# Preparing for physical activity research paper

Sport & Tourism, Fitness



## Introduction

\nIn the chapter 3 from the book The Basic Concepts of Wellness, the thing is about how to train body and mind very good so that to reach success in any kind of sport, specifically fitness. Training fitness is doing the hard work by stimulating muscles and getting trained heart. This chapter tells about how to do it right not to get the body harmed. It is necessary to choose the boots right, to decide how to organize the day correctly, how to deal with problems that may happen during training. The book may be very useful in order to make the right choice concerning the kind of sport. There is a very important notice about the heart, including its training. The authors of the book provide the readers with important schemes of the human heart, and give explanations how to avoid problems with heart. For example, if people have some heart diseases or gain over weighted, they are recommended to try their best to reach the best results, but they need also to get some instructions with doctors, to check if they are allowed to get their body trained. If they are allowed, they will reach the best results in future, no matter in fitness or in any other kind of sports. This book is closely related to the researches of some other researchers, including Fogelholm (2006), and Carnethon (2005). The works of these researchers have contributed much to development of the new kind of thinking about physical training issues.\n

### The role of fitness

\nWe all know that the role of exercise is great for the body and that we should go to the gym, because here we have listed the main reasons why you have to climb out of the chair and begin to lead active lifestyles. The

advantages of the exercises in the gym1) Slow heartbeat. Heart - this is one of the most important muscles. Aerobic exercises give the opportunity to strengthen it, which in turn allows more efficient heart to transmit oxygen to our cells, which is contained in the blood. 2) Reduce the risk of cardiovascular disease Exercise reduces blood clotting, which reduces the risk of heart disease. According to statistics, people who are actively involved in sports, the risk for development of heart disease is two times lower than that of people leading a passive lifestyle3) Helps regulate cholesterolPhysical exercise increases the ratio of good cholesterol (HDL) against the bad cholesterol (LDL), and with it, lower triglyceride levels. The triglycerides play an important role in metabolism as a source of energy for cells. 4) Reduce blood pressure5) Reduce the risk of developing colon cancerRegular exercise helps to regulate the digestive system to the robot . 6) Reduce the risk of stroke7) Strengthen and promote bone healthExercise improves blood circulation and nutrient supply to the bones, reducing the risk of fractures and osteoporosis. Osteoporosis is a bone disease that increases the risk of fractures. Osteoporosis decreases the bone mineral density and the amount and variety of non-collage nous proteins in bone. 8) Improves skin tone. Help keep skin elastic. 9) Assist acquire the desired shape10) helps to control blood sugarPhysical activity helps the body maintain blood glucose levels, it is very important for people with diabetes and those at risk for diabetes. 11) Helps reduce pain. Natural increase endorphins during physical activity naturally helps to relieve pain, such as PMS and menstrual cramps. 12) Increase flexibility13) Rejuvenate body and help to keep it healthy14) Strengthen the immune system15) Improve the

overall health and help you feel happierAnd now, when you see what benefits you can bring regular exercise , do you still have any doubt at the expense of the gym ? The Structure of the Heart\nHuman heart is located in the chest, roughly in the center with a small shift to the left . Is a hollow muscular organ. Outside, surrounded by a shell - the pericardium (pericardial sac). Between the heart and the pericardium is liquid moisturizing heart and reduces friction when it cuts. The heart is divided into four chambers: two on the right - the right atrium and right ventricle, and the two left - the left atrium and left ventricle. Normally, the right and left side of the heart between them are not reported. When birth defects in the atrial and ventricular septal may persist holes through which blood passes from one side of the heart to another. The atria and ventricles are interconnected openings. Along the edges of the holes are arranged wing heart valves: Right - three-sided, left - bicuspid or mitral. Bicuspid and tricuspid valves allow blood flow in one direction - from the atria to the ventricles. Between the left ventricle and the aorta out from it, as well as between the right ventricle and out from it are also pulmonary artery valves. Due to the shape they are called semilunar cusps. Each semilunar valve consists of three leaflets, resembling pockets. Free edge facing pockets in the vessel lumen. Semilunar valves allow blood flow in one direction only - from the ventricle into the aorta and pulmonary artery. Heart operation consists of two phases: contraction (systole) and relaxation (diastole). Cardiac cycle consists of atrial, ventricular contraction and subsequent relaxation of the atria and

ventricles. Atrial contraction lasts 0. 1 sec, ventricular contractions - 0. 3 sec. During diastole, the left atrium fills with blood through the mitral orifice blood flows into the left ventricle during contraction of the left ventricle blood is pushed through the aortic valve into the aorta and misses spread to

blood is pushed through the aortic valve into the aorta and misses spread to all organs. In the organs of oxygen transfer occurs body tissues for their food. Next, the blood in the veins going into the right atrium through the tricuspid valve into the right ventricle misses. During ventricular systole, venous blood is pushed into the pulmonary artery and into the pulmonary vasculature. In the lungs, the blood oxygenated, that is saturated with oxygen. Oxygenated blood through the pulmonary veins to the left atrium is going. Rhythmic, constant alternation of systole and diastole phases required for normal operation, ensured the emergence and conduct electrical impulses to the system of specialized cells - the nodes and fibers of the conduction system of the heart. Pulses occur first in the top, so-called, the sinus node, which is located in the right atrium, then go to the second, the atrio - ventricular node, and from him - for thinner fibers (bundle branch block) - to the muscle of the right and left ventricles, causing a reduction in all their muscles. Very heart, like any other body for nutrition and normal activity requires oxygen. To the heart muscle it is delivered on its own vessels of the heart - coronary. Sometimes these are called coronary arteries. Coronary vessels depart from the base of the aorta. Divided into right coronary artery and the left coronary artery. Left coronary artery, in turn, is divided into the left anterior descending and circumflex artery. The right coronary artery supplies the wall of the right atrium and ventricle, a rear portion of the interventricular septum and posterior wall of the left ventricle, sinus and atrioventricular node. Left coronary artery supplies blood to the front part of the interventricular septum, and the front side wall of the

left ventricle, the left atrium. A normal heart rate varies between 55 to 85 min . Under load frequency increases regularly . Determine the heart rate can be on the pulse . Pulse - this oscillation of the arterial wall that appear each contraction of the heart . The movement of blood through the vessels depends on the pressure generated by the heart when blood output and resistance to blood flow of the vessel walls. Aortic pressure at the time of the ventricular is the maximum, and is called the systolic. During the relaxation in the left ventricle a residual pressure, which is called diastolic. The magnitude of the blood pressure affecting the lumen of blood. As we move away from the heart blood pressure decreases and becomes the lowest in the veins. The difference between the highest blood pressure in the aorta in the low pressure veins hollow ensures uninterrupted blood flow through the vessels.\n

### **Boots for fitness**

\nVery often, before coming to the gym, clients ask, what is better to have shoes. That's why we decided to write an article about the right shoes for gym. For each species, there is a certain kind of fitness shoes. It is designed with the biomechanics of movement and reduce the calculation load on the musculoskeletal system. There are several types of shoes. Shoes for aerobics Shoes for fitness which takes into account the movement back and forth and from side to side, reduces shock, with a good lock, easy and safe are ideal sports shoes for fitness. Taken above the cross-country, they fix the ankle joints and reduce the possibility of dislocation. In aerobic shoes have a cutout in the Achilles tendon for the free movement of the foot. Plus, this is a shoe has additional shock in the toes. The boots for the fitness should be made of the dense material, but with ventilation and minimum weight. Such shoes for aerobics, step, power and functional exercises and interval training. Shoes for fitness, yoga and stretching Anyone who prefers soft areas of fitness, such as yoga, Pilates and stretching, best barefoot. Because during these sessions are no strong pressures on the foot, joints and spine and extra cushioning is needed. Catching up without shoes, you further massaging the nerve endings in the feet that helps to restore their natural tone, strength and flexibility. You can also engage in socks specially designed for such activities.\n

# Conclusion

\nThe book explains how to get deal with the difficulties concerning sport activities, how to train the body properly and how to reach the results in any kind of sports, including aerobics. It is difficult for those who are just beginners, but with time passes by and you proceed to get trained very well, you can manage to overcome the fear of mistake. This is only about the faith, with faith in success, everyone can win.\n

# References

\nBasic Concepts of Wellness Concepts of Fitness and Wellness: 10th Edition. Chapter 3. McGraw-Hill Publishing: New York. http://www. mhhe. com/corbin8e\nCarnethon, M. R., et al. (2005). A longitudinal study of physical activity and heart rate recovery: CARDIA, 1987–1993. Medicine and Science in Sports and Exercise 37: 606–612.\nInterval training: More benefit, less fatigue. 2005. Consumer Reports, May.\nFogelholm, M. (2006). Exercise,

# substrate oxidation and energy balance.\nInternational Journal of Obesity

30(6): 1022.