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ROLE OF AEROBIC EXERCISE ON CARDIOVASCULAR FITNESS IN PRESENT SCENARIO

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ABSTRACT

The cardiovascular system consists of the heart and blood vessels. 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. Heart problems and cardiovascular diseases is one of the leading causes of death worldwide. Regular exercise offers an even more effective approach to put a stop to the increasing number of people suffering from heart diseases. 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 hypertension and cardio-related disorders.

Keywords: Aerobic, Cardio Vascular fitness, hypertension.

INTRODUCTION

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. 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.

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. (jourkhash et.al.2012).

CIRCULATORY EFFECTS

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 (Miles et. al. 1976).Exercise also means total caloric expenditure promotes fat loss, and increases lean body mass (Maynard 1991). Heart size increases due to exercise and the strength training causes increase in the thickness of ventricle walls thereby increasing the efficiency of heart. Stroke volume increases progressively from rest to moderate work and then it levels off at about 30 to 40% of the maximum aerobic power. 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 up to 40 liters/minute.. When an individual suffers from stress, it constricts breathing passage, creates tension in the heart muscles, and increase heart rate. When this happens, one simply has to start executing aerobic exercises to release pressure exerted on the heart and its surrounding muscles. Daily or regular exercises and aerobic exercise also known to effectively reduce anxiety

or depression caused by stress and ultimately reduce the risk of cardiovascular Disease. Heart problems and cardiovascular diseases is one of the leading causes of death worldwide. Finding an effective cure against these type of diseases will greatly reduce to mortality rate. But 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.

BLOOD PRESSURE

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.

CARDIO- RESPIRATORY EFFECTS

Heart rate shows a gradual adaptation to an increased work load by increasing proportionally to the modern exercise and will plateau at a given level for about 2 to 3 minutes. The resting heart rate decreases with exercise. The rate of oxygen consumption can be estimated by taking the heart rate. The amount of blood flowing to the various organs increases due to exercise.

CONCLUSIONS

Cardiovascular diseases is one of the leading causes of death worldwide. regular exercise offers an even more effective approach to put a stop to the increasing number of people suffering from heart diseases. Finding an 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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