship could be confirmed (see Table 4).

**Table 4. Impact of Awareness on the purchasing decision of Consumers**

Estimated Marginal Means					
Dependent Variable: <i>purchasing decision of Consumers</i>					
	Sum of Squares	df	Mean Square	F	p
Awareness	21.086	5	4.217	4.064	.001
Error	843.675	813	1.038		

P<0.05 means that the differences between the groups studied are statistically significant.  
Source: own elaboration.

77% of respondents highlighted positive attitude trends towards relating the food labeling. It was emphasized by the respondents, that the level of education and usage of food labeling increased with family income. From point of majority respondents food labeling helps them to regulate healthier lifestyle, to utilize the knowledge, while making purchases. For the lowest income group food price became the major determining factor of the types of food they buy.

#### IV. CONCLUSION

The study of survey explores the significance of consumer awareness and education level of regarding food labeling, ability to interpret food labeling information while making purchasing decisions regarding food products. This study found, that 82, 7 % of the consumers have a certain view about food labeling. But their level of awareness on food labeling is rather low. Most of respondents receiving essential information regarding food labeling from internet resources, relatively less respondents get the information from special literature, mass media and word of mouth. Georgian National Health Strategy recognizes nutrition, as a priority in public health care issue. It is urgent to provide such public health policy, that has the effect of improving the availability, affordability and acceptability of healthy behavior of the consumers. One of the significant actions in this regard is raising public awareness on food labeling there is a significant progress in terms of food safety and nutrition policy in Georgia. However, the country still faces some serious challenges in this field. The majority of the consumers are not satisfied with the food labeling in the local market. It's important to elaborate national food safety strategy and nutrition policy to respond to the current challenges of Georgia. Obviously, implementation of the obligations according the Association Agreement with EU is significant for Georgia, which requires the concerted effort of governments, private sector and civil society for

encouraging healthy behavior for wellbeing of the population. It should be noted that the consumer perception regarding social marketing intervention is very positive. After increasing awareness of consumers of food labeling, they pay attention to the quality, design and innovation of food products, as well as promotion strategies such advertising, public relations and sales promotion. Social Marketing interventions will help to elaborate food standards of health products, to create an enabling institutional environment for successful implementation of nutrition policy and healthy behavior change of the consumer.

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