

HEALTHY EATING HABITS FOR A BETTER LIFE

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Abstract: *The purpose of this study was to analyze the main characteristics of dietary behaviour among young people and their perception of what a healthy diet means. The study is based on an online alimentation questionnaire with 42 questions referring the daily eating habits. The participants (students) that answered and submitted these questionnaires have the age between 18 and 35 years. The results of our study indicate that a high percentage of the participants consider breakfast important and they usually eat cereals and eggs. Based on their answers, a list of the favourite vegetables and fruits was obtained. This study revealed that most people involved have a relatively healthy eating style and a good understanding of the importance of the daily diet and exercises for the state of health.*

Key words: *nutrition, health, breakfast, food.*

1. Introduction

The foods consumption is absolutely essential to maintain the bodies' health and it is known that certain foods may actually provide, beyond nutrition, medical benefits.

As Hippocrates said, "Let your food be your medicine and your medicine be your food", the foods is absolutely essential to maintain the human and animal health. It is also important to underline that some foods are recommended for their role in maintaining health and sometimes are introduced in the food supplements or are recommended by some doctors as part of a special diet. Healthy eating is not only important for the diet, it is also important as a part of the personal well-being. It is important to obtain all the important ingredients, and to limit the consumption of fast food products

The aim of this study was to analyze the perception and the behaviour of some young people about benefits of a healthy diet and to encourage the healthy eating habits for a better life.

2. Material and methods

The study was based on an online alimentation questionnaire designed on Google spreadsheet, a program that allows more than 1 person to work individually from different computers in the same time, to complete or change the text/questionnaire/ charts.

The questionnaires have had 42 questions referring the daily eating habits and the daily program. The participants were invited to complete these questionnaires and to be part of this study: undergraduate students from *Transilvania*

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University of Braşov from different specializations related more or less to the nutrition issues (studying general medicine, nursing, physiotherapy and, students from the Faculty of Food and Tourism) and a group of PR employees.

Each participant answered this online alimentation questionnaire individually (anonymously). The answers to completed questionnaire have been collected using an online database. The ethical issues of data protection for each respondent were respected.

3. Results and discussions

In this study were involved 183 participants. The group included 47 males (26%) and 136 females (74%) (Fig. 1).

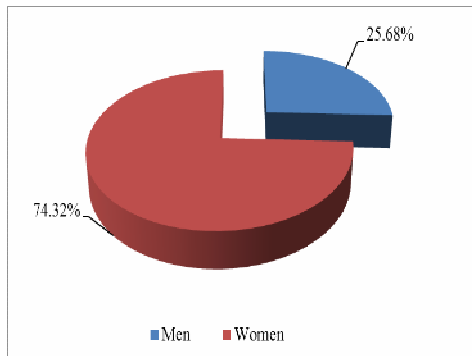


Fig. 1. *Distribution of the participants by gender*

All the participants that submitted this questionnaire had the age between 18 and 35 years. The majority of our participants had the age between 18-24 years (84.70%), and 28 persons (15.30%) have had between 25-35 years.

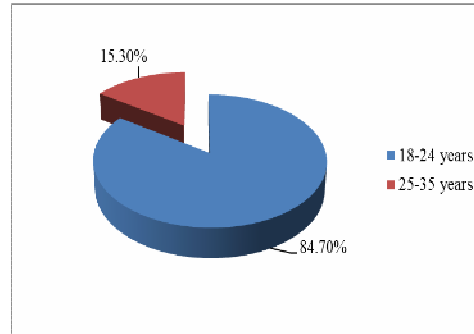


Fig. 2. *Distribution of the participants by age*

Regarding the profession of the participants, 162 (88.52%) were students, and 21 (11.48%) were employees.

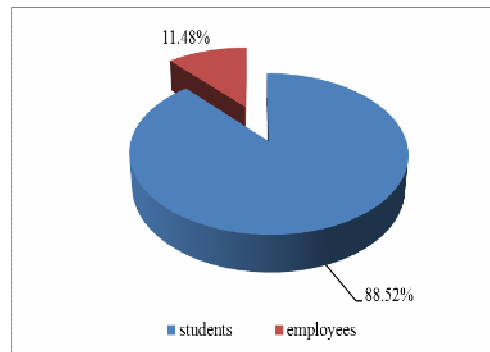


Fig. 3. *The professional status of study participants*

The analysis indicates that 152 (83.06%) persons consider they are healthy, 18 persons (9.84%) have reported different disorders that are not linked to the eating habit, and 13 participants (7.10%) have health problems related to nutrition. We analyzed their data, trying to make a link between their alimentation habits, physical exercises, and possible diseases related to the way of eating.

Vitamins or nutritional supplements help overcome nutritional deficiencies. Since in some cases some nutrients cannot be obtained in proper amounts from a

complete diet for an optimum health, these gaps could be filled by nutritional supplements. A number of 134 persons (73%) from our study considered that they have an equilibrated diet and do not take any food supplements and vitamins, and only 49 persons (27%) considered that it is important to take vitamins or nutritional supplements (Fig. 4).

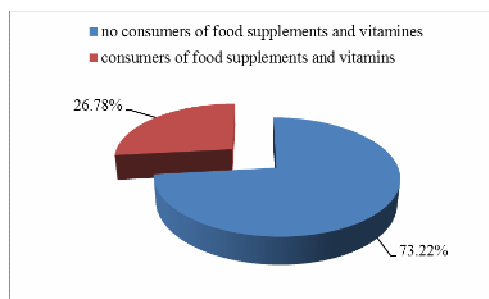


Fig. 4. *Consumption of food supplements and vitamins in the studied group*

Regarding the diet of the participants, 149 persons (81%) do not follow any special diet, 27 persons (15%) are on low-fat diet, and 7 persons (all women) (4%) are vegetarians (Fig. 5). It was observed that only 4.26% from the total men use low fat diet, and the remaining 95.75% use no special diet. Some of the women take care of their diet and 5.15% declared that are vegetarian and 18.38% that are using low fat diet.

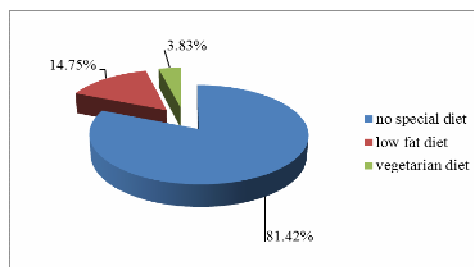


Fig. 5. *Distribution of the number of participants, depending on their diet*

The healthiest type of diet plan is a balanced diet which includes foods from all food groups in the Food Pyramid [13]. According to the food pyramid, all fats and oils should be eaten sparingly. This means the diet should be low in fat, especially saturated fat. No more than about 30% of our calories should be eaten in the form of fat.

The using of medications was investigated, and possible relations with alimentation habits were searched. 159 persons do not take any medication, 18 persons take some treatment for different disorders that are not linked with the eating habits, and 6 persons that are having health problems related to the way of eating are under medical treatment.

Regarding the smoking habits, the majority - 134 persons (73.22%) do not smoke, and only 49 persons (27.78%) are addicted to cigarettes (Fig. 6).

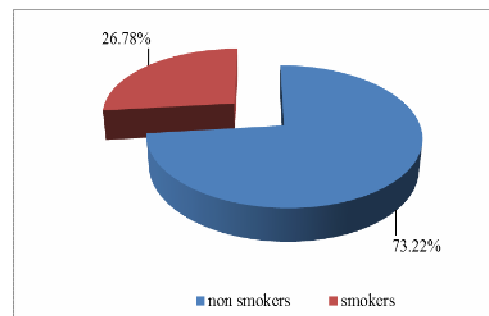


Fig. 6. *Distribution of the smoker/non smoker status of participants in the group of study*

It was observed that 30.88% from the total women from this study are smoking and 14.89% from the total men included in this study.

Considering the negative effects of excessive alcohol consumption on human health, the alcoholic drinking habits were also investigated. 55/183 (30.05%) persons reported drinking alcoholic beverages, and 128 persons (79.95%) affirmed they do not drink any alcohol (Fig. 7).

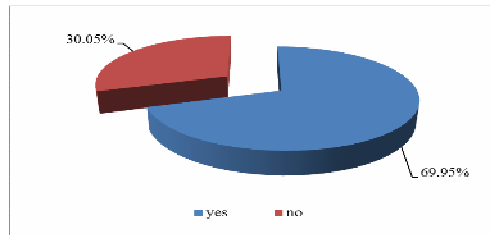


Fig. 7. *Alcoholic drinking habits among study participants*

The gender distribution of alcoholic drinking status is presented in Fig. 8.

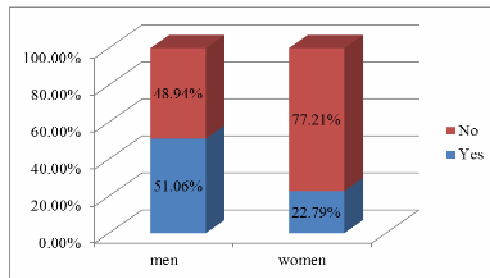


Fig. 8. *Alcoholic drinking habits among study participants, by gender*

Related to the coffee drinking habits, 104 persons (56.83%) declared that they are drinking coffee, and 79 persons (43.17%) that they are not drinking coffee (Fig. 9a. and Fig. 9b.).

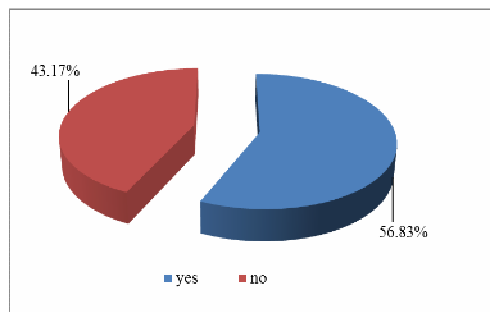


Fig. 9a. *Distribution of the participants regarding the coffee drinking habits*

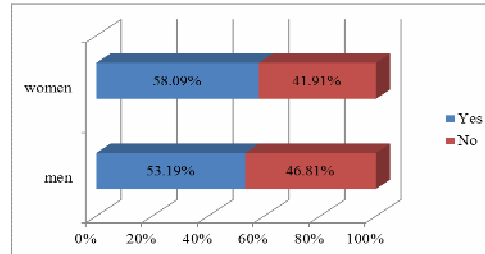


Fig. 9b. *Distribution by gender of coffee drinking habits*

The health effects of caffeine have been extensively studied, and both positive and negative influences on health status have been described. The long term consequences of moderate caffeine consumption might be related to risk reduction in several disorder, including Alzheimer disease [4], type 2 diabetes [9], cardiovascular disease [11], and even for some malignancies [3].

The majority of the participants are doing a significant amount of daily physical activity: 27 persons (14.75%) are making more than 50 min exercises/day, 70 persons (38.25%) are very active, they make 30-50 min daily exercises, 66 persons (36.07%) are making 15-30 min /day, and 20 persons (10.03%) are making less than 15 minutes daily exercises (Fig. 10).

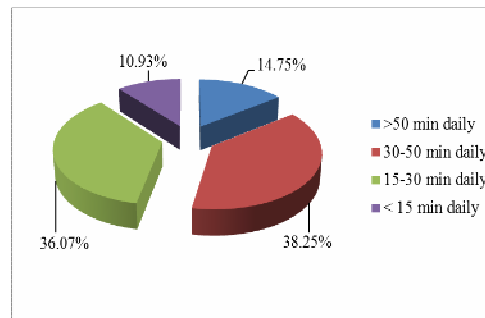


Fig. 10. *Time spent on daily exercises in the studied group*

Daily exercise is an essential component for a good health. The health benefits of regular exercise are numerous. The prevention of potentially serious medical conditions is one of the strongest. The risk of developing coronary artery disease, stroke, and diabetes, certain cancers, arthritis and osteoporosis are greatly diminished in those who exercise. Those who already have health problems can gain tremendous health advantages from safely increasing their level of physical activity [2].

Nutritional experts have referred to breakfast as the most important meal of the day, some studies indicating that people who skip breakfast have a higher risk for various dysfunctions [7].

In the studied group, 180 persons (98.36%) consider that breakfast is important, 2 persons (1.09%) do not think that breakfast is important for the health, and 1 person (0.54%) does not have any opinion regarding the importance of breakfast. However, when participants were asked if they really have this “good behavior”, 139 persons (75.96%) take the breakfast as important meal of the day, and 43 persons (24.04%) do not eat breakfast.

A healthy breakfast should contain some proteins and fibers. Proteins can become from low fat meats, eggs, beans or dairy. Fiber can be found in whole grains, vegetables and fruits.

From the total participants, 74 persons (40.44%) prefer cereals, 45 persons (24.59%) eggs, 24 persons (13.11%) fruits, 24 persons (13.11%) meat, and 16 persons (8.74%) prefer pancakes in the morning for breakfast (Fig. 11).

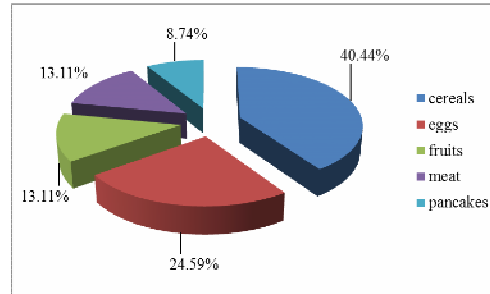


Fig. 11. *Distribution of the favourite food for breakfast*

Asking the participants how many times by day they eat vegetables, the results were: 87 persons (47.54%) eat vegetables once a day, 73 persons (39.89%) twice a day, 17 persons (9%) 3 times/day, 4 persons (2.19%) do not eat vegetables, 1 person (0.55%) 4 times by day and 1 person (0.55%) more than 4 times a day (Fig. 12).

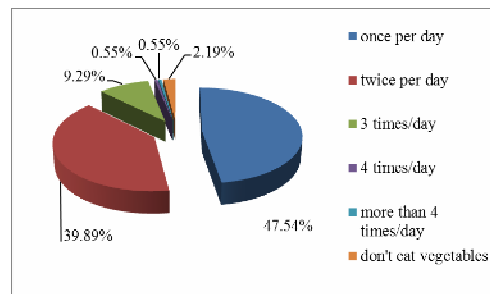


Fig. 12. *Distribution of the daily vegetables consumption frequency*

The nutritional content of vegetables varies significantly, but they generally contain varying proportions of vitamins, provitamins, dietary minerals, fiber and carbohydrates, as well as a variety of other phytochemicals. Some of these substances might be associated with antioxidant, antibacterial, antifungal, antiviral or anticarcinogenic effects.

Lycopene, a carotenoid antioxidant, contained by tomatoes, has been shown to

protect against oxidative damage in many epidemiological and experimental studies. Epidemiological data, in vitro data and results from animal experiments partly showed promising preventive mechanisms of lycopene in what cardio-vascular disease is concerned. There are promising results for antioxidant as well as anti-inflammatory effects of lycopene [1]. The richest source of lycopene in the diet is tomato. A possible protective role of tomato consumption has been suggested in various forms of cancers, particularly in prostate cancer [12]. The carrots provide β -carotene, which is metabolized into vitamin A in humans. Carrots are also rich in dietary fiber, antioxidants, and minerals [6]. From the total participants, 91 persons (49.73%) like tomatoes, followed by other vegetables 36 persons (19.67%), carrots for 34 persons (18.58%), cabbage for 12 persons (6.56%) and beans for 10 persons (5.46%) (Fig. 13). Although eating vegetables is very important, only 76 (42%) of the participants do eat vegetables when they take a snack.

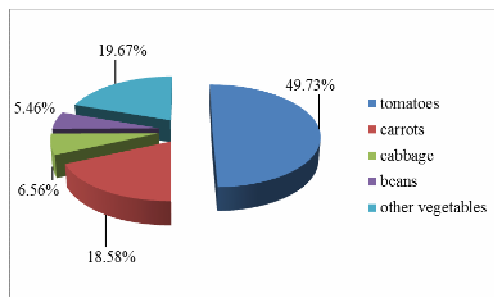


Fig. 13. *Distribution of the favourite vegetables of the participants*

Fruits have generally a high content of fiber, vitamin C and variable content of sugars. Similar to vegetables, fruits contain also various phytochemicals investigated for possible beneficial long-term effects on health and disease prevention. Regular consumption of fruit was associated with

reduced risks of cancer, cardiovascular, Alzheimer disease, cataracts, and other diseases [6]. The participants at the study know the importance of the fruits for the health: 181 persons (98.91%) like fruits, and only 2 persons (1.09%) do not like fruits. Asking the participants about daily frequency of eating fresh fruits, the results were: 67 persons (36.61%) eat twice a day fruits, 64 persons (34.97%) once a day, 26 participants (14.21%) three times a day, 13 persons (7.10%) four times/day, 8 persons (4.37%) do not eat fresh fruits, and 5 persons (2.73%) eat fresh fruits more than 4 times a day (Fig. 14).

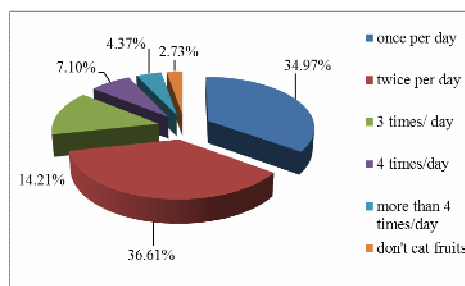


Fig. 14. *Distribution of frequency (times/day) of fresh fruits consumption*

We tried also to point out the preference of the participants regarding the favourite fruits : 47 persons (25.68%) likes bananas, 38 persons (20.77%) prefers apples, 39 persons (21.31%) oranges, other fruits are preferred by 34 persons (18.58%) and pears are preferred by 25 persons (13.66%) (Fig. 15). The proverb "An apple a day keeps the doctor away", addressing the health effects of the fruit, dates from more than hundred years ago. Apples contain relatively low amounts of vitamin C, compared to many other fruits, but are a rich source of other antioxidant compounds. Regularly consumption of apples was associated with decreased risk of many types of cancer, as well as cardiovascular disease, asthma, and diabetes [10].

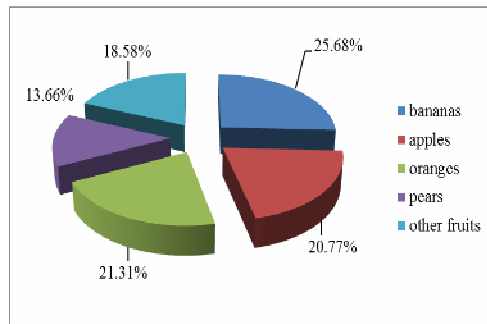


Fig. 15. *Distribution of the favourite fruit*

In what the preference for the type of bread is concerned, 118 persons (64.48%) eat white bread, 38 persons (20.77%) like black bread, 17 (9.28%) prefer Rye bread and 10 persons (5.46%) like other types of bread.

The preferred snacks in the studied group were: for 57 persons (31.15%) fruits, for 55 persons (30.05%) sweets, 34 persons (18.58%) declared they eat cheese for snack, 27 persons (14.75%) pastries, 6 persons (3.28%) vegetables, and 4 persons (2.19%) nuts (Fig. 16).

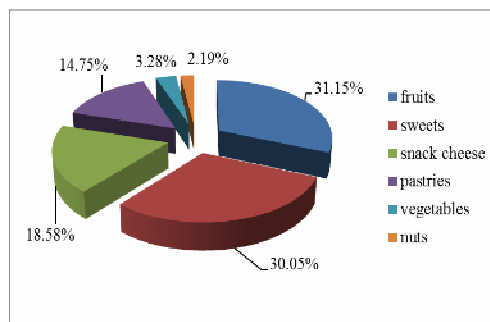


Fig. 16. *Distribution of the preferred snacks in the studied group*

Being asked if they eat sweets, and which are the preferred sweets, the participants responses were: 117 persons (63.93%) eat chocolate, 38 persons (20.77%) like cookies, 15 persons (8.20%) prefer other sweets, 9 persons (4.92%) like

cake, 2 persons (1.09%) prefer candies, and 2 persons (1.09%) like Waffles (Fig. 17).

Excessive consumption of sweets has been associated with increased incidences of type 2 diabetes, obesity, and tooth decay. While sweets consumption is generally associated with potentially negative health effects, various positive effects have been suggested for cocoa and dark chocolate consumption: cardiovascular effects, antioxidant effects, positive effects on mood and cognition. Research to date suggests that ration the benefits of moderate cocoa or dark chocolate consumption likely outweigh the risks [8].

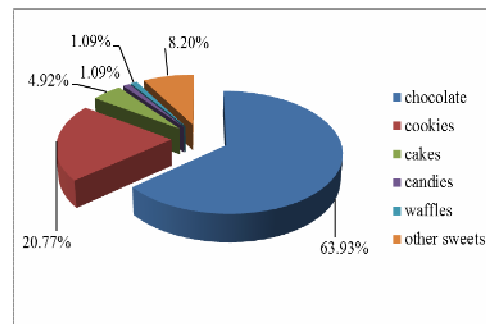


Fig.17. *Distribution of the preferred sweets*

Regarding the liquid products that the participants are consuming, predominantly, the answers were: 112 persons (61.20%) drink water, 25 persons (13.66%) like more the tea, 20 persons (10.93%) prefer soda, 14 persons (7.65%) like fruit juice, 10 persons (5.46%) milk and 2 persons (1.09%) prefer other products (Fig. 18).

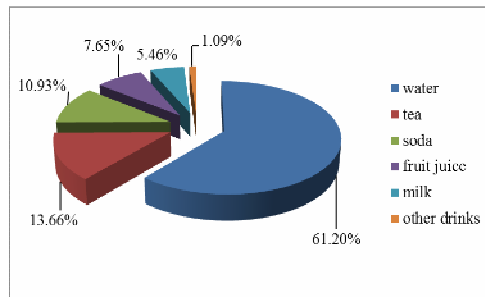


Fig. 18. *Distribution of the preferred drinks*

From the 183 participants, 163 persons (89.07%) like meat, and 20 persons (10.93%) do not like meat. The preferred meat was chicken for 147 persons (80.33%), pork for 18 persons, fish for 14 persons (7.65%) fish and beef for 4 persons (2.19%).

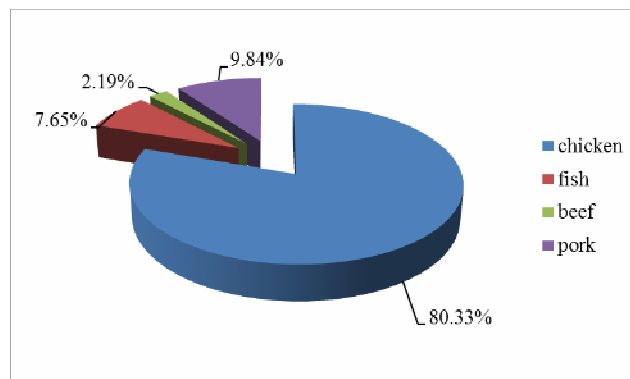


Fig. 19 *Meat preferences in the studied group*

Fish, including other seafood, is a healthful food probably associated with many health benefits: positive effect on cardio-vascular risk, on dyslipidemia, and on some forms of cancer risk, giving the high omega-3 fatty acids content (colorectal, prostate and breast cancers) [5]. In the present study, 150 persons (81.98%) like fish, and 33 persons (18.03%) do not eat fish.

In accordance with our study aim, we tried to reveal the participants' perception on eating habits and their importance for health. 180 persons (98.36%) think that

good eating habits preserve the health, and 3 persons (1.64%) do consider that eating healthy is useful for the organism. In order to design strategies for improving people's alimentary habits, it is important to know what their perception about their own diet is. The participants were asked how healthiest they think they eat. 87 persons (47.54%) know they do not eat healthy, 59 persons (32.24%) consider that their eating habits are good for their health and 37 persons (20.22%) do not have any opinion about their eating habits.

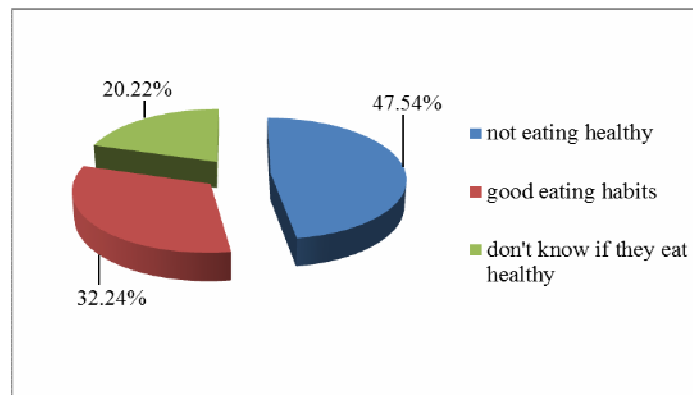


Fig. 20. *The participants perception regarding their own eating habits*

It is important to underline the significant difference between the proportion of participants who understand the importance of food in maintaining health (98%), and the involved, and the relatively low proportion of people considering they have a healthy diet (32%). These results suggested that while the level of knowledge is relatively high, there is space for improvement in what people behaviour is concerned.

4. Conclusions

This study revealed the main features of eating habits in a group of young people. Depicting these characteristics in specific groups is a prerequisite for establishing the most adequate actions for improvement. The study revealed that most of the participants have a relatively healthy eating style and a good understanding of the importance of the daily diet and exercises for the state of health. However, a much lower proportion of the study group do act in accordance with their knowledge in what healthy diet is concerned. Identifying the reasons of these discrepancies might be useful in finding the specific strategies which might induce the change of the alimentary habits, as needed.

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