

## Exercise: A need in modern era

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### Abstract

*Exercise is any movement that works for body at a greater intensity than your usual level of daily activities physical exercise enhances or maintain physical fitness overall health. Physical exercise help in accerating growth and development of a child. Physiologically, exercise improves the functioning of our various body system i.e. circulatory system, respiratory system, muscular system, nervous system etc. Exercise makes a person strong and active which helps them to perform better in their daily routine physical. Exercise helps to improves mental health, emotional development. Exercise helps to maintain optimum strength, flexibility, endurance for a long period, exercise prevents obesity and various diseases. Movement is a medicine for creating change in a person physical, emotional and mental states.*

**Keywords:** Exercise, obesity, coronary heart diseases

### Introduction

"Exercise is a physical activity that is planned, structured and repetitive for the purpose of conditioning any part of body." Exercise are useful in preventing or treating coronary heart changes, osteoporosis, weakness, diabetes, obesity and depression. Different types of exercise are used for different purpose for e.g. ROM exercise for improving movement of specific joint, strengthening exercise for muscle strength and mass, bone strength, isometric exercise for maximum strength.

"If I would 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". Hippocrates

The benefits of exercise have been known since antiquity. Marcus Cicero around 65 BCE stated "It is exercise alone that support the spirit and keep the body and mind in vigor". To be physical stronger was the necessity of early man living in jungles to protect themselves as well as hunt animals for food. Formation of different kingdom increased the demand for healthy

individual in the kingdom to protect their kings and people from enemies. In modern days the environmental pollutions and unhealthy eating habits has led to the need of physical activity in life of human beings.

"Those who thinks they have not time for bodily exercise will sooner or later have to find time

for illness." Edward Stanley Physical exercise is need of society and most suitable way to prevent the further worsening of health conditions in India. In 21st century, obesity is affecting 5 per cent of the countrys population. Obesity have lead to risk of heart diseases, diabetes and hypertension. India has becomes third most obese country in the world after USA and china having 30 millions people as obese.

Coronary heart diseases have increased to 23% of total deaths in India in (2010-13) from 17% in 2001-2003). In adults 26% of death in (2001-2003) to 32% in 2010-2013. Reason for this is lack of physical exercise, unhealthy diet, diabetes, hypertension, smoking etc <sup>[1]</sup>.

Environment population has been increasing day by day due to industrialization, automobiles etc. This has lead to polluted air, water, soil. To survive in such an environment, the need for physical exercise is felt. Outdoor pollution have risen by 8 % in 5 years with fast growing

Cities . According to WHO ultrafine particles of less than 2.5 microns are highest in India which are cause of pulmonary diseases.

### Benefits of Exercise



**Exercise Control Weight** - Exercise prevent excess gain or help maintain weight loss. When you engage in physical activity, you burn calories, obesity starts when the burning calories are less than intake calories. This extra energy gets store in the form of fat and excess fat cause obesity.

**Exercise Combats Health condition and diseases** - Physical exercise boosts high-density lipoprotein or good cholesterol and decreases unhealthy triglyceride. This decrease risk for cardiovascular diseases, depression, hypertension, diabetes etc.

**EXERCISE GIVES YOU A:**

- ♥ GOOD FEELING
- ♥ GREAT BODY
- ♥ BETTER SKIN
- ♥ BOOST OF ENERGY
- ♥ BETTER MOOD

**= HAPPINESS!**

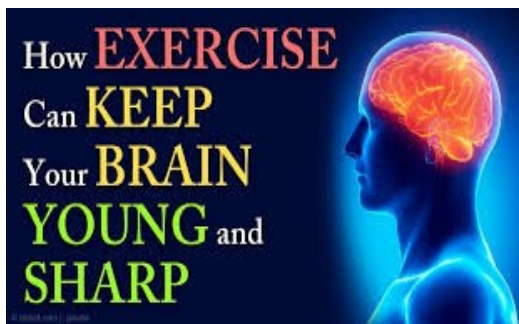
### Exercise Boost Energy

Regular exercises can improve your muscle strength and boost your endurance. Exercise delivers oxygen and nutrients to tissue and helps your circulatory system work more

efficiently system work more efficiently when heart and lungs improves a person has more energy tackle daily charges.

### Exercise and Recreation

Exercise and physical activity can be enjoyable. It gives you a chance to unwind, enjoy the outdoors or simply engage in activity that makes a person happy. This happiness makes a person feel relax and keep away stress and tension.



### Exercise Accelerate Growth and Development

Regular Physical activity promotes growth and development and has multiple benefits for physical, mental and psychosocial health that undoubtedly contribute to good health.

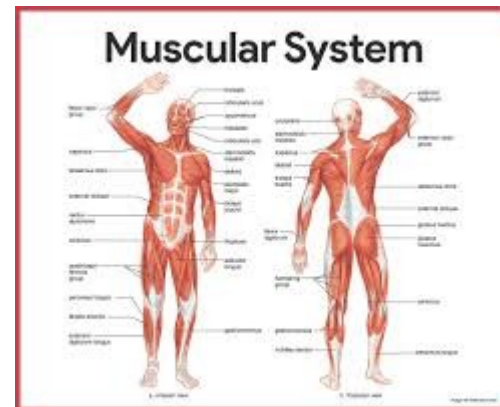
### Cardiovascular system

Lowering resting heart rate, quickness in recovery from exercise; Reduced risk of heart diseases, increased number of capillaries in heart, increased volume of blood and red blood cells, increase in cardiac output and stroke volume.

### Respiratory System

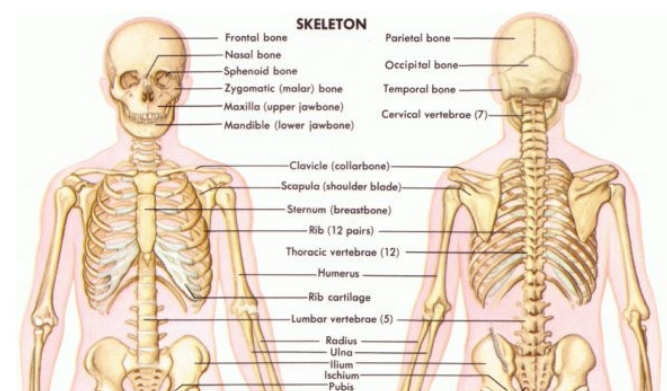
The respiratory muscles (Diaphragm/Intercostals) increase in strength.

The result in larger respiratory volumes which allow more O<sub>2</sub> to be diffused into blood flow. An increase in number and diameter of capillaries surrounding the alveoli leads to an increase in efficiency of gaseous exchange.



### Muscular System

Muscle hypertrophy is increased by increase in muscle cells and volume (Muscle fibre size increase) Muscle increase their oxidative capacity, increase a number of mitochondria and increase in supply of ATP and quality of enzyme. Ability to store myoglobin increases.

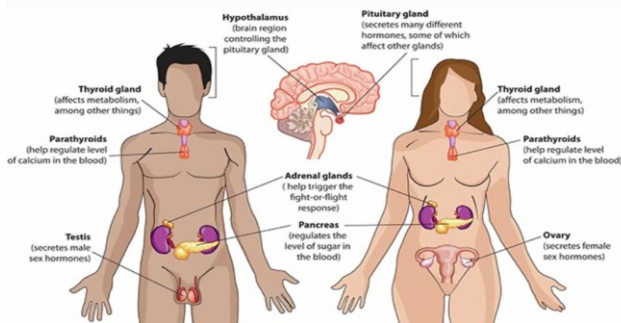


### Skeletal System

Increased synovial fluid products increased joint range of movement increased bone density, stronger ligament, healthier cartilage etc.

brain cell and increase number of path ways for oxygen, energy and to remove waste from the brain.

### The Endocrine System



### Endocrine system

Exercise boosts the number of hormones circulating in our body and strengthen reception sites on target organ cells. Function like metabolic rate (testosterone and thyroxin) improves, blood sugar begin decreasing 10 minutes of aerobic exercise, weight training might increase your sensitivity to insulin at rest.



### Nervous System

Exercise percent mental disorder, improve efficiency of impulse (contributes to brand now

### Prevent Chronic Diseases

Chronic diseases are major killer in the modern era. Physical inactivity to a primary cause of must chronic disease. Chronic diseases such as heart diseases, cancer and diabetes are leading cause of death and disability around the world.

### Conclusion

Healthful living is a combination of many things including good nutrition, regular exercise and mentally fit. Exercise helps in weight control, strengthening bones and muscles, increased stamina, reduced risk to disease, increased brain health, improved energy, sleep and sex and in the and a longer healthy life.

### References

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