

# Consumer Perceptions of the Nutrition Labeling of Food Products

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The objective of this study was to evaluate consumer perceptions and preferences regarding food labeling and the information displayed on the packaging of food products, with particular emphasis on nutrition facts. The survey covered 283 respondents who were asked to fill out a questionnaire.

**Keywords and phrases:** nutritional value, labeling, packaging, consumer research.

## Introduction

Recent years have witnessed an increasing incidence of diet-related diseases. Due to the lack of time and insufficient knowledge about healthy eating, consumers often act irrationally or at random when choosing food products, which may lead to obesity and nutrient deficiencies. Therefore, consumers should have access to clear and comprehensive nutritional information, based on scientific research.

Food labeling is an important source of nutritional information about the product, available at the place of purchase. The nutritional value of a product comprises the content of nutrients (including protein, fat, carbohydrates, vitamins) and energy value. This information enables consumers to select food products corresponding to their individual needs and dietary recommendations as well as to incorporate a balanced diet into their nutritional regime.

## Materials and Methods

A survey of consumer preferences regarding the nutritional information on food packaging was conducted using a questionnaire. The questionnaire contained questions about the form and content of nutrition facts labels on product packaging. The survey was anonymous and voluntary, and it covered 283 residents of the Province of Warmia and Mazury

(NE Poland). All subjects have consented to participate in the study. The questionnaire contained also classifying questions concerning the studied subjects' gender and nutritional habits. The questionnaire was filled out by 173 women and 110 men, including:

- 119 persons who declared that their life style was related to their nutritional regime,
- 164 persons who claimed not to be following any diet.

The above proportion resulted from the respondents' consent to participate in the survey.

## Results and Discussion

It was found that 42% of the respondents often read food labels, 7% of the subjects always read the relevant information and 22% of them always read nutrition facts when considering the purchase of a new product. Only 5% of the respondents declared that they never pay attention to food nutrition labels, while 24% do it occasionally. Similar results were obtained with respect to male and female respondents, and among persons whose diets were and were not adapted to a selected nutritional regime.

72% of the respondents found the information printed on food packaging to be both legible and comprehensible.  $\frac{3}{4}$  of all surveyed consumers expressed positive opinions about the information provided on food labels.

The purchase decisions made by consumers are determined primarily by the product's shelf life (46%), followed by information on the product's ingredients (29%), data identifying the manufacturer (13%) and information on the product's nutritional value (12%). Among women and persons adapting their nutritional regime to dietary requirements, the information on the nutritional value of a food product ranked third in the hierarchy of importance of all types of food label data (15% and 17%, respectively), and it was followed by the information on the manufacturer (9% and 10%, respectively). The present results are consistent with the findings of other authors. McLean-Meynsse [4] reported that women are more likely to pay attention to nutrition facts labels. According to Nayga [6], men — compared with women - consider nutritional information to be less useful. Men focus a list of the product's ingredients rather than on nutrition facts [1].

In reference to an increasing popularity of a healthy life style, including healthy nutrition, the consumers' knowledge about food labeling was evaluated in the study. The respondents were asked about the definition of nutritional value and about the GDA (Guideline Daily Amounts) labeling scheme. The results were satisfactory: more than one-half of the respondents gave a correct interpretation of the term "nutritional value". 53% of the polled subjects correctly associated nutritional value with the nutrient content and the energy content of a food product, while nutritional value was associated only with the nutrient content or the calorific value of a food product by 18% and 24% of the respondents, respectively. An analysis of survey results in view of the respondents' gender and nutritional habits produced a similar distribution of results to the entire polled population.

The Voluntary "Guideline Daily Amount" (GDA) Nutrition Labeling Scheme is aimed at providing realistic and reliable nutritional information to consumers in a consistent and legible manner [Polish Federation of Food Manufacturers, 2007]. In comparison with the study carried out in 2009, the respondents demonstrated broader (by 16%) knowledge of the problem. 48% of the surveyed consumers correctly interpreted the acronym GDA, while the remaining subjects gave incorrect answers. A higher number of correct answers was provided by women (54%) and respondents claiming to observe a nutritional regime (55%), compared with men (39%) and subjects who do not follow a diet (43%).

In Poland nutrition facts labels are obligatory and required only on the packages of food products for special dietary use, enriched food products, food products supplied with health and nutrition claims, and food supplements. The vast majority of respondents (81%) shared the opinion that nutritional information

should be displayed of the packaging of all food products, as it would facilitate the comparison of similar items offered by different suppliers with respect to nutritional value. According to 76% of the polled subjects, nutrition facts labels were needed and useful. As noted by Drichoutis et al. [2], the fear of health problems resulting from an unbalanced diet prompts consumers to pay more attention to food labels, including information on the product's calorific value and nutrient content.

It is highly satisfactory that a total of 68% of the surveyed subjects claimed to have an interest in additional information (such as leaflets) on food nutrition labels. Dieting individuals (78%) and women (74%) were more willing to expand their knowledge than the respondents who claimed not to be dieting (60%) and men (58%). 78% of the surveyed consumers declared that nutritional information on food labels supported their conscious choices and purchase decisions.

Moorman and Matulich [5] demonstrated that high health knowledge levels facilitated the acquisition of information provided on food nutrition labels. Levy and Fein (1998) reported that nutrition knowledge affects consumer use of nutrition labels [3].

The following conclusions may be formulated based on the results of this study:

1. The concept of nutrition labeling of food products has been evaluated positively. According to the polled consumers the information displayed on food packaging is both legible and comprehensible.
2. The consumers' knowledge of nutrition label use is relatively broad.
3. The respondents declared an interest in getting additional information concerning the nutritional value of food products. As shown by the answers given by the surveyed subjects, nutritional information on food labels supported their purchase decisions and affected consumer behaviors.
4. Women and persons adapting their nutritional habits to dietary requirements were more likely to search for nutritional information on food packages.

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