

## **Mobility vs. Flexibility - What's The Difference?**

Before we get to that, let's first take a quick look at what we learned of the musculoskeletal system in school.

### **Recap of the musculoskeletal system**

The structure of the human body come from our bones, they are what give us form to our body. Attached to the skeletal system we have ligaments, tendons, muscles and other connective tissue. The role of which is to hold the body together.

Our muscles and bones are allowed to move because we have joints. Some are immovable joints, some are partially movable and the rest are freely movable. We're interested in the freely movable joints as that's what mobility and flexibility training pertains to.

All freely movable joints are allowed to move through a specific range of motion.

For example your elbow is only allowed to bend and extend a 180°, but not rotate. Your wrist and shoulder on the other hand can rotate.

### **What is flexibility?**

The predetermined range that every joint is allowed to move, is governed by how tight or loose it's surrounding muscles, tendons and ligaments are. The more lax they are the more the joint can move, the tighter they are the less the joint can move.

Flexibility is a measure of how tight or lax someone's, muscles, tendons and ligaments are, at a particular joint, within it's range of motion. Some of us are genetically predisposed to be more flexible than others. Moreover some of us can be flexible in some joints and less flexible in others.

It is important to understand that more is not always better. People with too much flexibility have a strong chance of hurting their joints, because a certain amount of tightness is required to hold the joint in place.

### **What is mobility?**

We know that every freely movable joint has a certain predetermined range of motion it's allowed to move in. Mobility is a measure of how much range of motion you can control.

Try this out:

- Lie on your back and pull one knee up to your chest, using your hands. Notice how close you can get that knee to your chest
- Now stand up and try to pull the same knee up to your chest, without using your hands. See if your knee comes up that high.

Chances are you won't be able to get it to the same height. That is because your hip joint is flexible enough to allow your leg to move up that high. But the muscles around the hip responsible for moving your leg are unable to do so. Simply put, you have flexibility but not mobility.

Mobility encompasses flexibility and strength. The muscles responsible to pull your knee up may be strong enough to get it to a certain height, but beyond a point they lack the strength to do so, because we haven't trained the muscle in that range of motion.

Stretching and working on flexibility has its uses (recovery and warming up), but focused mobility exercises are far better at increasing overall flexibility than just stretching.

*Author Note:* This article was written by **Arun Pandiyan** for The Quad.