

## MOVEMENT is MEDICINE!

Movement can reliably change brain function, physical function, and pain responses in regard to knee pain and arthritis.

MUSCLE  
MASS PEAKS  
AROUND AGE

30

DECREASES 3-8%  
PER DECADE

DECREASES  
FASTER  
AFTER AGE

60

### THE GOOD NEWS!

You can gain muscle strength at any age, with **CONSISTENT AND PROGRESSIVE** exercise. This can have a positive impact on symptoms associated with arthritis & knee pain!

**KNOCKED KNEES** (genu valgus) frequently occurs due to weakness at the hip, allowing the knee(s) to collapse inward. Long term this can lead to arthritic changes and dysfunction. Physical therapy can help you strengthen the affected areas to improve function and reduce progression over time.



Knee Valgus  
Force



Medial  
Collapse



**MEDIAL KNEE COLLAPSE**, as shown to the left, can also be an issue for **ATHLETES**. When your knee collapses inward with running or jumping, you are at increased risk for knee injury and ACL disruption. Much of this is related to hip strength and control, quadricep, hamstring strength, which your PT team can help you with!

**KNEE MENISCAL TEARS** are also common and can present as catching & locking, decreased range of motion, pain, difficulty walking, and sometimes swelling. PT can be **JUST AS EFFECTIVE** as surgical intervention!

**PROPER MOVEMENT MECHANICS** are imperative for healthy knees. Activating the right muscles, at the right time, can play a key part in healthy knees, and avoiding long term pain! Your physical therapy team will instruct in correcting improper movement patterns that are inhibiting your quality of life.



## EVERYTHING IS CONNECTED!

Core strengthening enhances foundational support, improving function in both the upper and lower body, including your knees!



**SQUATS** can commonly be a painful movement. But often times we can make adjustments to how you move, to make that type of movement more comfortable & functional for life tasks! Everyone has their own unique squat form, which can be assessed and improved when working with your physical therapy team!

When we focus on **KNEE EXTENSOR (QUADRICEP) STRENGTH**, this can drastically improve perception of knee pain, while at the same time being a very safe and effective way to move and **PROTECT** many joints! Quadricep strength is imperative when dealing with any level of arthritis.

**KNEE TAPING METHODS** can be a helpful treatment tool during your course of PT. Taping can help your neuromuscular system improve movement patterns to help you move better & avoid pain. Ask your physical therapy team about your options!

