

The Safe Way to Exercise

Exercise is an important and essential activity in staying healthy and keeping fit. Humans have been exercising since the beginning of time. In 400 B.C., Hippocrates stated that "If we could give every individual the right amount of nourishment and exercise, not too little and not too much; we would have found the safest way to health". It was not until the 18th century that exercise routines came about for an intentional result for increased health and image. Yet, during this time many myths about exercise existed, which were not cleared up until the 19th century when science and medical research began to grow and expand. It was during this time that scientists and medical authorities began forming diet and exercise lifestyles for people to retain good health. In this time of technology, exercise equipment was also being manufactured, such as the treadmill and bicycles, as seen today in modern gyms.

Today exercise is viewed by many as a means to prevent an end. Some people exercise only when they must, others exercise everyday because they enjoy it as a hobby, but the majority of people begin to exercise when finding out that their health is in bad shape and must be restored before it is too late. Many people who start exercising in their middle ages, especially those who have not exercised in their younger years, may experience trouble with their hearts. These people should be checked by a doctor before they start exercising to make sure that it is safe for their heart to work at an exercise stressed rate. Exercising without getting a medical checkup first could be dangerous if fatigue or shortness of breath sets in; if this should happen, the exercise should be stopped and an appointment with the doctor should be made immediately to discuss echo stress testing. After seeing the doctor, a waiting period of two to four days should be carried out for all symptoms to disappear until restarting the exercise program, unless the doctor gives other specific directions.

Experiencing shortness of breath or increased fatigue during any activity is not normal, so it is usually good to slow down or stop the activity if this occurs. Another remedy for shortness of breath is to elevate the feet when resting. It is always safe to visit the doctor if shortness of breath is being experienced because this means that the heart is not pumping enough oxygen rich blood to all areas of the body during exercise. A doctor could make beneficial recommendations to patients experiencing shortness of breath, such as make changes in medications, diet, and/or fluid restrictions to help alleviate the problem.

Middle aged people should stop an exercise routine if they develop a rapid or irregular heartbeat or have heart palpitations during and/or after exercise. The best way to check if this is the case is to take the pulse after resting for at least 15 minutes. How to do this is to use the index and middle finger to locate the pulse on the wrist at the base of the thumb, count the number of beats for fifteen seconds and multiply that number by four, which is the pulse rate. If it is still above 120-150 beats per minute after resting time, call the doctor for further instructions.

The most important thing to remember when returning to exercise, or beginning for the first time, is to never ignore pain. Chest pain or pain anywhere else in the body during and/or after exercise should be realized and attended to, and the exercise activity should be discontinued. Performing an activity while in pain may cause stress or damage to the joints. If any of the following symptoms are experienced during exercise the activity should be stopped: chest pain, weakness, dizziness or lightheadedness, unexplained weight gain or swelling, pressure or pain in the chest, neck, arm, jaw, or shoulder, and/or any other symptoms that may cause concern.

When visiting the doctor, the best thing to ask for is an echo stress test because it helps to determine the risk for a heart problem resulting from exercise. People with a heart condition or history of heart disease should especially have a stress test before starting an exercise program because it will help to diagnose coronary artery disease, evaluate the progress of a major cardiac event in the past, and/or to investigate the affect of exercise on the valve function of the heart. A heart that contains coronary blockages may give the individual no signs or symptoms of trouble within the heart at a resting rate. The only way to diagnose these blockages is to distinguish the heart rhythms at a resting rate from the rhythms at a stress rate through the use of exercise to elevate the heart rate at the desired times.

During an echo stress test, the physician is able to view the heart at these times of stress and determine whether the coronary arteries are dilating at the correct measurement in order to supply the right amount of blood supply to the heart muscle. If the artery has a more narrowed opening, then the heart muscle will not be supplied with enough blood during exercise, which could cause chest pain or shortness of breath. The Echo stress test allows for the detection of these blocked arteries and enables the patient to take action in treating the condition.

People who have been checked by a doctor, and who have been cleared to continue exercise in their middle ages should still be educated about the effects of exercise on the heart. The heart is a muscle, and therefore becomes stronger as a result of exercise. The stronger it becomes through exercise, the easier and faster it can pump more blood throughout the body by every beat with less strain. The resting heart rate of those who exercise is also slower, because less effort is needed to pump blood. It is important to know that physical activity and avoiding high-fat foods are the two most successful means of reaching and maintaining heart-healthy levels of fitness and weight. Suggestions that can be made to help the exercise process to be safe

and healthy include drinking plenty of water before, during and after exercise, wearing the right shoes, and warming up and stretching before beginning exercise.

In order to get high increased health outcomes from exercise regimes, it should be an aerobic session lasting from about 20 to 30 minutes, at least three to four times a week. Exercising every day or even every other day is an even better way to stay fit and will help to enforce a daily routine for a healthier lifestyle. Aerobic exercises include: walking, jogging, jumping rope, bicycling and/or water aerobics. Any or all of these activities increase the heart rate to a medium level of stress in order to strengthen it overtime, therefore, increasing heart health overtime, which can prevent future heart disease and/or stroke.

Before discussing how exercise lowers and prevents heart disease, it should be made clear that increased heart health is not the only benefit received by a daily exercise regime; there are many other health advantages to exercise that cannot be received through any other type of action. Exercise, no matter what type or to what extent, increases brain power and increases the body's energy levels overtime. Exercise allows for a higher level of mental clarity, which is useful in all aspects of life.

In most situations of life comes stress, levels varying depending on the person and particular life situations. Exercise is the perfect activity to lower stress levels and serve as an outlet to release pent up stress energy in a more positive and useful way. Exercise serves as a positive distraction from stress and can be very relaxing, in turn helping the body stay healthier overtime. In fact, along with decreasing the risk of heart disease, exercise can also improve muscle, bone, and joint health.

Exercise helps lower the bad (LDL) cholesterol that leads to heart disease and raises the good (HDL) cholesterol that protects against heart disease. Exercise reduces inflammation in the body and makes it more difficult for blood to clot and cause a blockage of the coronary arteries. This is beneficial to the body because inflammation leads to the release of molecules called cytokines that can cause damage to blood vessels in the heart and throughout the body. The damaged spots in blood vessels caused by cytokines are left vulnerable for cholesterol to deposit and build up at these sites, leading to plaque, which causes atherosclerosis. Atherosclerosis is a leading cause for heart attack, and by preventing the buildup of plaque in arteries by exercising and reducing body inflammation, a person's risk for having a heart attack becomes much slimmer.

The damaged vessels containing increased cholesterol deposits can also cause strokes. These are the sites where platelets attach to blood vessels, clump, break off and completely block the blood vessel as it narrows downstream. If this event occurs in the brain, it causes either a major or a minor stroke. Therefore, if exercise lowers inflammation, a person is healthier and at a reduced risk for a heart attack and/or stroke due to the decreased chance of blockages in blood vessels from plaque and/or platelets.

In a major study at Harvard Medical School, over 27,000 women were assessed by researchers in a Women's Health Study for a variety of risk factors and different levels of exercise in women who were followed for 11 years for new diagnosis of heart attack and stroke. Scientists found that even modest changes in risk factors for heart disease and stroke through exercise, especially those related to inflammation and blood pressure, can have a profound impact on preventing heart disease events.

The overall result taken from the study concluded that long-term benefits of exercise start at a relatively low level, 600 kilocalories per week, which is equal to about two hours of physical activity per week. The risk of cardiovascular disease events decreased with increased levels of physical activity several times per week. The study shows how important physical activity is to keeping good heart health, and how even low levels of exercise once or twice a week can improve health; yet, increased level of exercise is recommended to increase heart health, of course only if a doctor agrees that exercising is safe for the particular patient.

An inactive lifestyle is one of the top risk factors for heart disease. The remedy to this lifestyle is staying active through exercise. Regular exercise, especially aerobic exercise, has many benefits that can prevent heart disease. Exercise can do things such as strengthen the heart, improve the circulation of oxygen within the body, increase energy levels, lower blood pressure, improve muscle tone and strength, improve balance and joint flexibility, help reduce body fat, and help reduce stress, tension, anxiety and depression. All of these benefits come along with maintaining a healthy lifestyle of diet and exercise, which becomes quite easy overtime after an exercise regime is enforced. In order to make sure exercise is safe for the body; a doctor's visit is highly recommended and, is an important way to ensure that the body and heart can take the stress of physical activity with good health in mind.

Works Cited

<http://www.sciencedaily.com/releases/2007/10/071022165535.htm>

http://www.personalpowertraining.net/Articles/history_of_exercise.htm

<http://www.webmd.com/heart-disease/guide/exercise-healthy-heart?page=2>

http://www.umm.edu/patiented/articles/what_effects_of_exercise_on_heart_circulation_00029_3.htm

http://www.medicinenet.com/fitness_exercise_for_a_healthy_heart/article.htm