EFFECTS OF EXERCISE ON HUMAN BODY SYSTEM

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INTRODUCTION:
The human body system and its parts are equally important and essential. It would be a mistake to make a comparison between them and rank them according to their importance. However, in the study of sports, exercise and motor skills, some systems are more involved than others. The more relevant systems for us are the cardiovascular system, respiratory system, muscular system, digestive system, excretory system and endocrine system.

WHAT IS THE RESPIRATORY SYSTEM?
The exchange of gases, oxygen (O2) and carbon dioxide (CO2) between the organism and environment is called respiration. There are two types of respiration.
- **Internal respiration** - The exchange of gases between blood and tissues is called Internal respiration.
- **External respiration** - The exchange of gases between blood and lungs is called External respiration.

The main parts of this system are Nose, Thairoid, Windpaip, and Lungs. The relevant exercises for this system are (1) walking (2) jogging (3) cycling (4) yoga breathing

EFFECTS OF EXERCISE ON RESPIRATORY SYSTEM:
- **RESPIRATORY MUSCLES BECOME STRONG:** When we do exercise regularly the respiratory muscles become strong and work more efficiently for longer duration.
- **EXPANSION OF CHEST:** Regular exercise causes greater expansion of the chest and thus improves physical outlook.
- **INCREASES RESISTANCE POWER:** Through regular exercise the resistance power improves. Thus, common problems like cold, cough, asthma, headache, etc. can be prevented.
- **WATER BALANCE IN BODY:** The water balance in the body is maintained through regular exercise. Thus, dehydration can be avoided.
- **INCREASE IN AN AEROBIC ENDURANCE:** As a result of regular exercise less amount of lactic acid is produced. Thus, fatigue is delayed. Hence endurance improves.

WHAT IS THE CIRCULATORY SYSTEM?
The Circulatory System is responsible for transporting materials throughout the entire body. It transports nutrients, water and oxygen to your billions of body cells and carries away wastes such as carbon dioxide that body cells produce. It is an amazing highway that travels through our entire body connecting all our body cells. The main parts of this system are Hart, Blood vessels, tissues, and lungs.

The main exercises for this system are (1) running (2) cycling (3)swimming (4)Stretching

EFFECTS OF EXERCISE ON CIRCULATORY SYSTEM:
- **INCREASE CARDIAC OUTPUT:** Regular exercise increases the cardiac output. Thus more blood is pumped out from the heart for the working tissues.
- **INCREASE IN HAEMOGLOBIN:** The result of regular exercise increases the haemoglobin content in blood. Haemoglobin-rich blood can carry more oxygen. Thus, improve the energy flow.

- **REGULATION OF BLOOD PRESSURE:** When we exercise regularly, it helps in maintaining a well-balanced blood pressure and regulation of body temperature.

- **FASTER REMOVAL WAST:** Regular exercise helps in faster removal of waste products from the body, moreover, there is the best defence against diseases and germs.

- **FASTER HEALING:** With regular exercise, the increased circulation of blood in the body, therefore, there is faster recovery from injuries.

- **REDUCTION IN CARDIC PROBLEMS:** Regular exercise decreases the cholesterol level in blood, therefore, reducing heart attack risk and other cardiac problems.

WHAT IS MUSCLE?

There are more than 650 muscles in our body. They give power to the body for movement. Muscles are 40% of the total weight of the body. Normally muscles are strongly attached with skeleton. They are known as a tendon. There are three types of muscles in our body: skeletal muscles, smooth muscles, and cardiac muscles. The most relevant exercises for this system are push-ups, chin-ups, short running, shoulder press, etc.

**EFFECT OF EXERCISE ON MUSCULAR SYSTEM:**

- **IMPROVE EFFICIENCY:** As a result of regular exercise, there is an increase in the number of capillaries in muscles and there is faster circulation of blood. Thus, the efficiency of muscles improves.

- **PROPER SHAPE OF BODY:** Regular exercise provides proper shape to the body. Thus, improving physical personality.

- **FASTER RECOVERY FROM INJURY:** Trained muscles can recover from injury very fast. Moreover, there are less chances of injuries.

- **EFFICIENT USE OF DIET:** Trained muscles can efficiently use carbohydrates, proteins, fats, etc. as sources of energy with less consumption of oxygen.

- **BETTER NEUROMUSCULAR CO-ORDINATION:** Regular exercise improves the neuromuscular coordination. Therefore, as a result, various skills can be performed efficiently.

WHAT IS DIGESTION?

Digestion is the breaking down of food into forms that our bodies can use. Our bodies use food as fuel to provide energy for work, play, and growth. Our digestive system is responsible for converting the food we eat into energy for our bodies to use. The main parts of this system are… and the main exercises for this system are walking, jogging, cycling, digestive breathing, sit-ups, etc.

**EFFECTS OF EXERCISE ON DIGESTIVE SYSTEM:**

- **INCREASED METABOLISM:** Regular exercise increases the metabolism. As a result, the food can move through the system much quicker, which then eases the load for the digestive system.
 INTERNAL MASSAGE: Another benefit of exercise is that it can help to massage the intestines. Side twists and forward bends are great exercises that massage the intestines so that they can relax in order to release their contents.

 INCREASED BLOOD FLOW: The blood is responsible for absorbing nutrients from the digested food and distribute it throughout the body. Exercise increases blood flow, and it is helpful for the digestive system.

 RELAXES THE MIND AND BODY: Another major benefit of exercise is that it helps to relax the mind and body. It is absolutely crucial for healthy digestion as any type of stress, whether physical or mental.

WHAT IS EXCRETORY SYSTEM?
It is the system which throws out waste from our body through kidney, ureters, urinary bladder and urethra etc. It is collect waste substance in kidney or ureters and filter there and then throw out by urination or sweating.

EFFECTS OF EXERCISE ON EXCRETORY SYSTEM:

- **INCREASE EFFICIENCY OF URETERS:** With regular exercise increase efficiency of ureters. Thus, ureters can work proper without any hurdles.

- **INCREASE STORAGE CAPACITY OF URINARY BLADDER:** A result of regular exercise increase storage capacity of urinary bladder. Thus, urinary bladder can work actively.

- **CONTROL OVER INJAMS:** Regular exercise control over the engine flow through the body.

- **PRO ACTIVE SWEAT GLANDS:** With regular exercise the body throws out the waste of the body through sweating. Thus body can maintain healthy.

WHAT IS ENDOCRINE SYSTEM?
There are many glands in the endocrine system. They are secreted blood hormones. They are actively control over the body functioning by chemical signals.

The main parts of this system are pituitary gland, thyroid gland, Parathyroid gland, pancreas and adrenal gland etc. And the main exercises for this system are…

EFFECTS OF EXERCISE ON ENDOCRINE SYSTEM:

- **EFFECT ON PITUITARY GLAND:** During exercise, the pituitary gland releases human growth hormone, which tells the body to increase bone, muscle and tissue production.

- **EFFECT ON THYROID GLAND:** When we start exercising, the thyroid gland sends out hormones that regulate the body’s temperature, heart rate and blood pressure. It also regulates the alertness and focus at a high intensity.

- **EFFECT ON PANCREAS:** Insulin regulates blood sugar. Excessive insulin in the blood reduces sensitivity to insulin and can lead to diabetes. Exercise improves insulin sensitivity and reduces the reliance on insulin injections.

- **EFFECT ON ADRENAL GLAND:** The adrenal glands are responsible for the release of cortisol into the bloodstream. Cortisol is control blood pressure, glucose and acts as an anti-inflammatory agent. The regular exercise more helpful to functioning of adrenal gland.