

Feel your best, perform your best.

# "Know" Knee Pain Program

## **Objectives:**

1.To Learn the Common Causes of Knee Pain
2.To Learn How to Manage Knee Pain
3.To Learn How to Correctly Perform the Exercises

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#### **About The Author Jesse Mehring**



Dr. Jesse Mehring is a physical therapist, athlete and certified personal trainer. On top of receiving his doctoral degree in Physical Therapy from Ohio University, Jesse is also an exercise physiologist. Dr. Mehring grew up playing competitive football, baseball and basketball from a young age through his high school career in Cincinnati, OH. After completing his doctoral degree, Jesse went on to work in multiple states and healthcare settings helping high school athletes, college athletes, powerlifters, veterans, elderly, and the general population to get rid of their pain and reach their health and wellness goals.

He has a passion for utilizing his advanced exercise physiology and personal training background along with his training in manual therapy, dry needling, bloodflow restriction training (BFR), and osteopractic manipulations to help his clients feel their best and perform their best. His goal is to help as many people as possible get out of pain, perform their best and be the best version of themselves overall. When not working, Jesse enjoys being outside, lifting weights, spending time with his German shepherd and terrier, hanging out with friends and family, sports of all kinds and playing guitar.

#### Introduction

The knee is one of the simplest joints in the body, a hinge joint. It opens and it closes, similar to the way a door hinge would. Not much else going on there besides that. So, this begs the question, why do we see so many injuries there? I'm glad you asked! Clinically, I see 3 main factors contributing to knee pain and injury(s):

- 1. Lack of Hip Abductor Strength
- 2. Lack of Hip Joint Mobility
- 3. Lack of Muscular Length/Flexibility

This guide will show you how to address the common impairments above quickly and effectively from wherever you are with minimal time and equipment required.

# "Know" Knee Pain

**You'll need**: a thick resistance band, a solid post or squat rack, a lacrosse ball/tennis ball/racquetball, a foam roll or soccer ball, 10-20 minutes & ab mat

# Technique #1

## **Anterior Hip Opener**

Hip flexor tightness is a HUGE contributor to knee pain. Use this technique to stretch out your hip flexors with only a resistance band and a squat rack or solid post.

<u>Equipment:</u> Band, Squat Rack/Post, Pad for Under Knee <u>Steps:</u>

- 1. Secure Band Around Squat Rack
- 2. Put Leg Through Band
- 3. Step Back with That Leg and Kneel on Knee
- 4. Breathe Out and Tighten Core
- 5. Squeeze Your Glute (buttcheek) on Side of Band
- 6. Hold for 1-2 minutes



Link: W ANTERIOR HIP OPENER W - YouTube

# **Technique #2**

## **Lateral Hip Opener**

Lack of hip joint mobility contributes heavily to knee pain. Use this technique to get the hip range of motion you require.

<u>Equipment:</u> Band, Squat Rack/Post, Pad for Under Knee

Steps:

- 1. Secure Band Around Squat Rack
- 2. Put Leg Through Band
- 3. Step Out from Rack w/ Side of Hip Facing Rack
- 4. Get on All Fours
- 5. Rock Back Towards Your Heels
- 6. Turn Foot on Band Side Inward Underneath You
- 7. Put Opposite Leg Back Behind You w/ Toes on Floor
- 8. Let Hips Drop Towards Band
- 9. Hold for 1-2 minutes

<u>Link</u>: <u>₩Lateral Banded Hip Opener ₩ - YouTube</u>

Lateral Banded

lip Opener



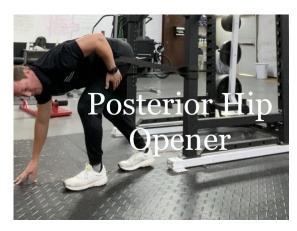
## **Posterior Hip Opener**

Hamstring tightness is extremely common in all individuals and an essential impairment to address when treating and preventing knee pain. Get your hamstrings stretched out with this technique.

Equipment: Band, Squat Rack/Post

#### <u>Steps:</u>

- 1. Secure Band Around Squat Rack
- 2. Put Leg Through Band
- 3. Face Away from Rack
- 4. Step Out from Rack w/ Banded Leg
- 5. Get in a Lunge Position
- 6. Bend Forward and Put Hands On Floor
- 7. Keep Foot Flat to Ground THE WHOLE TIME on Band Side
- 8. Straighten Knee of Banded Leg While Going Up on Toes on Other Leg
- 9. Perform 15-20 "Passes" Each Leg



**Link:** Posterior Hip Opener - YouTube

## **Technique #4**

## **Quad Self Release STM**

#### w/ Lacrosse Ball



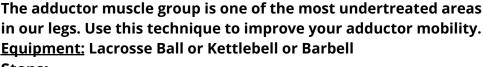
Quad tightness and IT band tightness are significant contributors to knee pain. Free up your quads and IT bands with this technique. Equipment: Mat, Lacrosse Ball or Racquetball or Tennis Ball Steps:

- 1. Lay Flat on Stomach
- 2. Put Lacrosse Ball Under Leg Just Above Knee
- 3. Find A Tender Spot on Ball
- 4. Bend Knee and Straighten Knee 10 Times
- 5. Move Ball to Mid Thigh
- 6. Repeat Steps 3 & 4
- 7. Move Ball Up by Hip
- 8. Repeat Steps 3 & 4
- 9. Perform on Each Leg in All 3 Locations

Link: PQUAD SELF RELEASE STM W/ LACROSSE BALL P - YouTube

# **Technique #5**

#### **Adductor Smash**





- 1. Lay on Your Stomach
- 2. Bring Leg Out to Your Side
- 3. Put Ball in Middle  $\frac{1}{3}$  of your thigh on Inside of Leg
- 4. Let Leg Sink into Ball Feeling Muscle Tension Release
- 5. Roll Ball Back/Forth & Up/Down 5-10x
- 6. Perform on Both Legs



**Link:** Adductor Smash - YouTube

## **Technique #6**

#### **Bretzel Stretch**

Lack of Mobility in our mid and upper back, as well as in our hips, can lead to knee pain, particularly with running. Use this technique to work on your core rotation & hip mobility.

<u>Equipment:</u> Foam Roll or Soccer Ball

#### Steps:

- 1. Lay on Your Side
- 2. Place Top Leg in Front of You on Foam Roll/Ball w/ Knee Bent
- 3. Reach Behind You with Top Arm & Grab Your Ankle
- 4. Pull Your Leg Back Behind You Until Knee is Pointing Directly Down
- 5. Put Opposite Arm Out in Front of You in Relaxed Position
- 6. Press Knee into Foam Roll/Ball
- 7. Holding Pressure Against Foam Roll/Ball w/ knee, Take a Deep Breath In
- 8. Breathe Out and Let Your Top Shoulder Fall Back
  Towards Floor
- 9. Perform 5-10 Breaths Each Side w/ Goal of Getting Shoulder Blade As Close to Floor As Possible

Link: ☐Bretzel Stretch for Thoracic Mobility ☐ - YouTube

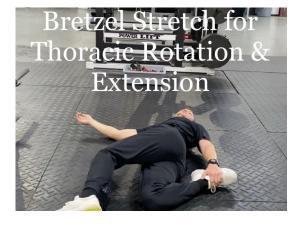
# Technique #7

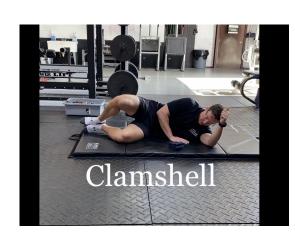
## **Clamshells**

Hip weakness is THE BIGGEST strength deficit I see in knee pain clients. Strengthen your hips with this exercise. Equipment: Mat

#### Steps:

- 1. Lay on Your Side
- 2. Bend Your Knees w/ Feet Behind You & Knees in Front
- 3. Roll Your Hips Forward and Put Top Hand on Floor in Front of You
- 4. Tighten Core as if Flattening Your Back
- 5. Squeeze Your Glute (Buttcheek) On Top Side
- 6. <u>Keeping Core Tight and Hips Rolled Forward w/ FEET TOGETHER, Slowly Lift Top Knee Up Towards Ceiling</u>
- 7. Hold for 3 Seconds at Top of Motion
- 8. Perform Both Sides for 3 Sets of 5-12 repetitions
- 9. Add a Band for Resistance as You Progress





Link: @CLAMSHELLS@ - YouTube

#### **Medical Disclaimer**

The information given in this report is not intended to replace prior medical advice regarding your symptoms. We provide information based on representation of injuries commonly seen in our facility. Each person's injury is individually specific and can have various recovery or need for treatment based

upon medical history, genetics, background, movement, and prior medical advice. We cannot guarantee 100% diagnosis and prognosis, nor can we provide fully accurate management strategies without a physical examination from a skilled PT at Superior Physiotherapy & Performance, LLC.

We can offer examination services at a standard rate. Risk of injury can increase if you do not seek appropriate professional advice for your condition. This report does not guarantee specific results for your condition.