

# Understanding the Importance of the Concept of “Healthy Eating” - Metabolic Impact on the Human Body

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## BRIEF REPORT

### Abstract

**Introduction:** Assessing the level of knowledge on rational nutrition among consumers is of great importance on the metabolic benefits with a primary impact in ensuring and improving health. One cannot talk about healthy diet without knowing the parameters that contribute to ensuring and establishing a balanced, rational diet. Nutrition that sustains and maintains health must be adapted to the body's requirements and correlated with balanced nutrient content.

**Aim and objectives:** This study aimed to assess the impact of scientifically healthy nutrition education on consumers' perceptions of understanding the innocuous phrase "healthy eating" due to the growing tendency of consumers to focus on poorly promoted healthy eating in most of the cases.

**Methods:** The methods (clinical and nutritional) of analysis were selected to highlight as accurately as possible the metabolic benefits of healthy = correct eating on human metabolism and thus to improve the health of the body.

**Results:** Results have highlighted the importance of nutrition education based on scientific evidence on the metabolic impact of food in ensuring and maintaining health. Improper correlation leads to increased incidence rate of disorders, resulting in altered physiological status.

**Conclusions:** Most consumers are able to understand at least some basic nutritional information about food even if the accuracy of understanding the data decreases if the nutritional information is presented in a more complex way.

**Keywords:** healthy nutrition, metabolic benefit, nutrition education.

### I. INTRODUCTION

Misperception and misunderstanding of the concept of healthy eating, resulting in inadequate nutrition, is linked, throughout life, to many chronic diseases that have a significant impact on morbidity, mortality and quality of life [1, 2].

The abundance of information and strategies that promote healthy eating education, very common in the media, applicable to any consumer regardless of age, confuses consumers on healthy eating [3]. Such information is found in illusory phrases such as “consumers who have a healthy diet are preoccupied of and interested in choosing healthy foods and pay special attention to increased consumption of nutrients in food choices”. This phrase, scientifically analyzed and proven by scientific evidence, can lead to devastating results for the body by increasing the incidence rate of eating disorders such as orthorexia, bulimia or even anorexia, on the one hand, and by inducing an excessive consumption of nutrients that increases the incidence rate of metabolic pathologies altering health, on the other hand.

Mozaffarian considers several diseases as diet-related diseases, including coronary heart disease, stroke, type 2 diabetes and obesity [4]. Thus, diet represents a prime factor in current studies [5, 6]. Lifestyle, including nutrition, plays

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an important role in the etiology of the disease preceded by multiple metabolic pathologies [7].

The quality and types of foods consumed influence the various metabolic pathways. Thus, nutritional interventions are complex at the individual level as well as at the social, cultural, community, agricultural, industrial, governmental and global levels. A common mistake among consumers concerned with healthy eating is related to the association of taste and other sensory characteristics with the quality of being natural and ecological food.

Certain studies that assess eating behavior from the perspective of supporting healthy eating habits state that some consumers avoid declaring that they are interested in a healthy diet even when their actual eating behavior indicates increased concern for highly sensory foods.

Studies in the specialized literature on the real impact of healthy nutrition education proven by scientific evidence that is faithfully correlated with the human metabolism come to make a first-rate statement: healthy food should NOT be confused with highly sensory food. A very attractive and appetizing taste, flavor and smell indicate a rather inappropriate food in terms of metabolic effect. These statements are very common in today's publications on healthy eating that are intended to be educational in this field, but they can lead to an increase in the incidence rate of eating disorders.

These interventions are based on solid and effective evidence that leads to the development of several strategies of improving the perception of the meaning of healthy eating, thus improving the health education system, the health policy system and, last but not least, improving several individual eating strategies through a scientifically sound education correlated with the metabolic aspects [5,6].

#### *Aim and objectives*

This study aimed to assess the impact of scientifically healthy nutrition education on consumers' perceptions of understanding the innocuous phrase "healthy eating" due to the growing tendency of consumers to focus on poorly promoted healthy eating in most cases.

In order to achieve the proposed aim, the following objectives have been set: to develop and implement a program that promotes a healthy lifestyle among adolescents; to carry out nutrition education activities in order to improve knowledge on healthy eating; to assess the results of the program that promotes a healthy lifestyle and to present the conclusions emphasizing the importance of promoting a healthy diet.

## II. METHODS

The methods of analysis were selected to highlight as accurately as possible the metabolic benefits of healthy = correct eating on human metabolism and thus to improve the health of the body.

The clinical method of analysis included nutritional anamnesis and objective examination and was applied for a

judicious clinical evaluation of the nutritional status correlated with the adolescent consumers' attitude regarding healthy eating. This method involves the behavioral assessment of eating using the questionnaire method.

The nutritional method of analysis assessed the nutritional intake in order to collect information on the quantity and type of food ingested which was then correlated with the metabolic effect produced.

We must say from the very beginning that there is no method that allows an accurate assessment of food intake, but these methods are essential in determining the causes of increased incidence of several pathologies, starting with the oral cavity because all foods introduced into the oral cavity will be metabolized and will have a beneficial or less beneficial effect on the whole body.

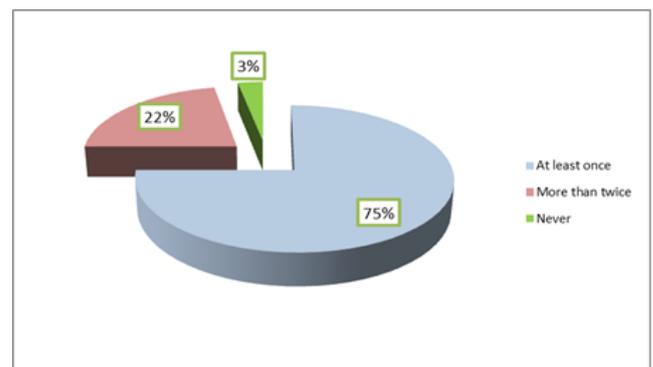
## III. RESULTS AND DISCUSSION

### *A. Results*

The study on the assessment of healthy nutritional knowledge shows that knowing the current state of consumer perception on the metabolic importance of food micro- and macronutrients is an important prerequisite when developing concepts on improving nutrition among the population through nutrition education.

The assessment of the results obtained on consumers' perception on healthy eating indicates that people fail to ensure a balanced diet and intake of essential nutrients according to nutritional recommendations. This fact is increasingly noticeable among the population that focuses on food choice according to media recommendations supported by innocuous phrases which do not coincide with scientific data.

The analysis of the responses on the adoption of a diet according to innocuous recommendations shows a higher share of adoption among adolescents. They adopt, at least once in their lifetime, a certain diet for socio-cultural reasons (Figure 1).



**Figure 1:** The groups of respondents who adopted a diet promoted in the media

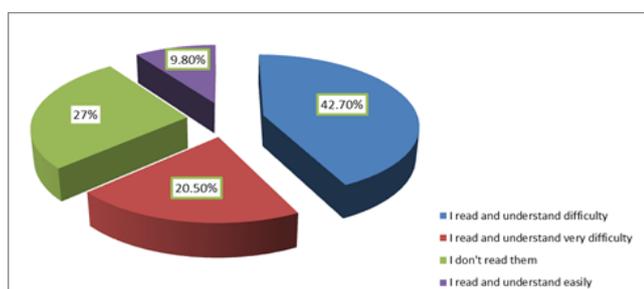
Result assessment on the population's attitude and perception on the nutritional quality of foods promoted as food that can ensure a healthy diet explains the correlation between

choosing a particular product and the low level of correct knowledge, leading to an inadequate classification of foods in two quality categories: healthy and unhealthy.

The results of this study were directed and focused on the effects of consumers' knowledge and correct use of information on the choice of healthy foods in order to maintain quality of life.

In most cases, today's consumers talk about the role of healthy eating, but they state with great conviction that they "eat healthier" or that "they have made changes in the family's diet and have been eating healthier for some time" without being able to provide minimal explanations of what they mean by eating healthy.

Respondents' answers (Figure 2) on reading and understanding the nutritional information on the product label show that 42.7% of the respondents have difficulty in reading and understanding it, 20.5% find it very difficult, 27% do not read it and 10 % read it and easily understand it.



**Figure 2:** The groups of respondents according to the understanding of the information on the nutrition label

Result assessment of the respondents' answers has led to the conclusion that the perception of food quality is influenced by the level of search for information on the nutritional quality of the product on the label. The level of understanding of this information is closely linked to the level of education and to certain cultural, social and personal conceptions. It is known that cultural and social factors play a decisive role in consumers' food choice. This phenomenon is observed when society aggressively promotes a fact about eating with minimal and innocuous information.

The answers given by the subjects in the study show that 78% of the participants in the study improved their level of knowledge on the scientific significance of healthy food, being able to accurately identify the differences between nutrients that could ensure healthy nutrition while 20% of the respondents failed to understand the significance and metabolic benefits of healthy eating.

### B. Discussion

The EU Platform on Diet, Physical Activity and Health, launched in 2005 with the general aim of counteracting or reversing the growing trend of overweight and obesity among the population in the Member States of the European Community, seeks to generate concrete action on nutrition education. These actions have aimed the following areas: reducing the publicity of high-fat, sugary and salty products (especially in children); changing the nutritional composition

of foods in terms of fat, sugar and salt; changing food labels; changing lifestyle through activities meant to educate the population on healthy eating for physical activity and behavior change, to which activities meant to promote research in obesity are added.

The important role of scientifically sound knowledge on the metabolic impact of nutrients in sustaining health and in preventing non-communicable diseases is currently receiving insufficient attention and remains poorly understood by the general population, leading to the acceptance of incorrect information about food and healthy eating.

Continuous nutrition education through programs that promote a healthy lifestyle and through simple and concrete learning activities has highlighted the fact that the information must be scientifically correct and complete and must be proven in terms of metabolic impact.

Result assessment of the program that promotes a healthy lifestyle and the presentation of conclusions, emphasizing the importance of promoting a healthy diet, have led to the observation that the basic nutritional notions have an important effect on the processes of perceiving nutritional information in order to choose foods easily, aspect observed by several authors [8,9]. Result assessment shows that nutritional knowledge could support the information on nutritional quality in order to adopt a healthy diet by properly using the information listed on the food label in at least three ways [10, 11].

Firstly, consumers who have some previously acquired nutritional knowledge should pay attention to other important pieces of information listed on the label and ignore psycho-informational and manipulative information that does not reflect special nutritional qualities, but rather minimizes the essential information in choosing food.

Secondly, prior nutritional knowledge can facilitate the understanding and the memorization of information on the nutritional quality listed on the label, such as the perception of the amount of salt, whether 700 mg of sodium is a small amount compared to the recommendations or is a large amount compared to the recommendations.

Thirdly, previously acquired knowledge that reflects nutritional knowledge could support the application of understanding and recall of information in order to choose foods that best fit the individuals' physiological status, food habits and traditions.

Assessing the impact of scientifically healthy nutrition education on consumers' perceptions of understanding the innocuous phrase "healthy eating" provides feedback to consumers on their health and on the ways to improve their nutritional habits. Carrying out nutrition education activities to improve knowledge on healthy eating would provide important scientific tools in the field of ensuring health by nutrition, thus improving the quality of life and reducing the risk of increasing the incidence of non-communicable diseases.

Addressing the effects of knowledge on food consumption and on the wide range of food products on the market related to the food attributes and behaviors of the consumers, such as

attitudes towards some nutritional or non-nutritive components, along with certain perceptions and social characteristics represent important premises in choosing food for each individual.

#### IV. CONCLUSION

The use of the nutrition label on foods could be a moderator of the association between nutritional knowledge and eating behaviors faithfully correlated with individual eating habits and tradition, offering the possibility to correct any imbalances.

Most consumers are able to understand at least some basic nutritional information about food even if the accuracy of understanding the data decreases if the nutritional information is presented in a more complex way.

#### Conflict of interests

The authors declare that they have no conflict of interests.

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