

Muscle System Terminology

The following definitions are used when referring to the muscular system:

Origin

Fixed (anchored) attachment of the muscle. The origin does not normally move during contraction.

Insertion

Point of attachment of muscle opposite to origin. The insertion normally moves towards the origin when the muscle contracts.

Action

The function of the muscle, i.e. what happens when the muscle contracts.

Tone

A condition where some muscle fibres are contracted and others are relaxed so that the muscle is 'semi-contracted'. This maintains posture of the body.

Tension

Over stimulus of a muscle so that more fibres are contracted than is necessary for the muscle to function.

Fatigue

Condition in which a skeletal muscle is frequently stimulated and is forced to contract faster than it can remove lactic acid (and deal with other metabolites). The muscle will not now be able to contract until it has been allowed to rest.

Flexion

Bending of a joint, i.e. decreasing the angle across that joint.

Extension

Straightening of a joint, i.e. increasing the angle across that joint.

Abduction

Movement occurring in the coronal plane, i.e. (sideways) away from the trunk or median, i.e. moving it away from the body.

Adduction

Movement occurring in the coronal plane, i.e. (sideways) towards the trunk or median, i.e. adding it to the body.

Rotation

Turning of a limb about its axis.

Supination

Movement of the flexed forearm so that the palm of the hand is turned anterior or superior.

Pronation

Movement of the flexed forearm so that the palm of the hand is turned posterior or anterior.

Dorsiflexion

Flexion of the ankle joint so that the angle between the shin and foot decreases, i.e. standing on heels.

Plantarflexion

Flexion of the ankle joint so that the angle between the shin and foot increases, i.e. standing on tip toes.