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# EVALUATION OF TIME GRANTED FOR EXERCISE AND DIETARY HABITS TO A GROUP OF STUDENTS IN IAȘI-PILOT STUDY

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Sport performance requires in addition to specialized training sessions to ensure adequate nutrition. Material and methods: the study was conducted on a sample of 54 students, from these 25 from 25 Sports high school. These students have been questioned in connection with time and physical activity with their eating habits. Search results: time to get physical activity in students from Sports High School to over 60 minutes, the differences calculated statistically significant mass caterers being a p < 0.001 (f = 2,  $\chi^2 = 27.94$ ). Weekly consumption of milk, eggs, chicken meat, derived from cereals and sugary foods is similar in the students in the two types of studied communities. Conclusions: the modification does not appear at the students from Sport High School depending on what exercise submitted represents a risk factor for maintaining the health of these students.

Keywords: nutrition, exercise.

Nutrition is an external factor contributing to ensuring growth and normal development of children and youth. Balanced diet involves ensuring adequate intake of animal protein and vegetable, animal and vegetable fat, carbohydrate, mineral elements and vitamins [6]. Overall it is important to ensure a proper caloric intake and activity group. Poor caloric intake is associated with risk of undernutrition and the excessively with the occurrence of obesity [4].

Nutritional balance is even more important to students who practice sport. The high number of hours of daily training is associated with increased calorie requirements. Also the type of sports activity done daily influence the balance between protein, lipids and carbohydrates [12, 14]. In this context it is very important to the daily expenses imposed by the appreciation of the special scheme of the child athlete. It is necessary to support the families and ensuring nutritional support specialist [13]. Often the family does not have the necessary financial possibilities and no specialized information that allow maintaining the health of the student athlete performance and nutritional support [11].

Another important aspect is the one related to body image. Currently the ideal of beauty is 90-60-90 which requires frequent realization of slimming cures. Healthy adolescents cannot compare with this ideal so that identification with the model is associated with the need to reduce body weight. Such a reduction is not beneficial for a student from a school and becomes problematic for one practising intensive sport.

Getting sports performance is only possible under conditions of balanced life where nutrition is well evaluated [10].

## Objectives of the study:

- knowledge of the time granted by the students exercise; obviously this time is much higher in students from the High School Sports Program;
- assessment of the dietary habits of students of the study;
- assessment of the extent to which these dietary habits are adapted to the specific activity of young people.

Material and method. The study was conducted on a sample of 54 students from 7th grade to High School Sports Program (youth) and the music (29 students) from the city of Iasi. These young people have completed a questionnaire that includes questions about their daily exercise time and eating habits. The question regarding the time to physical activities daily response options are: under 45 minutes, 45-60 minutes and 60 minutes.

Eating habits have been appreciated with the help of a questionnaire of weekly food consumption. In this study we will insist on the weekly supply milk, eggs, chicken, sugar and cereal products. Response options are: zero, 1-3 times and 4-7 times per week [10]. Processing of the results will be compared using the Pearson Test.

**Results.** The study is oriented on two main directions of exercise daily time and the nutrition needed to cover the expenses of the body's energy.

Daily physical activity is essential for maintaining the health of children and young people. This task must be carefully monitored if pupils engaged in the sport. Attention is even greater during periods of intense growth of the kind from the prepubertal period. The students polled are in 7th grade and have ages between 12 and 14 years, age with growth stage so intense.

In most cases (53.7%) taking the time to exercise is over 60 minutes. The students of The High School Sports Program with this response occurs in 92.00% of the situations when at the Music High School only 20.68%. The differences are statistically calculated at a p < 0.001 (f = 2,  $\chi^2 = 27.94$ ) (Fig. 1).

The second aspect to be pursued is the one related to the weekly intake of food. We study only the consumption of milk, eggs, poultry, cereal products and confectionery. The results will be presented in comparison to being able to appreciate the extent to which nutrition is adapted to needs, essential for students of the High School Sports Program.

Milk is rich in animal protein and lipid as in mineral elements. The students answered he is present in the menus, especially 1-3 times per week, calcu-

lated on the differences being statistically insignificant between the 2 high schools (p > 0.05. f = 2,  $\chi^2 = 2.28$ ). Drag atention 5.55% negative responses (no consumption) which is a problem with the intake of calcium and magnesium, essential elements for maintaining bone structure (table 1).

■ High School Sports Program ■ Music High School

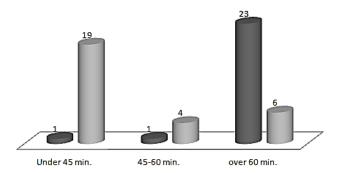


Fig. 1. Time allowed daily by the students for sports

Table 1
The frequency with which it milk occurs
in the menus

High School	Weekly intake		
	zero	1-3 times	4-7 times
Music	2	15	12
Sports Program	1	18	6
Total	3	33	18
%	5.55	61.11	33.33

Balanced consumption of milk appears only in 33.33% which is a problematic situation. Chicken is becoming more and more present in the menus of families. It is an easily digestible meat that provides a modest caloric intake, it is especially rich in animal protein (about 21 g%).

The batch of the dominant consumption study is 1-3 times per week (61.11%). Adequate consumption of chicken meat is alleged of 40.74% young people. Statistical differences calculated are not significant (p > 0.05. f = 2,  $\chi^2 = 1.09$ ) and orient to the existence of similar eating habits in the families of the students' questioned. The situation is difficult to students from the High School Sports Program where you don't see a change in nutrition according to physical effort filed (fig. 2).

■ High School Sports Program ■ Music High Schoo

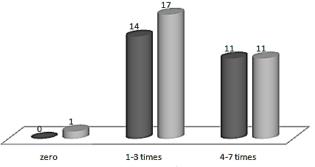


Fig. 2. Consumption of chicken meat

The eggs have a modest caloric value, but one particular nutritional [7]. Their presence in the

menus is essential to maintaining normal growth of the students. The dominant contribution of the egg is 1-3 times (72.22%) what is totally insufficient. Balanced consumption occurs only in situations 25.92% and drag attention 1.85% of negative responses. The differences are statistically insignificant (p > 0.05. f = 2,  $\chi^2 = 1.75$ ), which represents a wake-up call for the health of the students from the High School Sports Program (table 2).

 $\begin{tabular}{ll} Table 2\\ The presence of eggs in the students menus \end{tabular}$ 

High School	Weekly intake		
	zero	1-3 times	4-7 times
Music	0	20	9
Sports Program	1	19	5
Total	1	39	14
%	1.85	72.22	25.92

Pasta/rice have a high calorific value (over 250 kcal/100 g of product) are needed especially to young people who submit a sustained physical effort. High caloric intake is provided especially for carbohydrates that are considered labor fuel. [16] Students from the study affirms the intake of pasta especially 1-3 times per week (75.92%), low intake due to the fact that they «gain weight». The differences are not significant statistically calculated (p > 0.05. f = 2,  $\chi^2 = 0.40$ ) and must face a special situation of pupils of the High School Sports Program, does not appear on the actual food needs of adaptation of the organism (Fig. 3).

■ High School Sports Program ■ Music High School

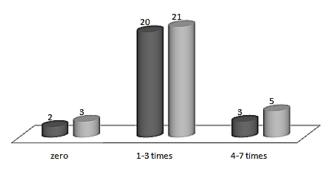


Fig. 3. Intake of pasta/rice at group study

Table 3 Weekly consumption of sugary foods and sugar

High School	Weekly intake		
	zero	1-3 times	4-7 times
Music	1	9	19
Sports Program	1	14	10
Total	2	23	29
%	3.70	42.59	53.70

Sugar and sugar products are considered foods preferred by children thanks to their sweet taste. The teenage body and appearance concern especially for keeping the silhouette is associated often with reduced consumption of these products. The students questioned the dominant contribution is 4-7 times (53.70%) which is a positive element, statistical differences calculated is not significant

(p > 0.05. f = 2,  $\chi^2 = 3.64$ ) and orient to the existence of similar eating habits (table 3).

**Discussions.** The High School Sports Program with time to exercise exceeds 60 minutes daily. At The Music High School physical activity in most cases only get up to 45 minutes (65.55%).

In a study conducted at a General Education High School outcomes are different, with 56.40% young that practice sport, less than 30 minutes, 27.80% students practice over 30 minutes and 15.80 only students that make physical activity more than 60 minutes [2]. Different results obtained in the various studies carried out in the area of Moldova, allow highlighting the lack of concern of teachers and parents for the movement.

Sport is constantly present in the life of young people from France, 39.9% young people admit to practicing physical exercises for the purpose of maintaining health status [8, 9].

In a study conducted in the Republic of Moldova is observed the existence of 19.3% students from rural areas who are not interested in practicing physical exercises and 20.3% only students who practice daily even 20 minutes of sports [15].

In the conditions of practicing physical activity oriented towards obtaining performance is necessary to support a nutrition specialist [3, 5]. The results obtained in this study are worrisome because it reveals a strong anchor in the tradition of families from the study. Insignificant differences indicate a diet similar to pupils in the two types of high schools surveyed.

It's a result obtained and in another survey conducted on students from the High School Sports Program and where there appears a tendency of change of food depending on the perception of one's own body weight [1].

Milk has a low calorific value (50 kcal/100 g product) but is rich in protein, lipids and especial-

ly in mineral elements (especially calcium). It can be consumed on a daily basis and this situation is not present in most cases. Chicken meat is a good source of quality protein but low calorie intake provides (around 140 kcal/100 g of product) which appears in case of intake of eggs. In the absence of quality protein, food will be associated with the reduction of the muscular masses or with insufficient development [7].

It requires knowledge of protein metabolism during physical exertion. In brief effort (2 h)-to-tal increase at the end of half an hour (around +10%), decrease the minute between 60 and 90 (-10% to-15%) and then return to normal values. In the long effort-there is a progressive increase in the level of blood proteins and a considerable increase in urea sometimes and uric acid; return to normal values only occurs after the second rest day. Basically during prolonged effort there is a protein, and the balance sheet which is initially negative nitrate reverts to positive just after resting [12].

Sugary and cereal products will provide increased carbohydrate intake necessary for sustaining muscle contraction. Muscle contraction calls captured in a power short. This energy is provided by binding (ATP) according to the following reaction ATP-ADP (adenozindifosfat) phosphoric acid [11].

Conclusions. The students of the High School Sports Program there is a tendency to adapt the food needs of the organism. In this context sports performance becomes an illusion from increasingly distant and there is a danger of serious disturbance to health status.

It requires the existence of a close collaboration between family, coaches and specialists in food to ensure that they are maintaining and even increasing your child's motor potential.

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