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Exercise On Cardiovascular Fitness

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Abstract

Life without exercise contributes to the early onset and progression of life style disease such as cardiovascular disease, hypertension, diabetes and obesity. Cardiovascular fitness, the activity components included are not only for muscular development and endurance training. The lungs, heart, and circulatory system are also the focal points in health and fitness. Decreased physical fitness may result from various diseases, especially when accompanied by prolonged recumbence, or from inactivity such as a sedentary lifestyle and a low- level of physical activity. Increased amount of daily exercise , on the other hand, is associated with a decreased incidence of blood pressure . regular exercise offers an even more effective approach to put a stop to the increasing number of people suffering from heart diseases. Hence, expert physical education suggest incorporating Aerobic exercise, calisthenics and resistance exercises into the daily life so that one can embark on an important lifestyle transformation that will improve the heart condition.

Introduction

Modern lifestyle has a lack of movement and physical activity due the shrinking availability of space, the loss of family time, and preoccupation with media, among other reasons. It is imperative that children - as well adults - move more every day. Many of the mega-cities of the world cannot supply growing numbers of inhabitants, particularly children, with low cost sports training and fitness facilities.

When the body is at rest cardiovascular disease as one caused by unhealthy lifestyle including smoking, poor diet and sedentary behaviour . Cardiovascular diseases have behavioural correlates and that physical inactivity is related to cardiovascular disease . Low cardiovascular fitness may result in high physical strain on the body .For Cardiovascular fitness, the activity components included are not only for muscular development and endurance training. The lungs, heart, and circulatory system are also the focal points in health and fitness. The reason for this is to improve stamina, immune system, and maintain good body composition. Cardiovascular fitness reduces the risk of cardiovascular diseases and other diseases like hypertension ,Diabetes obesity, and may cure respiratory problems like asthma **(Amusa, & Goon ,2011)**.

Life without exercise or physical Fitness contributes to the early onset and progression of life style disease such as cardiovascular disease, hypertension, diabetes and obesity.

Importance of cardiovascular fitness

The importance of cardiovascular fitness to health for all individuals has been well documented. Physical fitness is a required element for all the activities in our life. Cardiovascular fitness of an individual is mainly dependent on lifestyle related factors such as daily physical activity levels. It was believed that the low cardiovascular fitness level of an individual is associated with higher mortality rate. (jourkhesh et.al.2012). Physical fitness has been shown to decrease the risk of cardiovascular disease and improve total cholesterol and high density lipoprotein levels (Milesis et. al. 1976).Exercise also means total caloric expenditure promotes fat loss, and increases lean body mass (Maynard 1991).

Circulatory system

The cardiovascular system is responsible for pumping blood throughout the body thereby providing a rapid-transport system to distribute oxygen to the body cells and also remove carbon dioxide from the body with other waste products. The cardiovascular system consists of the heart and blood vessels.

Vasodilation

Vasodilation is the widening of blood vessels. It results from relaxation of smooth muscle cells within the vessel walls, in particular in the large veins, large arteries, and smaller arterioles. Arteries in your working muscles dilate to accommodate their

increased need for blood. At the same time, the heart's increased output causes your blood pressure to rise. Arterioles (tiny arteries) in your skin expand, allowing for more blood flow there. As you continue to exercise, blood vessels **is widening**

Cardiac output

Cardiac output: The amount of blood the heart pumps through the circulatory system in a minute. The amount of blood put out by the left ventricle of the heart in one contraction is called the stroke volume. The stroke volume and the heart rate determine the **cardiac output**. As result exercise, the size of the heart change Regular practice of exercise increased cardiac output by 40-60% of maximal capacity during rest it is around liters/min. whereas while exercising, it increases upto 40 liters/minute..

Athletic heart

Athletic heart is a non-pathological condition commonly seen in sports medicine in which the human heart is enlarged, and the resting heart rate is lower than normal. The athlete's heart is associated with physiological remodeling as a consequence of repetitive cardiac loading. Athlete's heart is common in athletes who routinely exercise more than an hour a day, and occurs primarily in endurance athletes, though it can occasionally arise in heavy weight trainers. The condition is generally considered benign, but may occasionally hide a serious medical condition, or may even be mistaken for one. Heart size increases due to exercise and the strength training causes increase in the thickness of ventricle walls thereby increasing the efficiency of heart.

Decrease the risk of cardiovascular disease

Regular exercise has improved the cardio vascular system, decreased some of the risk factors leading to a cardiovascular disease, promoted fat loss, increased muscle mass, increased glucose intake by cells and enhanced well- being of the sedentary students.

In other research (Clausen J P 1997) physical fitness was noted to improve cardiovascular fitness and work capacity, while decreasing resting and exercise blood pressure, as well as peripheral vascular resistance. Finally, physical fitness has been shown to decrease the risk of cardiovascular disease and improve total cholesterol and high density lipoprotein levels (Milesis et. al. 1976).

Hypertension

Blood pressure control due to exercise as the requirement of blood by the muscles is increased. The pressure exerted on the walls of the blood vessels increases as the heart pumps more and more blood to meet the requirement of muscles. Pulse become normal in the shorter duration after the cessation of activity in case of trained athletes. Exercise resulting as new capillaries are formed within the muscle fibers.

Stress-Related conditions:

Anxiety and stress are one of the causes of cardiovascular disease In fact, stress is considered as healthy as it enables the body to push beyond the limits and act according to what type of physical situation an individual is confronted with. Exercises are very effective in helping you control stress and regulating your breath patterns. The Complete Breath technique is one of the breathing exercises that one needs to learn, especially when "stressed out". Daily or regular exercises and aerobic exercise also known to effectively reduce anxiety or depression caused by stress.

Obesity

Obesity is one of causes of cardiovascular disease . Regular exercise 45 minutes daily was connected to weight loss in subjects between the ages of 45 and 55, according to a study funded by the National Cancer Institute. Aerobic exercise isn't about burning calories; it's more about becoming more aware of your body and when it's full of food, stress, or conversation. The health benefit of exercise with regard to weight loss is that it's easier to stop eating when your mind-body connection is strong. It's your body awareness that is improving, not necessarily the caloric burn. Regular exercise improves mindfulness and encourages a "gentle strength", which positively affects weight loss and weight management.

Conclusions

Exercise enhances the mind-body connection, which can improve your mood and physical health – and even lighten various psychological disorders. Improved depression, body image struggles, eating disorders, and even physical problems such as back pain and asthma are some of the health benefits of exercise. The effective cure against these type of diseases will greatly reduce to

mortality rate. Finally, this paper provide a greater insight to eliminate the risks of diseases such as hypertension, and cardio vascular problems to the people.

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