

GUIDELINES FOR FORMING HEALTHY HABITS IN FEMALE STUDENTS IN AEROBICS CLASSES

(Preliminary communication)

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Abstract

The healthy lifestyle is a system of vital activities, aiming at the preservation and improvement of the health of the individual and the society. This is achieved through one's personal health culture, value orientation and motivation. The goal of the present study is to analyse the results of the work with the students in the aerobics classes and to summarise guidelines for forming healthy habits. A study was conducted in the 2012/2013 academic year, aiming to establish the results of the joint work with the students with regard to the healthy habits and physical activity of the students at the Angel Kanchev University of Ruse. A total of 76 female students were surveyed. Their average age was 21 years. To determine the normal values and levels of overweight, the Body Mass Index (BMI) was used. The result obtained at the beginning of the year was 24.06, and at the end – 21.64. Taking into account the classification of the normal values for women, the result at the beginning was borderline between normal and overweight, whereas at the end it was within normal values.

Keywords: *physical activity, aerobic training, healthy habits, physical shape, female students, healthy and balanced diet, Questionnaire, Body Mass Index*

INTRODUCTION

Every type of physical activity, when reasonably dosed, improves the vital activity of all organs and systems, increases the mental and physical capacity, reduces stress, occupies the leisure time and introduces a positive mood. Gym workout is a favourite among the varieties of types of physical activities.

With the age advancement – with the maturity of the individual, human desires, needs and goals change. The organised fitness activities, according to the practitioner's preferences and abilities, create conditions for personal comfort – both mental and physical.

The achievement and keeping of good fitness requires the setting of goals – reducing the body fat; increasing the muscle mass; losing weight; toning up; increasing the muscle endurance; relaxation and flexibility; improving the coordination skills, etc. Setting goals is connected with motivation, which is the drive for each activity. The successful achievement of a positive result leads to increasing the ambition and a lasting desire for fitness activities (Dyakova & Popova) (Дякова & Попова), 2011; Dyakova, Sinilkova, & Bozhkova) (Дякова, Синилкова, & Божкова), 2012); Dyakova (Дякова), 2009; (Zhelyazkov & Dasheva) (Желязков, Карабиберов, & Дашева), 2002); Ivanova (Иванова), 2007); Karabiberov (Карабиберов), 1995).

In aerobic training, the rhythmic contraction and expansion of the muscles improves blood circulation. This eases the work of the heart and has a favourable effect on the vascular tone, and also normalises the blood pressure.

The correct performance of the aerobic exercises

helps the following: the harmonious development of the body muscles; the improvement of the aerobic abilities of the organism and the development of physical qualities. It enriches motor movements, forms a correct bearing and coordinated movements, improves motor spatial orientation, removes the stiffness and clumsiness of the practitioner's movements.

Sport aerobics or aerobic gymnastics includes exercises from gymnastics and rhythmic gymnastics, jazz dance, modern dances, elements from the folklore, hops and jumps, and special exercises for the different body parts combined with pleasant music.

The positive setting of the emotional background of the practices attracts students. In addition to improving the fitness and the healthy impact of the exercises, the classes also achieve physical and mental relaxation (Mineva (Минева), 2005, 2010).

The well-selected music, in compliance with the structure of the aerobic practice, has an impact on the improvement of the mood and the positive emotions in the class as well. This helps the implementation of some functions of the pedagogical communication, namely **emotional, communicative, and stimulating function.** (Mileva Милева), 2010). They are connected with the satisfaction of the needs for physical relaxation and positive mood in aerobics classes.

To have a good state of health, physical activity alone is not sufficient. A balanced diet is also important.

Its essence comprises an intake of the three types of nutrients (proteins, carbohydrates and fats) in certain quantities. They introduce energy to the body in a certain proportion. Normally, *proteins* provide approxi-

mately 12% of the energy of the food, *fats* - 30%, and *carbohydrates* - 58%.

The basic nutrients have certain weight ratios. Normally, the quantitative ratios between *proteins*, *fats* and *carbohydrates* are about 1:1:5.

A favourable balance among the amino acids is achieved when 50% of *proteins* are of *animal-based* and 50% are of *plant-based* origin.

To ensure a favourable ratio among *fatty acids*, about 28% of the *fats* need to be plant-based, and 72% - animal-based.

In order to avoid the negative effects of carbohydrates, it is recommended that the sugar *added* to the food do not exceed 10 E% of the total energy intake.

According to scientists from Harvard, who published the latest recommendations for a balanced diet in 2008, the foundation on which it needs to be built in order to expect a positive result is regular physical activity and constant weight control. The body weight is the most general reflection of the diet. If the weight is normal, this means that there is a balance between the food quantity intake and the burnt calories it delivered to the organism. The possibility for an individual to gain unnecessary weight is insignificant if this balance is maintained daily. If, however, even 100 more calories than the burnt ones are taken in a day, one risks to increase their weight by almost six kilograms in one year, and the tendency towards gaining weight increases and often goes beyond control. The physical activity and the normal weight are directly influenced by what one eats and how food affects them (Stefanov (Стефанов), 2007).

The goal of the present study is to analyse the results of the work with the students in the aerobics classes and to summarise guidelines for forming healthy habits. It is important that their participation should not be compulsory, but that it should bring pleasure, satisfaction from the achieved results and positive emotions.

The approaches and methods are aimed at making the practices stimulate towards activity and achieving personal comfort – both mental and physical. Thus, students' motor and health culture will be enriched through physical education. It is important that they continue their physical activity after finishing their university studies in the form of individual or group practices.

METHODS

A study was conducted in the 2012/2013 academic year, aiming to establish the results of the joint work with the students with regard to the healthy habits and physical activity of the students at Angel Kanchev University of Ruse. A total of 76 female students were surveyed. Their average age was 21 years.

Survey

1. What type of trainings do you prefer /underline/: power, aerobic, stretching?
2. How many times a week do you practice sport and are physically active?
3. Is your dietary regimen aimed at a balanced and

healthy diet?

Yes / No / Sometimes

4. Which foods do you mainly include in your daily menu? /more than 1 answer is possible./

- 4.1 Fruit and fruit juices;
- 4.2. Bread, cereals and potatoes;
- 4.3. Meat, fish, eggs;
- 4.4. Milk and dairy products;
- 4.5. Fatty foods.
- 4.6. Pulses and nuts.
- 4.7. Vegetables

5. Do you smoke?

No

Yes

6. Do you drink alcohol?

Never

Sometimes

Often

RESULTS AND DISCUSSION

The majority of female students prefer aerobic trainings – 65.78%. The dynamics and the varied movements in these practices attract women at a younger age. The achieved results and the good mood generated by the well-selected music create conditions for achieving the main goal for each female student – firm muscles, maintaining normal body weight, and relaxation.

Power trainings are preferred by 21.05%. These trainings are mostly characterised by power exercising of the different muscle groups and to a lesser extent by aerobic movements.

Stretching trainings were preferred by 13.17%. The female students are familiar with the importance of stretching to the human body. Stretching is present in every type of training, but to a lesser extent, especially at the end of the practice. In view of the young age of the practitioners and their vigour, it is only logical that a smaller percentage prefer this type of training.

To the second question, "How many times a week do you practice sport and are physically active?", 46.05% answered "Once". The other 53.95% practice a sport more than once, namely: twice – 27.64%; three times – 17.10%; more than three times – 9.21 %. This is a good tendency, but the striving is that the better part of the students should build habits to practice a sport more than once a week. One of the opportunities is to do that at home with the exercises they have learned in the aerobics classes.

The answers to the third question are connected with the students' dietary regimen. Of them, 40.78% answered they have a healthy diet, 46.05 % sometimes switch to a healthy and balanced dietary regimen, and the other 13.17% gave a negative answer.

As for the products included in the daily menu, the students provided the following answers:

- Fruit and fruit juices – answered by 82% of the students;
- Bread, pastry and sugar – 92 %;
- Meat, fish, eggs – 72 %;

- Milk and dairy products – 35 %;
- Fatty foods – 57 %;
- Pulses and nuts – 26 %;
- Vegetables – 77 %

The total percentage is more than 100, as more than one answer is possible. The most preferred foods in the students' menu are: bread, pastry and sugary foods; fruit and fruit juices; vegetables and meat, fish, and eggs. The milk and dairy products, the pulses and the nuts account for the smallest percentage.

The fifth question is connected with smoking. Of all the surveyed students, 64% gave a negative answer, and the other 46% - a positive one. As for the use of alcohol, "sometimes" is given by 73 %; "never" – 27%, and "often" – 0%.

To determine the normal values and levels of overweight, the Body Mass Index (BMI) was used. The formula $BMI = \text{weight}/\text{height}^2$ was used. The result obtained at the beginning of the year was 24.06, and at the end – 21.64. Taking into account the classification of the normal values (table 1) for women, the result at the beginning was borderline between normal and overweight, whereas at the end it was within normal values.

Table 1. BMI classification for men and women

Classification	Men	Women
Underweight	<20	<19
Normal weight	20-25	19-24
Overweight	25-30	24-30
Obese	30-40	30-40
Severely obese	>40	>40

In conclusion, the following guidelines for forming healthy habits in students can be summarised:

1. Keeping a good physical shape;
2. Update of the goals in accordance with the achieved results;
3. Knowledge of the importance of physical activity to health and self-confidence;
4. Knowledge of the healthy and balanced diet;

5. Overcoming harmful habits;
6. Hygiene and safety;
7. Suitable outfit;
8. Personal motivation

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