

## Anatomy of the Hip

### Overview

The hip joint is the largest weight-bearing joint in the body. This ball-and-socket joint allows the leg to move and rotate while keeping the body stable and balanced. Here are the main parts of the hip joint's anatomy.



### Bones

Two bones - the femur and the pelvis - meet at the hip joint. The femur, known to many as the "thighbone," is the longest and heaviest bone of the body. The femoral head, at the top of the femur, is the "ball" of the hip joint. The pelvis provides the "socket" of the joint. The pelvis is a bone made of three sections: the ilium, the ischium and the pubis. The socket (the acetabulum) is located where these three sections fuse. The head of the femur fits tightly into this cup-shaped cavity.

### Articular Cartilage

The femoral head and the acetabulum are covered with a layer of articular cartilage. This tough, smooth tissue protects the bones, allowing them to glide smoothly against each other as the ball moves in the socket.

### Soft Tissues

Several soft tissue structures hold the femoral head "ball" securely in the pelvis "socket". The acetabulum is surrounded by a ring of cartilage called the acetabular labrum. This soft tissue structure absorbs shock and deepens the socket and helps keep the ball from slipping out of alignment. The ligament of the head of the femur anchors the ball to interior of the socket, while the exterior of the joint is wrapped within three large femoral ligaments.

### Conclusion

The hip joints are versatile joints, supporting your body while allowing you to perform a wide range of activities. Because they bear such a heavy load, hip joints are vulnerable to injury.