



## Attitudes and Behavior of Consumers Related to the Inspection of Food Labels

**F. Gül AYGEN**

Doğuş University

Faculty of Economics and Administrative Sciences

Department of Business Administration

Acıbadem 34722 İstanbul, Turkey

[gaygen@dogus.edu.tr](mailto:gaygen@dogus.edu.tr)

### Introduction

The European Union accession negotiations with Turkey are categorized under 35 different chapters among which chapter 12 stands for the Food Safety, Veterinary, and Phytosanitary Policy. The chapter has been opened on June 30, 2010 officially and deeds to be undertaken within the scope of this chapter are expected to have many positive effects on the daily lives of Turkish citizens. Among other things, the chapter lays down rules on appropriate labeling for foodstuffs and food products whereby consumer health and interests are to be protected to the greatest possible extent. This important development is an indicator of the fact that the topic of food safety, including aspects such as additives, flavorings, aromatic substances, pesticide and herbicide residues, labeling, sampling and analysis methods, will be treated more seriously in Turkey, from now on. As such, besides the State and related institutions, academicians should also be interested in this rather not extensively studied subject and conduct studies so as to increase public awareness on the topic. Findings of such research will also prove to be a fruitful source for both the State, related institutions, producers, and retailers in their operations.

### Methodology

The purpose of this study is to find out about the attitudes and behavior of Turkish consumers regarding food labels and to increase awareness pertinent to the topic. Within this frame, it is aimed at revealing the frequency with which consumers read food labels; learning about various situations that may affect their reading frequency; pointing out the dimensions of dissatisfaction with labels; finding about the most influential factors in making food purchases; having an idea about their attitudes toward food labels; identifying the reasons for not using labels, and figuring out if frequency of label readership differs with respect to the socio-demographic characteristics of individuals (gender, age, education, income, working status, district of the city in which the respondent lives, marital status, child ownership, health-related condition ownership that necessitates careful choice of foods).

Data was collected through a structured and undisguised questionnaire distributed among consumers. The internal reliability of the questionnaire using the Cronbach's alpha coefficient was 0.92, which indicated a high internal correlation among the items. The content validity in meeting the objectives of the study was established on consultation with food engineers and the literature.

This cross-sectional field study took place during the two months of July and August, 2011. The sample consisted of 500 individuals and was recruited by a local market research company. High, middle, and low income districts on the Asian and European sides of the city were chosen and the questionnaires were administered face to face with the respondents at their homes, by qualified interviewers. Random sampling was used in recruiting the respondents and the sample size was determined taking into consideration population densities of the districts representative of Istanbul as a whole.

The analysis on the 500 completed questionnaires, inclusive of the descriptive statistics and the relevant tests to investigate the various relationships and differences sought among the variables included in the study, was completed by using the computer program SPSS (Statistical Package for the Social Sciences). Since all of the variables used in the study were found to be non-normally distributed, non-parametric tests were used: The Mann-Whitney U Test was used to test for significant differences in case of "gender", "marital status", "having or not having a child", and "having a health related condition necessitating careful choice of foods, and the Kruskal-Wallis Test was used in case of "age", "education", "income", "working status", and "district of the city in which the respondent lives".

### **Findings and Conclusions**

Percentage of those respondents who "always" read labels is 20, who "usually" do so is 33, who "sometimes" do so is 38, and who "seldom" do so is 9. None of the respondents have reported not reading food labels, at all. The first five most-frequently-read label elements are the "expiration date", "production date", "shelf life", "name and brand of the product", and the "ingredients". Nevertheless, even for these elements, there are individuals who read them "seldom" or "never". Nutrition information is read less frequently compared to label information: With respect to each element of the nutrition facts label, inclusive of the most frequently read ones, 20% or more of the respondents have indicated either reading them "seldom" or "not reading them at all". Given the role nutrition labels play in the fight against obesity, one of the major problems of today's world, and the fact that respondents were in charge of food purchases for the house, it is of prime importance that consumers acquire the needed consciousness on this topic. There is a need for consumers, in the first place, to be aware of the importance of label use and its benefits together with their responsibilities in maintaining a healthy life. As such, consumers, as well as both the state and the industry, inclusive of food manufacturers and retailers, all have significant roles to play with regard to this vital topic of consideration. Introduction of related courses in school curricula is a major step towards the goal of educating consumers.

One of the findings of the study reflects that the percentage of those whose minds got mixed up if they read labels, as there is too much information on labels, is 18. To deal with this confusion, terminology used on labels should be meaningful and understandable to the general public. For this purpose, labeling regulations might be revised at the governmental level. Percentage of those who state that they are too busy

to read labels is 24. Hence, the use of a standardized and simple format that can easily and quickly be understood would be helpful for those consumers who do not have the time to check for individual food labels. As has been pointed out by earlier research, besides the Ministry of Food, Agriculture and Livestock and the Ministry of Health, food manufacturers and retailers should also be involved in public education activities, through employing knowledgeable and helpful sales personnel, providing consultancy services to consumers in stores.

With respect to various situations that may affect frequency of label readership, it is seen that if the product is new on the market, if it is being purchased for the first time, or if it is not a frequently purchased item, individuals tend to read labels more. Again, they have indicated that they would read labels more if they purchased for their children or if either themselves or a member of their family had a health-related concern necessitating careful choice of foods. In spite of this, no statistically significant difference could be found between those who have children versus who do not and between those who have a health related concern necessitating careful choice of foods versus those who do not, with respect to their food label readership frequency. However, as it is especially important for individuals who have children and who have health related concerns to read labels, these people should be encouraged and educated to be more interested in reading labels in their food purchases.

Dissatisfaction with food labels is mainly due to an “absence of cautionary information on labels” and of “nutrition facts per serving” as well as the perceived “inadequacy of product storage information”. Besides, respondents think that it is “quite hard to find the production and expiry dates”, that “there is too much information on labels”, that “it is hard to understand the given information and to evaluate the weight/amount information”, and that “the words on labels are too small to be read”. All of these comments should be evaluated and necessary revisions should be made by producers so as to satisfy their target markets.

Those factors that influence food purchases the most seem to be “past experiences” (73%), “information obtained from family and friends” (58%), “price”(42%), “advertisements”(41%), and “labels”(36%). As is revealed in many other studies, opinions of family and friends are quite influential in food purchase behavior; therefore, it may be a good idea to determine opinion leaders in the community so as to enhance word-of-mouth communication within the society as to the benefits of label readership.

81% of the respondents “agree” or “strongly agree” that “eating very oily, salty, and sweet foods may lead to conditions like high blood pressure, heart disease, or cancer, in the long run”. On the other hand, percentage of those respondents who “disagree” or “strongly disagree” with this statement is 16. This points out to the fact that there are a number of people who do not know about the relationship between diet and health. Education is of prime importance, again, in building a more conscious society.

Percentage of those who follow nutrition related news in the media is 72; about one third of the respondents have stated that they did not follow such news. For those who follow, television ranks the first among the different media sources with a percentage of 71. As such, television may be used to the greatest possible extent and through relevant television programs, the learning process of, at least, the “interested/

concerned” individuals may be enhanced. For those individuals who are less likely to use food labels, highlighting the ill health element of poor nutrition may be an effective tool in convincing these individuals to use food labels as Nayga has pointed out in one of his studies.

With respect to analyses regarding the socio-demographic variables, the only statistically significant results were obtained in case of education and age. Regarding education, high school graduates were found to read labels more compared to literates and university graduates. Those who were 55 and older were found to read labels less compared to respondents aged between 25 and 54. Older individuals may be studied separately in another study to figure out their problems with and expectations from food labels, in detail and suggestions may be presented for some improvements on food labels so as to increase their food safety.

Inclusion of some self-reported practices may be considered to be a limitation of this study as self-reported practices are blamed for possibly not reflecting actual behavior due to social desirability bias. Hence, future research should consider this potential shortcoming and observe individual behaviors, as well, besides asking for respondents’ replies.