

CONSUMPTION OF FUNCTIONAL FOODS AND KNOWLEDGE ABOUT THEM BY PEOPLE OF DIFFERENT AGES IN KOSOVO

Vlora Rama

University “St. Kliment Ohridski”, Faculty of Biotechnical Science, Bitola, R.N.Macedonia, “Stone
Catle-Vineyards and Winery”, Rahovec, Kosovo, vlora_rama@hotmail.com

Abstract: Functional foods can be considered to be those whole, fortified, enriched or enhanced foods that provide health benefits beyond the provision of essential nutrients (e.g., vitamins and minerals), when they are consumed at efficacious levels as part of a varied diet on a regular basis. All foods have certain functions and some nutritional value, but functional foods have more specific and targeted nutritional value for physiological function than others. Functional foods can help fulfill nutritional deficiencies; if you're not getting enough of a nutrient, you can consume a functional food to fulfill that need. A functional food can have both naturally occurring ingredients that are then boosted or they can have nutrients that aren't naturally found in them. For example, orange juice has potassium and food scientists can boost this to make it more of a functional food; or you can add calcium which wouldn't normally be found in orange juice and make it functional in a different way. In general, this includes anything added for a specific functional purpose. This research has been done to determine how much people know about functional foods and how much they consume. For this reason we have done a survey with people of different ages where we asked them if they know about functional foods, do they consume and if yes, which of their products. 180 people were responded where 53.3% of them were 18-25 years old, 27.2% of them were 25-35 years old, 9.4% of them were 35-45 years old and 8.3% of them were over 45 years old. Of 180 respondents, 98.3% responded with YES consuming functional foods while 1.7% responded with NO that did not consume functional foods. Some of the functional foods consumed by the respondents were: dairy products, meat products, fruits, cereals, chocolates and drinks. After this survey, we have researched that what kinds of functional food products the markets of this country contain and we have concluded that the markets of this country have sufficient quantities of functional foods to meet consumer demand. Some of these products are: lactose free milk, with calcium, with vitamin D, with minerals, with omega 3, kefir yogurt, fermented dry sausage, ginger, broccoli, grapefruit, different types of cereals, sugar-free chocolate, fiber-rich, with antioxidant, with vitamins A, C, E and with protein, antistress water with niacin, pantothenic acid, vitamin B6 and magnesium, different types of red wines as a product rich in anthocyanins etc. Due to insufficient knowledge, some respondents requested additional information about functional foods before responding. At the end of the analysis and survey we found that respondents aged 35 to over 45 did not have enough knowledge about functional foods even though in daily life they used at least one of their own. From the results, fruits with 74.7% are the most consumed while sweets with 46.1% are less consumed.

Keywords: functional foods, types, consumption, survey

1. INTRODUCTION

A functional food is a typical food that has specific nutrients added to it, like vitamins or minerals, fiber, or probiotics or prebiotics. In general, this includes anything added for a specific functional purpose.³ In recent years consumers have become increasingly interested in and conscious about their health and appearance. They also seem to have acquired a better understanding of the relationship between diet and state of health.¹ Nutraceuticals are substances that are a food or part of a food that provides medical and/or health benefits, including the prevention and treatment.¹⁸ Functional foods or health foods are dietary substances that provide some health benefit beyond basic nutrition. Health benefits associated with functional foods depend on the bioactive components they contain. With an annual average growth rate of about 8.5%, the global functional food market is expected to exceed \$305.4 billion by 2020.¹⁵ In the light of this development, the food industry has developed and introduced a number of food products that, in one way or another, are meant to be healthier and more nutritious than conventional food products. These products have then been marketed as containing reduced quantities of fat, cholesterol, salt, sodium or devoid of certain additives. Today, manufacturers also emphasis enriching food with an extra benefit, positioning them as functional foods. The most frequently bought functional foods include cereals, sports and energy beverages, yoghurt and other dairy products, bread, biscuits, baby food, and pasta. All foods have certain functions and some nutritional value, but functional foods have more specific and targeted nutritional value for physiological function than others. Functional foods have no universally accepted definition. The concept was first developed in Japan in the 1980s when, faced with escalating health care costs, the Ministry of Health and Welfare initiated a regulatory system to approve certain foods with documented health benefits in hopes of improving the health of the nation's aging population.¹ According to the Food and Nutrition Board of the Institute of Medicine, a functional food is “any food

or food ingredient that may provide a health benefit beyond the traditional nutrients it contains”.² A functional food is a food claimed to have an additional function by adding new ingredients or more of existing ingredients.⁴ It may be “designed to have physiological benefits and/or reduce the risk of chronic disease beyond basic nutritional functions, and may be similar in appearance to conventional food and consumed as part of a regular diet”.⁵ Functional foods offer great potential to improve health and/or help prevent certain diseases when consumed as part of a balanced diet and healthy lifestyle. However, the research opportunities in nutrition to explore the relationship between a food or a food component and an improved immune system are very challenging.¹⁶ Functional foods range from berries to fish, but they all provide therapeutic benefits and therefore are often considered “superfoods.”⁶ Fruits and vegetables, as functional foods are well recognized for their beneficial properties and can have a significant impact on the progression and outcome of Diabetes Mellitus.¹⁷ Functional foods are classified by source of origin, including plant, animal, microbial, and miscellaneous (algae, mushrooms, other).⁷ They can be divided into two broad categories. The first category consists of functional foods that naturally contain a component that offers additional benefits to the consumer. The other category of functional foods consists of processed foods in which a component is added to the food to give it additional benefits.⁸ Possible ingredients for the development of functional foods that could contribute to optimal immune response include the antioxidant vitamins, trace elements (e.g. zinc, copper and manganese), n-3 and n-6 PUFAs, l-arginine, nucleotides and nucleosides, probiotics, prebiotics and synbiotics. The gastrointestinal tract is an obvious target for the development of functional foods because it acts as an interface between the diet and all other metabolic functions.⁹ The bacterial genera most often used as probiotics are lactobacilli and bifidobacteria.¹⁰ Top 10 functional foods for health are: Omega-3 enriched eggs, oats, fatty fish, fortified margarines, soy, tomatoes and tomato products, probiotics, nuts, grape juice or red wine and leafy greens.¹¹ Some fermented foods as functional foods are: fermented milk products as dahi, kefir, bifidus acidophilus yogurt, cultured cheese and fermented meat products as fermented dry sausage.¹² The simplest and most direct way for consumers to learn about functional foods is through food labeling but the information provided by labeling must be understandable and it must be reliable.¹³ Consumers’ awareness and knowledge about the preventive and curative benefits of these food components is limited.¹⁴

2. MATERIAL AND METHODS

This research has been done in Kosovo, respectively in the municipality of Rahovec and is related to the consumption of functional foods of different ages. The research method is the statistical method based on a survey. During this research, people of different ages were asked if they were consuming functional foods and what products. The number of respondents was 180 with 18-50 years of age. Although everyone consumed at least one type of functional food, they did not have enough knowledge of the term "Functional Food". Less knowledgeable about functional foods had respondents aged 35-50, to which was given an additional explanation about this kind of food, while respondents aged 18-35 had more knowledge about functional foods and as the result of this is more frequent access to the internet of the younger generation and greater interest in healthy eating. The most consumed products as functional foods are fruits, then dairy products, meat products, cereals, beverages and sweets as the least consumed. Since 180 people of different ages have been interviewed, then markets are also explored to see what types of functional foods they contain. After analyzing some of the markets, we have seen that they contain these products as functional foods: lactose free milk, with calcium, with vitamin D, with minerals, with omega 3, kefir yogurt, fermented dry sausage, ginger, broccoli, grapefruit, different types of cereals, sugar-free chocolate, fiber-rich, with antioxidant, with vitamins A, C, E and with protein, antistress water with niacin, pantothenic acid, vitamin B6 and magnesium, different types of red wines as a product rich in anthocyanins etc.

3. RESULTS AND DISCUSSION

Below, by charts, we will show the results obtained from 180 respondents.

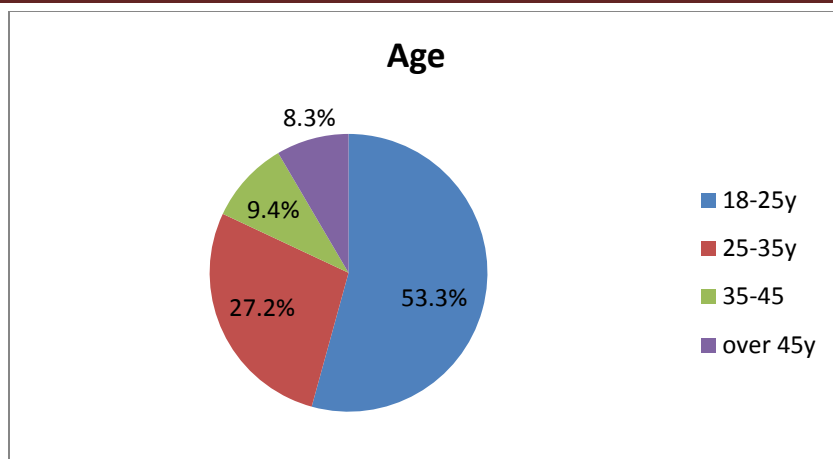


Figure 1. Age percentage of respondents

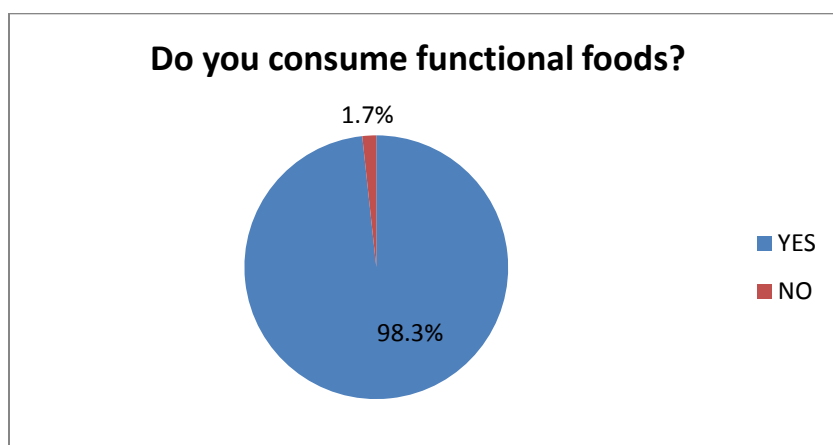


Figure 2. The percentage for consuming functional foods

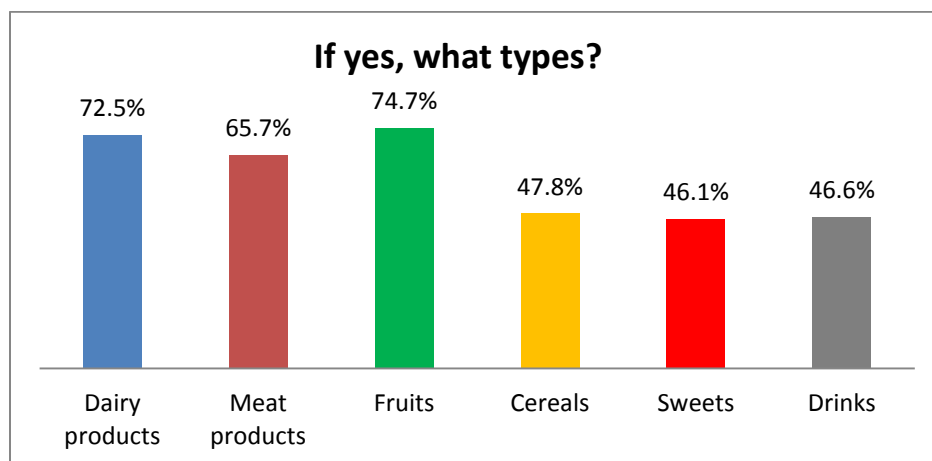


Figure 3. Percentage of functional food products consumed by respondents

To see how different generations understand functional foods and if they consume any product, it was done a survey where 180 people of different ages were responded. The questions that have been asked are: 1. about their age, 2. whether they consume functional foods and 3. if yes, what types. 53.3% of them were 18-25 years old, 27.2% of them were 25-35 years old, 9.4% of them were 35-45 years old and 8.3% of them were over 45 years old. Of 180 respondents, 98.3% responded with YES consuming functional foods while 1.7% responded with NO that did not

consume functional foods. Some of the functional foods consumed by the respondents were: dairy products, meat products, fruits, cereals, chocolates and drinks. 72.5% of them were consuming dairy products, 65.7% consuming meat products, 74.7% consuming fruits, 47.8% consuming cereals, 46.1% consuming chocolates (sweets) and 46.6% consuming beverages. Due to insufficient knowledge, some respondents requested additional information about functional foods before responding. From the results we see that as functional foods, fruits with 74.7% are the most consumed while sweets with 46.1% are less consumed.

4. CONCLUSIONS

At the end of the analysis and survey we found that respondents aged 35 to over 45 did not have enough knowledge about functional foods even though in daily life they used at least one of their own. Knowing that a healthy life and consumption of functional foods is very important, people should be as informed as possible about the importance of these products so, informing the population about functional foods is very important. If a product is considered to be a functional food, its packaging must clearly show the functional ingredient and I think it would be important and easier for the consumer if the markets will have a separate corner of functional foods. The results obtained give us a conclusion that people value more a fruit as a healthy and functional food than chocolate because they get minerals, vitamins and other components from the fruit naturally rather than as in other products that are added components.

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