ROWING STRONGER

Mobility for Rowers

Targeted mobility, strength, and stretching exercises to make you a better, healthier, faster rower.

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Disclaimer

This content is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay in seeking it because of something you have read here. The strategies outlined in this e-book are intended for maintaining health and good range-of-motion or providing the tools to correct minor imbalances. It is ALWAYS best to get the advice of a medical professional in-person.

Rowing Stronger

The online home of strength training for rowing.

I'm a strength coach who just wants everyone to row stronger so they can row faster, healthier, and longer.

As a junior rower, I tried it all from bodybuilding programs to powerlifting to Crossfit to high-rep machine-based training and it was always missing something. I was getting stronger in the gym, but it wasn't carrying over to my water performance or erg times. Now I know why, and I want to share that with you and how you can do things differently to train better than I did and be faster than I was.

Mobility is one of those vital aspects that I failed to maximize as a rower. There are sport-specific demands in rowing that do not exist in other sports and merit specific training. This is even more so for sweep rowing than sculling. Read on for how you can unlock stronger muscles, faster speed, and a healthier body through just 10-15 minutes a day of dedicated static and dynamic stretching, self-massage (foam rolling, lacrosse ball, etc.), and muscular activation work.

Thanks for reading!

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Introduction

With its unique demands as a seated sport, rowing requires an aggressive mobility regimen to avoid decreased performance, pain, and injury.

Learn how to effectively target these problem areas with a combination of self-manual therapy, dynamic stretching, and static stretching for improved performance and longevity in the sport.

For most athletes, practicing and competing in their sport is a daily break from the usual routine of sitting necessitated by the lifestyle of a student or desk-bound employee, but not so for rowers. While mobility work is important for all athletes, without dedicated attention to specific target areas, rowers can develop severe mobility restrictions that can decrease performance and lead to both short-term and long-term pain or injury.

First, we should understand broadly what "tightness" is and why mobility becomes restricted. "Tightness" has less to do with the structure of a muscle, and more to do with nervous system feedback, as very few people have muscles that are inherently too short for their skeletons. True structural problems in muscles occur when a muscle is torn or artificially kept in a shortened position for an extreme amount of time, such as an arm kept in a sling for 6-8 weeks. Instead, when someone says, "my _____ is tight," what they likely mean is, "my nervous system recognizes my instability in a fully stretched position and will not allow me to reach that point."

The important takeaway is that end-limit flexibility is not the be-all-end-all to the mobility issue. Pure flexibility does not necessarily equate to stability, which is often the real reason movement is restricted. If you cannot support or stabilize yourself in a given position, the nervous system will continue to restrict range of motion to keep you out of that position. You also need to gain strength and stability in those flexible positions, or your flexibility on the yoga mat won't carry over to the boat. This is done with strength training and disciplined attention to technique in the boat. Every flawed

stroke pulled is another that needs to be un-done and corrected before a new motor pattern can take place. Steady state rowing and erg training is a great way to train for postural and technique improvements at lower intensities. Simply row or erg until your form breaks down, rest, do some of the mobility work, and then do it again. Changing a technique or habit is painstaking, but well worth it to achieve greater performance, longevity in the sport, and decreased chance of injury.

Many rowers have mobility problems that restrict their ability to fully compress in the catch position or to get adequate torso angle and reach on the recovery. Rowers who bend excessively at the lumbar spine, round excessively in the mid and upper back (hunchback posture), or lose control at the catch resulting in inconsistent blade placement are common exhibits of mobility restrictions.

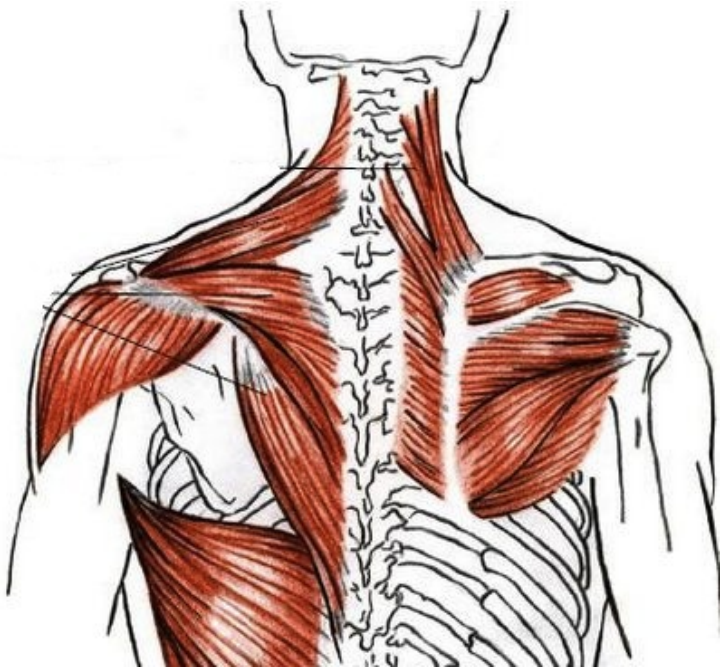
In order to enact significant, lasting change, none of the approaches outlined in this series should be used as "one and done." A dedicated comprehensive program that involves all modalities from manual therapy (foam rolling or massage) to stretching to strength training is critical. I recommend focusing on one problem area at a time, at least one 10-15 minute session per day. Spending 20 minutes a day working on mobility for 2-3 weeks while watching a TV show, for instance, is a great way to progress toward full function. Foam roll, perform self-manual release on specific trigger points, and stretch, then make sure to perform additional strengthening exercises while implementing proper form into your rowing and erging training. Also, be cognizant of posture throughout the day. Many times, those with thoracic restrictions will spend much of the day hunched over between work, driving, home, and daily activities. Once full function is achieved, daily maintenance is simply performing daily activities from that now-strong position that your body can now adopt as normal positions.

The Thoracic Spine

Restriction: Thoracic spine

Location: Mid back, vertebra T12 to T1

Muscles: The Thoracic spine includes the scapular muscles (supraspinatus, infraspinatus, teres major/minor), posterior deltoid, rhomboids, lower/middle trapezius, and latissimus dorsi muscles.



Test: Easy thoracic spine mobility test. If you can't maintain contact between your hand and low back while reaching overhead with the other arm (keep it straight), there is a restriction.

Rowing fault: Hunchback posture, inconsistent handle heights, over-reaching at the catch.

Explanation: Restriction of these muscles most often displays as a rounded upper back, referred to as thoracic kyphosis or hunchback posture. The inability to reach thoracic extension or maintain a neutral thoracic spine under load causes uneven handle heights and difficulty with a "soft hands" approach at the catch, as rowers will naturally round further at the catch, making it more difficult to smoothly place the blade in the water. This also may look like overreaching, but it is really just what the rower perceives as a neutral spine because neutrality feels like extension to them. Finally, hunchback posture puts great stress on the anterior side of the spine, compressing discs and possibly causing damage to the thoracic vertebrae, especially when under load.

Watch the Video

The Fix

Start by foam rolling broadly over the mid back. Do not roll on the lumbar spine or the neck. Roll both up and down the middle of the back as well as on the sides of the back, by the latissimus dorsi. After a few broad strokes up and down the back, begin at the bottom of the mid back and hinge up and down over the foam roller, moving up one vertebra at a time. Remember to not do this on the lower back or upper back. Further self-manual release work can be done with a lacrosse or tennis ball if you find one particular spot of tightness, commonly referred to as a trigger point. "The Peanut" is of great use for self-manual therapy on the thoracic muscles, as is a Theracane in my personal experience. With any specific trigger point work, take special care to avoid rolling directly over vertebrae or bones, as this will cause pain. Once you have worked through the thoracic spine, move on to the stretching shown in the video.

Strength Training

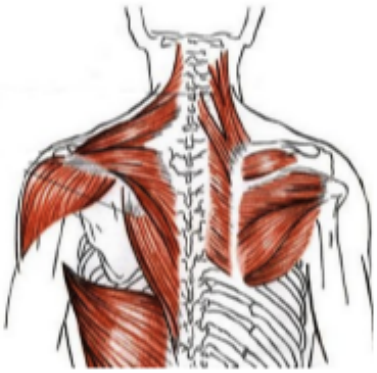
The strict overhead press, face pull, Y-W-T raise, pull-up, and front squat will improve the strength and postural endurance of the scapular and postural muscles of the mid back and shoulder region. The Sotts Press is also a useful activation and strengthening exercise, as seen in the mobility video. Strict attention to form to keep shoulder blades depressed and externally rotated, also referred to as "packed," is essential.

MOBILITY FOR ROWERS

The Thoracic Spine

Location

Scapular muscles
Rhomboids
Lower/middle trapezius
Latissimus dorsi



In the Boat

Hunchback posture
Inconsistent handle heights
Over-reaching

In the Body

Disc damage
Shoulder pain
Neck pain

The Fix

1. FOAM ROLL	Roll and hinge, lacrosse or tennis ball for trigger points
2. STRETCH	Bench & Wall Stretch
3. STRENGTHEN	Overhead Press, Facepull, YWT Raise, Sotts Press, Front Squat

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The Hip Flexors

Restriction: Hip flexor

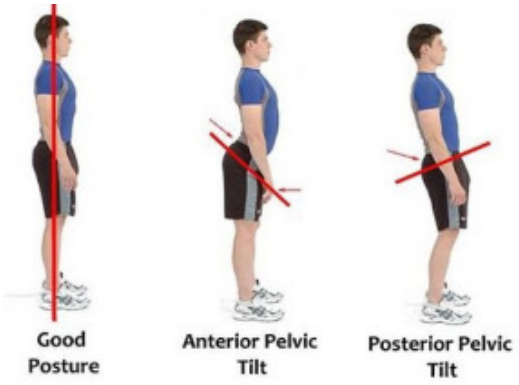
Location: Anterior upper thigh

Test: Test hip flexor tightness using The Thomas Test

Rowing fault: Poor compression at the catch, poor reach during recovery

Explanation

The main muscles we'll focus on include the rectus femoris muscle of the quadriceps and the tensor fasciae latae ("ten-sir fasha latay" or just TFL). Hip flexor restriction is a major problem for rowers. Spend all day sitting in a chair, at a desk, at work, in the car, then sit for another couple hours a day on an erg or in the boat in a sport that doesn't train hip extension, and you get restricted hip flexors. This is a major cause of low back pain, common with many rowers, as well as poor gluteal function and inefficient drive mechanics. Tight hip flexors can also cause anterior pelvic tilt (APT), which results in slack hamstrings, weak glutes, and lumbar lordosis, which all contributes to an inability to sit up straight while rowing. Additionally, the hip flexors often contribute to snapping hip syndrome, a common complaint among rowers, which often results from a tight or restricted rectus femoris. I dealt with this as a rower and still have to perform regular work to avoid recurrence.



The Fix

Begin by foam rolling the quadriceps broadly, as well as the lateral (outside) portion of the thigh. The rectus femoris muscle of the quadriceps runs right up the middle of the thigh and is the only quadriceps muscle to cross both the knee and the hip joint. It is very often restricted in rowers, especially in those who pull themselves up the slide. Work up to the top of the pelvis, but avoid rolling directly on bones as this can be painful. After a few broad strokes, get a lacrosse or tennis ball and work back up the

rectus femoris before positioning it on the tensor fasciae latae muscle, located at the top of the thigh. Spend some time rolling over that area, attempting to find a trigger point, then do the same on the opposite leg. Following the self-manual therapy, begin to stretch with either a lunge stretch or the 3-way hip opener. If these stretches are easy, proceed to the couch stretch. I suggest stretching each hip flexor for bouts of 2-3 minutes at a time, progressively trying to attain a deeper stretch throughout that period. The hip flexors spend so long in a shortened position (ie when sitting) that it can take a long time to enact change on these tissues.

Watch the Video

Strength Training

Hip flexor problems most often result from tightness, rather than weakness. Thus, strengthening exercises in this case is mostly about strengthening the muscles around the hip flexors so the hip flexors are relied upon less. Bilateral exercise can contribute to hip flexor tightness, as the hip flexors contract strongly to maintain an upright torso. Single leg exercises, on the other hand, stretch the non-active hip flexor (the back leg) while working the front leg. For this reason, as well as the fact that single leg exercises can help even out bilateral imbalances resulting from sweep rowing, single leg squats are a staple of my rowing programs. Additionally, exercises that emphasize full hip extension will work the hip flexors through a complete range of motion. Banded good mornings, Romanian deadlifts, and hip thrusts or glute bridges are great for strengthening the posterior chain muscles and reaching full hip extension.

MOBILITY FOR ROWERS

The Hip Flexors

Location

Rectus femoris
Tensor faciae latae

In the Boat

Poor compression
Poor reach

In the Body

Low back pain
Anterior pelvic tilt
Snapping hip

The Fix

1. FOAM ROLL	Roll, lacrosse or tennis ball for trigger points
2. STRETCH	3-Way Opener, Lunge, Couch Stretch
3. STRENGTHEN	Single-leg squats, full hip extension exercises

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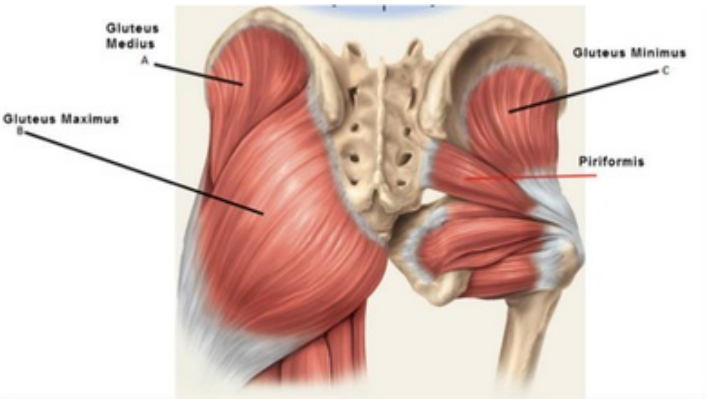
The Glutes

Restriction: Piriformis, gluteus medius and maximus

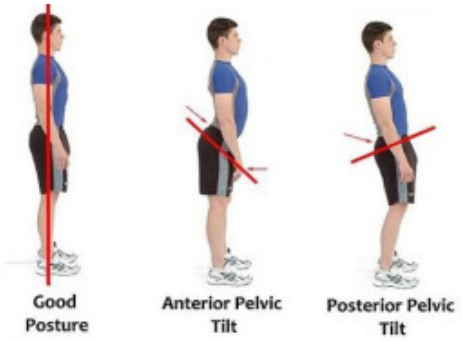
Location: Posterior hip, "the butt muscles"

Rowing fault: Poor compression at the catch, poor leg drive, shortened reach during recovery



Explanation

On the opposite side of hip flexors, the gluteal muscles are in a constant semi-stretched position during long bouts of sitting. Because full hip extension is never reached in rowing, the hip extensors are not often worked through their full range of motion. Inhibited compression, posterior pelvic tilt, and poor reach during the recovery are common results from gluteal restriction. Legs splayed during the recovery or at the catch is also common with rowers with tight glutes. Similar to hip flexor tightness, restricted glute muscles can be a culprit of back pain as the muscles all interact with the lower spine and hip region.



The Fix

With one leg crossed over the other, begin by foam rolling over the glute muscles broadly. If you find a trigger point with just the foam roller, work it for a couple minutes. Next, repeat with a tennis, softball, or lacrosse ball (ordered in ascending intensity). This should really allow you to dig in to the glute muscles, particularly the piriformis. Repeat on both sides of the hip, then move on to static stretching. The pigeon stretch, figure-four, and lying glute stretch are the main stretches I use for tight glute muscles. I find that the specific trigger point work can be done at least once daily for an athlete who has a problem with their glutes.

Watch the Video

Strength Training

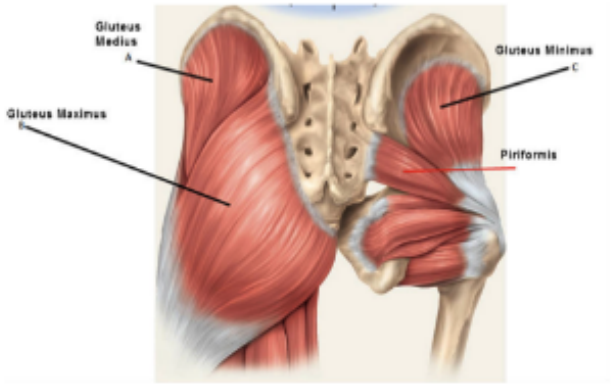
First, I have my rowers do a glute activation hip warm-up sequence before every lower body session, and encourage them to do it before every rowing session. This sequence ensures that the hip flexors are being stretched and the glutes are being worked through a full range of motion at least once per training session. This helps keep them mobile before getting in a boat or on an erg. Including exercises that work the hips through a full range of extension motion is critical to strengthening the glute muscles. Banded good mornings, Romanian deadlifts, X-Band walks, and bilateral and unilateral hip extensions (thrusts or bridges) are always included in my rowing programs. Additionally, squats are great for gluteal development as well as leg drive power.

MOBILITY FOR ROWERS

The Glutes

Location

"The Butt Muscles"
Gluteus maximus
Gluteus medius
Piriformis



In the Boat

Poor compression
Poor leg drive
Shortened reach
Legs splaying at catch

In the Body

Low back pain
Anterior pelvic tilt

The Fix

1. FOAM ROLL	Roll, lacrosse or tennis ball for trigger points
2. STRETCH	Pigeon, Figure-4, Lying Stretch
3. STRENGTHEN	Activate, band good mornings, RDL's, hip extensions, squats

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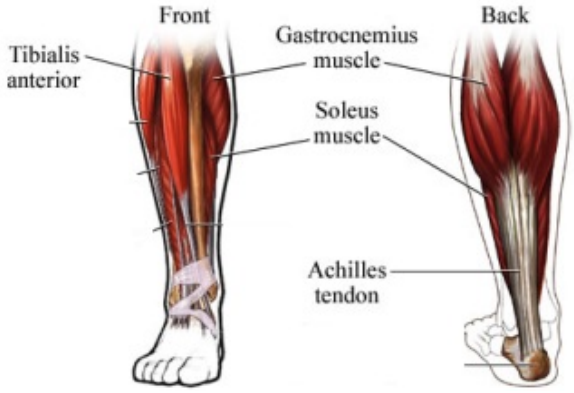
The Ankles

Restriction: Ankle mobility

Rowing fault: Poor compression, splayed legs at the catch, poor leg drive at the catch from being in an unstable position

Explanation: Poor ankle mobility results from muscles of the lower leg, including the calf muscles of the soleus and gastrocnemius, and the tibialis anterior and posterior, and even the plantar fascia. The plantar fascia is a sheet of connective tissue covering the muscles on the bottom of the foot. Any or all of these tissues can become restricted to result in poor mobility of the ankle, which will limit the rowers' ability to get to full compression without another fault at the catch. Rowers with restricted ankles may splay their legs at the catch, lift excessively from the heels, or round at the lumbar spine (posterior pelvic tilt) to compensate for the lack of ankle mobility. Knee pain, ankle pain, and shin splints can result from restricted muscles of the lower leg.

The Fix



In a seated position with one leg outstretched, begin by foam rolling the calf muscles one leg at a time, covering both the middle portion (gastrocnemius) of the calves as well as the outer portion (soleus). Go slowly and methodically. If this is too easy, place one leg on top of the other to add pressure to the bottom leg receiving the manual therapy. Once you have made several broad strokes over the calves, use a tennis/lacrosse ball to go through again and search for trigger points. Work from the base of the ankle all the way to the top of the lower leg, sitting on each painful point for at least 30 seconds. You may then do the same on the tibialis anterior, the large muscle running along the shinbone. Use only the tennis/lacrosse ball, not the foam roller, and be careful not to roll along the shinbone. Sitting in a chair or on a bench, place the ball under one foot (no shoes, bare feet or socks for this part) to roll the plantar fascia. Apply pressure as necessary, just roll over the area. This is great to do while on the computer, watching TV, etc. Once repeated for both sides, move to

dynamic stretching for the ankles as shown in the video. Make sure to keep your weight on the heel throughout the movement. After dynamic stretching, try to sit in the “third world squat” for 2-3 minutes. This will be difficult for many on the first attempt, but this is great to do for full ankle range of motion.

Watch the Video

Strength Training

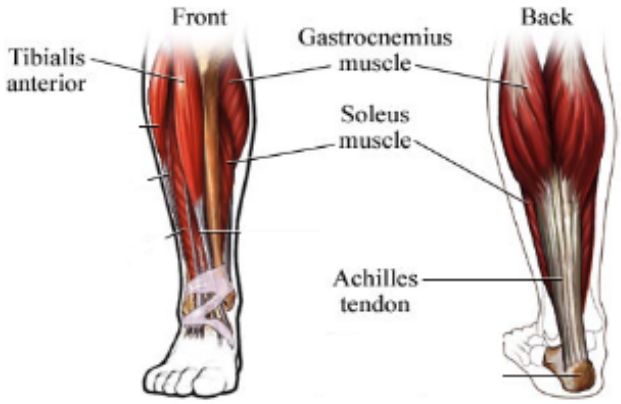
The calves tend to need more loosening than strengthening. However, the gold standard for calf function is 10 full range unilateral calf raises with a 1-2 second hold at the top and minimal external support. This is a great exercise to do while waiting in line at the grocery store, talking on the phone, etc., and can be easily worked in to a daily regimen if so desired. Squats, deadlifts, and rowing training will strengthen the calves as well.

MOBILITY FOR ROWERS

The Ankles

Location

Soleus & Gastrocnemius
Tibialis Anterior
Plantar Fascia



In the Boat

Poor compression
Legs splayed at catch
Poor leg drive at catch

In the Body

Knee & Ankle Pain
Shin splints
Gait problems

The Fix

1. FOAM ROLL	Roll, lacrosse or tennis ball for trigger points & plantar fascia
2. STRETCH	"3rd World Squat," Dynamic stretch, classic calf stretch
3. STRENGTHEN	Single-leg calf raises

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Exercise Index

Check out my free Youtube Exercise Guide for 50+ videos demonstrating and coaching the lifts used in this guide and the rest of my rowing programs.

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