

Your Hips

By Jenna Reeder, DPT



Physical, Occupational and
Speech Therapy



The hip is a joint in our body that connects the trunk of the body to the leg. The joint is made by the long bone of the leg, femur and part of our pelvis, ilium. It moves in multiple directions which allows for the body to kick, go up and down stairs, step over obstacles, and change positions like standing and sitting.

Bones:

The hip is made up of two bones

- Head of the Femur
- Acetabulum of the Pelvis

Muscles:

- Flexors of the hip move the leg forward like you are kicking a ball or taking a step with your leg. The muscles that help flex the hip include: **iliopsoas, rectus femoris, Sartorius, tensor fasciae latae, pectineus, adductor longus, adductor brevis and gracilis**. These muscles are found in the front and sides of the thigh.
- Extensors of the hip move the leg backward like you are preparing to kick a ball or taking a step backward to sit in a chair. The muscles that help extend the hip include: **gluteus maximus, and the hamstring including bicep femoris, semimembranosus, and semitendinosus**. These muscles are found in the back of the thigh and buttock.
- Abductors of the hip move the leg out or away from our body like you are stepping sideways. The muscles that help to abduct the hip include: **gluteus maximus, gluteus medius, gluteus minimus and tensor fascia latae**. These muscles are found in the buttocks and outside of the thigh.
- Rotators of the hip turn our leg inward or outward and allow us to pivot on our leg to turn around. The muscles that help to rotate the hip outward include: **piriformis, gemellus superior and inferior, obturator internus and externus, and quadratus femoris**. Muscles that help to rotate the hip inward include: **tensor fasciae latae and gluteus medius**.



Common Pediatric Pathologies of the Hip:

Hip Dysplasia: is a disorder that has a spectrum from mild to severe. It presents as altered positioning of the femur bone and the ilium bones. It may occur at birth, in infancy and during childhood. It is common in female infants whom were in a breech position at birth.

Slipped Capital Femoral Epiphysis: is a fracture of the femur bone where it connects to the pelvis. It is a condition that occurs in teens and pre-teens during growth. The fracture causes pain, stiffness, and instability of the hip.

Perthes Disease: is a rare disease that occurs when the blood supply to the part of the femur bone that connects to the pelvis is disrupted.

How to keep them strong

Bike riding- When riding a bike you are using the hip flexors and extenders to move the pedals of the bike. Going up hills or on grass will add additional resistance for more strengthening.

Hop scotch- Single leg hopping uses more strength and power than jumping and will isolate leg muscle strengthening. Hopping can be done in different directions to strength all parts of the hip including forward, backward, side to side and diagonals.

Swimming- Water can be a great way to add resistance for strength and power. Kicking forward or backward across a pool uses a lot of strength from the hip muscles. Squatting, lunges, jumps and hopping in the water can also be a fun way to gain strength.

Seated Scooter- A ground scooter on wheels or big wheel toy uses a lot of leg muscles to move your whole body weight from place to place. What a fun way to gain strength.