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Women today are much more active compared to 30+ years ago. Women are running marathons, and there are more competitive women's sports leagues. As a result, our hips have the potential of being harmed during physical activity.

The hip is one of the most mobile joints of the body and is able to move in many different planes. As a result of its mobility, it has the potential to be an unstable joint if there are strength and range-of-motion imbalances. Many muscles, large and small, attach to the hip or around the hip which is how it is able to move in so many different directions. It can also be a major area where we experience pain. Unfortunately, women tend to experience hip pain more than men, and it is becoming more commonplace recently.

The hip is made up of the pelvis and femur the long bone of your thigh. The head of the femur meets the acetabulum, which is a socket on the sides of the pelvis, and forms what is known as the hip joint. In a perfect skeleton, the

## It's All in the Hips

head of the femur fits very nicely into the acetabulum. Within the socket, there is the labrum and ligaments that help to create the fit that is just right.

In reality, though, most people do not have a femur that fits perfectly in the hip socket. Everyone's anatomy is different: bones, muscles, tendons, and ligaments are all different in each individual. Some people have a femur whose head is too big for the socket (i.e., hip dysplasia) or a socket that is too big for the head of the femur.

This asymmetry can cause impingement of the labrum of the hips also known as femoroacetabular impingement (FAI). As a result, there is potential for injury of the labrum that can cause hip issues. As we get older, there are increases in bony prominences, like arthritis, that can cause more tearing and damage of the labrum.

One reason why women tend to have hip pain is our anatomy. Females tend to have wider and shallower hips compared to males. This variation allows females to carry a child for 9 months and give birth. Men also tend to have heavier and thicker pelvic structures compared to women. Their acetabulum is also larger compared to the female anatomy. Because

females have a smaller hip socket, their incidence of hip dysplasia is much greater. According to *Women's Health* magazine, the number of women treated for hip dysplasia compared to men is 20:1. So there is a greater potential for conditions like FAI and labral tears in women.

Not only is the female anatomy a potential culprit for hip pain, but our hormones and reproductive health can be suspects as well. During the menstrual cycle and pregnancy, our body releases a number of hormones including relaxin and estrogen. These hormones create laxity in our tendons and ligaments, which is great when a woman gives birth to a child; however, ligaments and tendons that are weak can cause instability in our joints. Unstable joints can lead to imbalances and weak muscles and pain. Even how the baby is carried in the womb can put stress on specific ligaments of the pelvis that lead to more instability.

Once the baby is born, how we carry a child can affect our hip musculature too. As noted, laxity can lead to instability and weakness. Once we start to hold babies in a certain way, then those musculatures start to strengthen and stabilize in those positions. Many women tend to hinge on one hip when they carry a baby. That is putting their weight onto one side of the hip to help hold the child up. This uneven strengthening on one side will lead to muscle imbalances. Thus, we have movement impairments when we walk or run that can lead to pain.

There is not much we can do to change the female anatomy and how are bodies are built, but we can change how we move and how our muscles activate.

Our hip muscles are some of the most important muscles in our bodies. They help us walk, run, lift, etc. Despite the importance of the hip muscles, they are often the most ignored when we work out. Runners, competitive players, and casual



exercisers need to make time for cross training, specifically strengthening of the hips. Squats, lunges, and hip raises in different directions are good general hip exercises that will help strengthen those muscles. Strengthening these muscles will provide stability in your hips and also stability down the leg in your knees and ankles.

If you are experiencing pain in your hips or elsewhere, see your local physical therapist or come visit us at WWS Physical Therapy. We are movement experts who can determine whether your hips and certain muscles are the offenders causing your pain and give you exercises to make those hips stronger.

Image:https:// midwestgoalieschool. com/2018/06/whygoalies-are-prone-todevelop-hip-injuriesand-what-you-can-doto-prevent-the m-ben-meirsdpt-shares-hisprofessional-insight/

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