Fitness technologies and their influence on the state of health of young people

Nowadays the active lifestyle combining a certain philosophy, outlook and the experience of physical activities is gaining popularity in Russia, especially among young people. This lifestyle called “fitness” is focused on the development of all systems of a human body.

If we trace the dynamics of popularity of fitness in Russia we may notice the smooth and steady growth of this type of physical activity and the industry in general. Since 2005, fitness has involved thousands of people in the healthy ranks. Fitness in translation from English literally means "compliance". That is, how capable our body is to meet the...
expectations we set upon it. Fitness is not just sport and physical exercises. It is not only beautiful muscles, or small amount of subcutaneous fat. And even not so much physical force or endurance, flexibility or coordination, it is the ability of these qualities to serve us in the situations when it is really necessary [3].

The philosophy of fitness teaches us to lead a full-fledged life, to enjoy ourselves and the world around, to go purposefully towards an effective objective. The balanced harmony of the inner world with the outside world is on the first place, it is a paramount task in which fitness allows to realize the uniqueness, identity, to develop the best qualities, both physical and spiritual [1].

Fitness as a Wellness technique allows us to achieve the desired result using force aerobic exercises in combination with individually tailored diet, depending on age and health status.

Physical fitness as it is treated in fitness technologies includes the development of the following abilities of a human body:
• flexibility;
• strength;
• speed;
• coordination;
• reaction;
• muscular endurance;
• readiness of cardiovascular system;
• ratio of muscular and fatty fabrics [1].

Today there is a wide choice of the types of fitness: aerobics; step aerobics; water aerobics; fitness yoga; shaping; wellness; bodyflex; workout; kallanetika; crossfit; Pilates; stretching; bodybuilding; powerlifting.

Sports activities, generally, and fitness, in particular, promote the production of protein of BDNF and endorphins that is the reason of our perfect health. When the person begins to train, the brain perceives it as a stress. As pressure from loadings increases, the brain thinks that the body struggles with the enemy. To protect itself and the brain from stress, the body begins to produce protein of BDNF (a neurotrophic factor of a brain). This protein possesses protective activity and also stimulates the development of neurons and works as a reset button. That is why, after training we experience greater clarity of thoughts, and, finally, feel happy. At the same time, endorphins also participate in the fight against stress. Their main objective is to minimize discomfort from exercises, to block
the feeling of pain and even to wake up the sense of euphoria. Regular fitness training not only increases life expectancy, but also helps to feel younger [1].

Fitness helps to avoid destructive influence of many diseases connected with age. Many of the problems arising with age are not connected with diseases, but with being out of shape. The study of 10,224 men and 3,120 women conducted at Research Institute of Aerobics in Dallas within 8 years has shown that death rate was the highest in the group of the least trained people and low in the group of the most trained people [1].

Sedentary lifestyle negatively affects the physical condition of the people. The indicator of the effective volume of the lungs decreases by 1% per year after the age of 25.

The trained heart needs to make fewer beats per minute to accomplish the same task. Programs for health improvement including various fitness technologies can reduce heart rate resistance by approximately 5-15 beats per minute, and this factor makes you healthier. The human body undergoes the process of recovery quicker, the heart rate and breath will return to normal values quicker, therefore, the energy amount will increase. When the human body is completely healthy, the body cells use oxygen more effectively, it means that the person possesses a large amount of energy and recovers quicker after a physical activity [2].

Different Fitness Programs help prevent arthritis, the loss of flexibility due to the lack of use of the connective tissue – everybody knows that because of sedentary way of life, the ligaments, joint bags, and tendons lose their elasticity.

Excess weight in modern society remains the main reason for people to attend fitness programs more often. If people are overweight and are not engaged in physical activities, their metabolism is slowed down. The basic level of metabolism (metabolic rate) is slowed down with age, approximately 2-3% every 10 years after the age of 20. The work experience and personal observations have shown that going in for fitness, as a rule, demonstrates not only positive change of indicators of the health, but also the improvement of the perception of the world.

Thus, the concept of fitness combines years of experience, embodied in specially designed programs of fitness activities to maintain and enhance human health, training and lifestyle which ensures good health and a positive outlook on the world.
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Здоровьесберегающие образовательные технологии в условиях реализации ФГОС

Статья посвящена проблеме использования здоровьесберегающих образовательных технологий в условиях реализации ФГОС. В статье рассматриваются понятие и содержание здоровьесберегающих технологий применительно к образовательному процессу в образовательных учреждениях в целях создания физиологически благоприятных условий для учебной и иной творческой деятельности учащихся. Показана роль здоровьесберегающих образовательных технологий в жизни человека.