



Aerobic and anaerobic exercise – A panacea for stress

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Abstract

Stress has become a common challenge in modern life, significantly affecting physical and mental well-being. Aerobic and Anaerobic exercises have emerged as effective non-pharmacological interventions to combat stress. Aerobic exercises, such as walking, cycling, and swimming, enhance cardiovascular endurance and promote the release of endorphins, often called “feel-good hormones,” thereby reducing stress and anxiety. Anaerobic exercises, including strength training and high-intensity interval training (HIIT), help improve muscle strength and resilience, contributing to greater mental fortitude and stress tolerance. This paper highlights how the balanced incorporation of aerobic and anaerobic exercise into daily routines serves as a holistic approach to managing stress, improving emotional stability, and enhancing overall quality of life.

Keywords: Stress, aerobic exercise, anaerobic exercise, endorphins, mental well-being

Introduction

The most alarming remedy less malady what corrodes into the very matrix of the modern society is stress and strain filled life. Man has no time to sit in peace or to stand and stare the gentle beauty of the nature. His mind is torn as under by average violence and lust. As a result, he falls an easy prey to various unknown by very destabilizing diseases. The most dominant among them are cardiovascular diseases, Diabetics, Insomnia, Depression, Pancreatic and migraine etc. As the proverb goes “a sound mind in a sound body” anything that affects the mind has its ripples and repercussions on the body.

Constant mental stress and strain paves the way for fatal and mortal diseases. After math of stress and strain is the increase of harmful Low-Density Lipoprotein and loss of body power to absorb calcium. Stress leads to the malfunction of autonomous nervous system. This sends direction to the Hypothalamus of the brain and activates several Hormones and neurotransmitters. The most important among them are Adrenaline and cortisone. When tension exceeds it bounds the above said hormones powerless and strength less. Due to the activity of this the blood circulation increases and blood vessels swell. The kind of strain reduces the functioning of parasympathetic nerve system. At this time the heart beat speeds up and the immune system suppressed. To resist this all energy of the body is used. When adrenalin and cortisone blends with the blood pressure. Blood pressure and pulse rate increases.

These stress hormones burn out blood cells. This burning out is equivalent to wounds. The immune system sends agents of blood clotting to immune cells. This burning out is equivalent to wounds. The immune system sends agents of blood clotting to immune cells. Though burning out process is reduced a bit it clots the blood at the same time energy is needed to the total functioning of the system. The body naturally protects the fat exceedingly. If this fat is not burned out it becomes part of blood clotting agent and thereby the blood clots. These clots enter into the blood clots. These clots enter into the blood vessels and gets transformed into atherosclerotic plaques. When too much of cortisone enters the blood vessels which weakness the

immune system of the body. Due to this illness like rheumatoid arthritis gets developed.

The patients who are regularly subjected to mental stress and strain their immune system gets reduced and even hepatitis “B” vaccination proves to be ineffective.

How to Prevent Mental Stress

1. Regular Practice of Yoga reduces Pulse rate and Blood Pressure
2. Massaging of the body muscle also reduces mental stress
3. Exercise enables the capacity to sleep and rest. Regular exercise reduces the amount of adrenalin which is a stress hormone and also provides endorphins which nullifies bodily pain aches. The deep respiration is a method of reducing mental stress.

Mental stress that leads to physical disorders cannot be easily healed and so the best way to maintain a healthy physical status is not to become a prey to mental stress and strain

Regular exercise lowers the cholesterol and blood pressure, and reduce the risk of heart attack and diabetics. Exercise increase the size of coronary arteries and reduces clotting due to atherosclerosis. Exercise has been linked to increased levels of high-density lipoprotein (HDL) good cholesterol and decreased low density Lipoprotein (LDL) bad cholesterol and triglyceride levels. Exercise is a critical component of weight loss and are a good beginning for a lasting commitment to a healthy lifestyle. Among the various exercise patterns aerobic exercises are found to be very fruitful in reducing stress and improves the healthy life style.

Aerobic Exercise

Of all the different exercise Programme available the aerobic exercise appears to possess the greatest potential for improving your health. William Haskell of Stanford University an internationally reputed authority on the therapeutic aspects of exercise has noted recently that aerobic exercise is a treatment for various medical conditions and its value in all overall Programme of health

promotion. There is much more extensive and long-standing evidence, however about the benefits of aerobic training and cardio-vascular fitness and disease risk reduction particularly for reducing the risks of heart disease and for premature death from heart disease.

Benefits of Aerobic Exercise

1. Reduces risk of heart attack by
 - a. Increasing HDL, cholesterol
 - b. Increasing triglyceride levels
 - c. Reducing high blood pressure
 - d. Reducing desire to smoke
 - e. Improving the efficiency of heart
2. Reduces risk of developing non-insulin dependent diabetes
3. Reduces excess body weight and helps to maintain optimal weight
4. Increases resistance to stress, anxiety and fatigue.
5. Increases cardio-respiratory fitness, strength and working capacity. In order to receive the optimal benefits from the exercise Programme one must attain certain threshold stimulus i.e.60 to 90% of maximum heart rate or 50 to 85% of maximum oxygen uptake.

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