

# What does the Gluteal Muscles do?



**Gluteus Maximus**



**Gluteus Medius**



**Gluteus Minimus**

# Gluteus maximus

The **gluteus maximus muscle** is located in the buttocks and is regarded as one of the strongest muscles in the human body. It is connected to the coccyx, or tailbone, as well as other surrounding bones. The gluteus maximus muscle is responsible for movement of the hip and thigh.

Standing up from a sitting position, climbing stairs, and staying in an erect position are all aided by the gluteus maximus.

Pain while rising to a standing position or lowering to sit may be caused by **gluteus maximus syndrome**. This syndrome is caused by a spasm in the muscle of the gluteus maximus. The pain usually disappears when sitting and affects only one side of the body.

Other causes of pain can be caused by an inflammation of the tendons or friction between the bones, tendons, and gluteus maximus muscle; these conditions are referred to as either bursitis or tendinitis. Treatments for these disorders include physical therapy or anti-inflammatory pills or injections. Physical therapists may try to put pressure on the joint of the gluteus maximus muscle and coccyx, or recommend exercises to reduce pain and improve range of motion

Function. **Gluteus maximus main actions** are to extend and laterally rotate the hip joint. Furthermore, upper fibers can abduct the hip whereas the lower fibers can adduct.

# Gluteus medius

The **gluteus medius muscle** is partially covered, on its lower-third part, by the gluteus maximus muscle. This makes up what is commonly referred to as **the buttocks**. The gluteus medius works to provide rotation of the thigh outward from the center of the body, which enables a steady walking gait.

The gluteus medius attaches to the leg at the top of the femur (thigh bone), close to the hip joint, on a bony prominence called the **greater trochanter**. The greater trochanter is a ridge on the femur (thighbone). The muscle attaches at the other end to the ilium, which is part of the big pelvic bone.

Weakness in the muscle, nerve damage, or problems with the muscle (or structures where it is attached) can cause a limp to develop, such as the Trendelenburg gait. This is an abnormal walking form where a person's hip drops on the side opposite the damage or weakness, giving their gait a hobbled appearance.

Function. Along with the gluteus medius and tensor fasciae latae, the gluteus minimus serves as the primary internal rotator of the hip joint. The gluteus minimus helps with abduction (**movement** away from the midline of the **body**) and medial (inward) rotation of the thigh at the hip.

## Gluteus minimus

The **gluteus minimus** is one of the secondary muscles that can produce hip extension. This muscle is located deep and somewhat anterior to (in front of) the **gluteus medius**. It is a broad and triangular muscle.

The gluteus minimus and gluteus medius are separated by deep branches of the superior gluteal neurovascular bundle, a group of nerves and blood vessels.

The gluteus minimus emerges from the external surface of the ilium, part of the large pelvic bone, between the base and the front of the gluteal lines, bony ridges on the ilium that are used to mark the attachments of different gluteal muscles. It inserts into the greater trochanter of the femur, which is a bony prominence located at the top of the thigh bone, near the hip joint.

Along with the gluteus medius and tensor fasciae latae, the gluteus minimus serves as the **primary internal rotator of the hip** joint. The gluteus minimus helps with abduction (movement away from the midline of the body) and medial (inward) rotation of the thigh at the hip. Together with the gluteus medius, it acts to stabilize the hip and pelvis when the opposite leg is raised from the ground. Meanwhile, the tensor fasciae latae helps to internally rotate the hip joint.

Function. **Gluteus medius** is the prime mover of abduction at hip joint. Anterior portion of **Gluteus medius** abduct, assist in flexion and medial rotation of hip. Posterior portion of **Gluteus medius** abduct, assist in ext and lateral rotation of hip.