

THE FUNCTIONS OF MUSCLES

The physiological functions of muscles include generating mechanical movement, maintaining posture, producing heat, and stabilizing joints.



MOVEMENT

Muscles generate mechanical movement by contracting and pulling on bones.



POSTURE

Muscles maintain posture by providing continuous support against gravity.



HEAT

Muscle activity produces heat, helping regulate body temperature.



ENERGY

Muscles convert chemical energy into mechanical force to power all activities.



STABILITY

Muscles stabilize joints by balancing forces and preventing injury.

MUSCLES CONVERT CHEMICAL ENERGY INTO MECHANICAL FORCE

Muscles are made of specialized tissues that work together to produce movement, maintain balance, and support life.



SKELETAL MUSCLE

Attaches to bones and enables voluntary movement and posture.



CARDIAC MUSCLE

Found in the heart, pumps blood continuously.



SMOOTH MUSCLE

Lines organs and blood vessels, controlling involuntary functions.