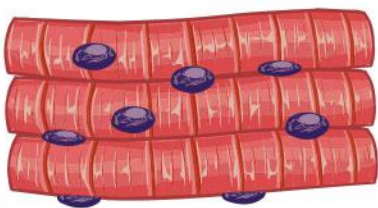


What Is The Human Muscular System?

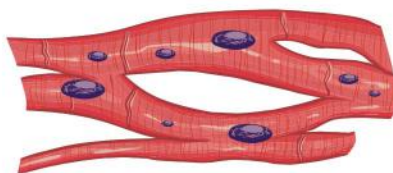
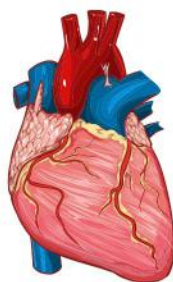
Muscles are made up of bundles of fibrous tissues. Each muscle is made of tissues, blood vessels, tendons, and nerves. Muscles form about 40% of the human body weight. Muscle groups together form the body's muscular system. There are about 700 distinct muscles that are attached to the skeletal system.

Muscles are of two types, namely voluntary muscles and involuntary muscle. Voluntary muscles can be controlled at one's own will. The muscles like the biceps, the triceps, the quads, the calves, the hamstrings, the deltoid, etc. are all examples of voluntary muscles. They help in the movement of the hands and the legs.

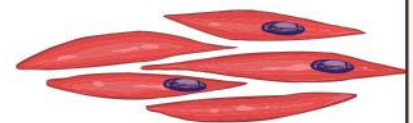
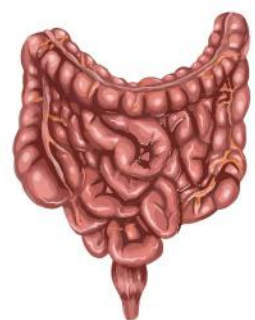
Involuntary muscles cannot be controlled at one's will but are controlled by the unconscious part of one's brain. The abdominal muscles, locomotory muscles, middle ear muscles, diaphragm, cardiac muscles, etc. are examples of involuntary muscles.



Skeletal muscle



Cardiac muscle



Smooth muscle

Muscles help in producing movement and maintaining the posture of the body. They contract and relax and help us in performing various activities. They help in transmitting signals, chemicals, and substances through the body. Information travels between the brain and muscles via the nerve fibers that are spread throughout the muscles.

There are three different types of muscles:

I Visceral muscles:

These are smooth muscles found in organs like intestines and blood vessels. They are considered to be the weakest of all muscle types. They help in moving substances through the organs and are involuntary muscles.

I Skeletal muscles:

These are the voluntary muscles. They are very strong muscles and help in movement. They are always attached to a bone. Usually, these muscles are attached to two bones across a joint, thereby helping in the movement of bones and, therefore, the joints.

I Cardiac muscles:

They are found in the heart and are responsible for the heartbeats. They are also involuntary muscles, but the hormones and signals from the brain may control them. They are also known as auto-rhythmic because they are self-stimulating.

Based on your understanding, answer the following questions:

1. What are muscles made up of?

2. What is the role of muscles?

3. What is a voluntary muscle action?

4. What is an involuntary muscle action?

5. Approximately, how many muscles are present in the human body?

6. What is the role of muscles in the human body?

7. What are the three different types of muscles?

8. What are the visceral muscles?

9. What are the skeletal muscles?

10. What are the cardiac muscles?

Distinguish the voluntary and involuntary muscles in the box below:

abdominal muscles,
biceps,
the quads,
diaphragm,

the triceps,
the calves,
locomotory muscles,
the hamstrings,

the deltoid middle
ear muscles,
cardiac muscles.

Sr. No.	Voluntary muscles	Involuntary muscles
1		
2		
3		
4		
5		