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## Special Features of Using Physical Exercises in Preparing Individual Programs

**Abstract.** In this article the authors formed the main objectives and principles of individual programs for physical training classes. The role and place of the individual programs as a means of physical training in the system of physical culture are defined.

**Keywords:** physical training, exercise, individual programs.

**Problem.** Traditional physical training programs focused on middle-norms and include neither individual nor typological variability and dynamics of psychological, physiological, somatic indices, making them insufficiently objective. Modern programs in physical training declare individual approach taking into account, in particular, the level of physical fitness. However, despite the practical importance, science-based procedures for individual-typological approach has not worked yet. Therefore, the current method of differential physical training is largely empirical. Hereby, physical training is an important part of the educational program of students, whose mission is to optimize learning for all students, without separating them into "capable" and "incapable" of various physical skills, develop students' motor skills, promote social and emotional development, and cognitive component in the study of human movement.

**Methods:** Analysis and synthesis of scientific and technical literature and empirical data, teacher observation and survey by questionnaire

**Results and discussion:** When building individual training programs muscle and energy component should be taken into account. Muscular component - the key to success in many sports: football players need strength and power, cyclists – endurance, sprinters - speed, most athletes - flexibility, balance and agility.

Another important factor to achieve athletic performance is the ability to correctly produce and consume energy in motion. Special exercises improve the

muscle's ability to use this energy, improve heart function, improve the circulatory system, increase respiratory efficiency and makes the bones, ligaments and tendons stronger. Thus, the proper organization of the learning process leads to a significant improvement in the body that are associated with high sports results. According to the anatomy, the human body consists of 639 skeletal muscles. Theoretically, then the number of exercise is equal to  $639^2 - 1$ . This number is calculated from the condition that each muscle can be either busy or relaxed. The total number of different combinations of some muscle tension and relaxation other is 2 to the power equal to the total number of muscles. The only case that should be excluded from this fantastic numbers, and is a situation where all the muscles are relaxed, and, do not perform the exercises. This is purely theoretical information, which gives us an idea of the enormous opportunities in the selection of physical exercises.

In practice, for the purpose of recreational exercise rather focus on the musculoskeletal system of man, his cardiovascular and respiratory systems. When choosing exercises for making individual program, firstly it should be guided not fashionable at the moment exercises, but their effectiveness in strengthening their health, and primarily focus on the functional "weak" level of the organism. It should be noted that the exercise should not only be effective but also bring you joy in the performance.

An important condition which should be used at the beginning of training, is the variety of the means. For qualitative diversity of exercises from 7 to 12 exercises will be enough which differ significantly from each other. This will train the different parts of the body. As an example, one of the options for constructing classes in groups of general physical preparation: 20 min. - gymnastic exercises to warming up, 20 minutes. - the game of volleyball and 20 min. - swimming. If you use one or two exercises, and if they involve small muscle groups in the activities, there is a highly specialized training effect. This technique is widely used in medical physical culture when they want to restore the lost function of any organ quickly. But the race, which includes a large number of muscles work, serves as an

excellent means of comprehensive training. Skiing, swimming, boating, rhythmic gymnastics have the same effects.

Another important point in the exercise selection is their health safety. It is determined by the training equability, the possibility of precise dosing and lack of excessive emotion, and opportunity at any time to stop the exercise, stop and even sit down. From this perspective, the ideal exercises are walking and jogging. Games in this case will be in last place.

The effectiveness can be measured by the time spent for their execution. Basic time - duration of the exercises, taken on average. Walking, of course, requires a major investment of time and running - the smallest. The greatest training effect for the heart and lungs is achieved in running, and the greatest effect on the development of joints and muscles give gymnastics and sports games. Games, in addition, improve nerve mechanisms of traffic management – coordination and reaction, which is important for many professions. The smallest result is in walking.

Defining your motor diet you should take care of endurance loads (running first in slow motion, then on average, but not fast), power load for large muscle groups (squats, lifting legs on the crossbar or the transition from the supine to the sitting position by reducing abdominal muscles), as well as exercises for the joints of the spine, hands and feet. Required exercises in changing body position, as well as in the improvement of physical fitness is a speed run (without the desire to beat your record), flexion and extension arms in emphasis lying are not to be performed beyond their capabilities.

Compiled an individual complex can be done alone in the hall, stadium, home, replacing race with promotion - running in place. But before you begin to perform complex you should familiarize yourself with the basic rules of recreational exercises. Exercises - "double-pointed weapon." They provide the positive effects on the body only when performed on the state of your health, physical fitness, sex, age, nature of work and other factors. Exercises are very diverse, so they are usually classified according to the principles of the order, namely, depending on

the nature of the regime of muscle structural features, power and duration of exercises and motor skills. Knowledge of exercise classification has theoretical and practical importance. Exercises, which differ from one another by their structure, affect the human body differently. According to the nature of the muscle regime the work can be divided into dynamic and static. Static work is characterized by the fact that the muscles contract without subsequent relaxation.

During this work (or rather in this effort) there is no body movement or its parts in space, no external work muscles. However, despite this, its maintenance consumes a very large amount of energy. This is primarily for those muscles that are long tonic contraction, for example, while keeping the burden on the outstretched hand. Static work can be carried out during tonic muscle tension (sitting, standing, etc.). Example of static muscle function are: lying (swimming, shooting), seat (a horse, bicycle, a boat, etc.), standing "legs apart" (shooting, fencing), standing "feet together" ("attention"), standing "feet on the same line" (on deck), standing on one leg on myltsyah (gymnastics), the sliding (figure skating) pendent and stops (gymnastics). All these types of static work provide a particular posture of the body, which is exercise.

Dynamic work is accompanied by alternating contractions and "relaxation" muscles, resulting in movement of individual body parts or the whole body in space. This work is in isotonic or auksotonic process. The vast amount of human movement performed in auksotonic process.

Depending on the nature of the response to external conditions dynamic physical exercises can be divided into two major groups: the stereotypical (standard) and situational (non-standard). Stereotypical exercises performed mostly formulaic, in constant conditions, they are formed according to the principle of dynamic patterns. An example of the standard exercise can be walking, jogging, swimming, throwing, jumping, lifting barbells, gymnastics and others. These exercises consist of items that are always done in the same sequence and with equal intervals between them. As a rule, these exercises are brought to automaticity.

Standardization is not inherent for the situational exercises. They are performed without a specific sequence elements in changeable conditions without stereotyped movements.

Examples of the situational exercises can be single combat (wrestling, boxing, fencing) and sports games (basketball, football, volleyball, handball, hockey, etc.).

Muscle force can be overcome or translational. The first is related to overcoming gravity (lifting the burden), the second - with revenue gravity (lowering the burden). Under overcoming muscle - the positive work is done, while incoming - negative. With moderate energy consumption for negative work is about 2 times smaller than the positive. An example of positive work can be a person walking up stairs, while lowering them characterizes negative work.

Stereotypical exercise depending on their structural features are divided into cyclic and acyclic. Cyclic exercises consist of identical structure movements, whereas acyclic include not like each other motor elements which are not similar. Cyclic exercises can be performed with maximum, submaximal, moderate and large capacity.

Depending on the motor activity the cyclic exercises are divided into natural locomotion (walking, running) with sliding locomotion (walking on skis) locomotion using vashelnyh gear (cycling) and locomotion in water (swimming). Acyclic exercises depending on the ratio between the intensity and muscle tension can be divided on speed-strength (jumping, throwing), the actual power (lifting barbells) and sights (shooting, filing and penalty throws the ball) exercises.

The nature of the work is divided into three groups: power operation (lifting weights) speed work (sprint race), and work on endurance (marathon). In this regard we can define four basic movement qualities: strength, speed, stamina, agility. Sometimes flexibility is also referred to motor characteristics.

### **What type of exercise to choose?**

To develop endurance is better than speed raise money or build muscle mass. When choosing the best exercise to look at them in terms of long-term benefit.

Stayer will enjoy his favourite sport to old age. Long run sprinter won't run 100 meter for pleasure for a long time.

The best kind of exercise, the benefits of which you can use even in old age, without causing any harm to joints - is walking. Among other sports that increase endurance are: swimming, golf, skiing, skating, hiking, tennis, squash, cycling, yoga, aerobics and dancing. When choosing exercises pay special attention to their ability to maintain long activity of enzymes that burn fat. Outdoor physical exercises are more useful than indoors, because in the first case you are restoring natural body connection with nature.

Thus, the four most important steps to better health:

- the balance of water and salts in the body;
- exercise to strengthen muscles - the best in the fresh air and sunlight;
- diet is based on balanced intake of protein and vegetables;
- rejection of drinks dehydrate the body.

These simple rules can prevent a disease or be the basis of any treatment that will require your body.

**Conclusions.** The data of our researchers confirm that individual programs are an integral part of physical education students, the development of which involves the knowledge, skills and abilities. And physical training classes should be self motivated desire and individualized (preferably daily).

In constructing physical education classes principles of individual motor programs should be considered. Exercises should be chosen to help maintain the health of students, and the emphasis should be on individual recommendations and the control for the tendency of individual development. The key components in the development of science-based programs is psychological, energetic and muscular component exercises in qualitative and quantitative application to a particular type of physical activity.

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