



# Active Releases: Purpose and Demo

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# Active Release: What Is It?

- Active Release is a strategy that all of the clinicians at React utilize on a daily basis during our treatments.
- Active release is a technique that targets adhesions (tightness) within a muscle that are preventing that muscle from contracting and lengthening properly. Those adhesions can also limit blood flow and proper nerve firing. Eventually this leads to poor alignment/posture and pain
- Our goal, is to break up those adhesions to improve the extensibility of that muscle, which will allow for improved contraction and firing of that muscle. This will improve circulation to the tissue in that region, and greater circulation leads to faster healing
- Decreased tension -> decreased inhibition -> improved activation -> an effective muscle (<https://bereact.com/the-active-release-explained>)

# Why Active Release?

- Pain
  - Muscular
  - Joint
- Posture
  - Sitting
  - Standing
- Movement Patterns and Biomechanics
  - Poor motor planning during exercise: runners, weight lifters, aerobics, etc
  - Repetitive functional tasks: frequent bending/lifting, stair climbing, reaching overhead, looking side to side at monitors, etc
- All of these play off each other and need to be addressed for full recovery

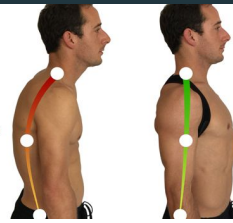
# Pain

- Trauma, sports related injury, falls, etc (any movement or contact that results in an injury to bone or soft tissue)
- Once we experience pain, we begin to move differently to avoid motions that will aggravate our pain. This is called “guarding”, where the muscles around the site of injury or in that limb become very tight because they think that if they allow that joint to move, it will result in increased pain
- I.e: while stepping off a curb, I sprain my R ankle causing pain and bruising. In the following week, I stop putting as much weight through my R leg. This results in the muscles in your R leg to stop working properly, leading to decreased activation and excessive tightness. Active release allows us to turn those muscles back on so that proper motion can be restored.

# Posture - Sitting Examples

## BAD POSTURE

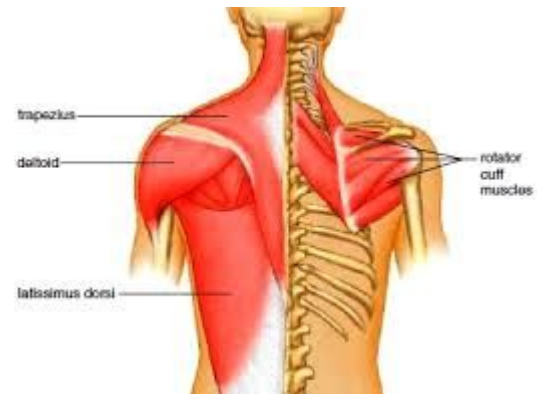
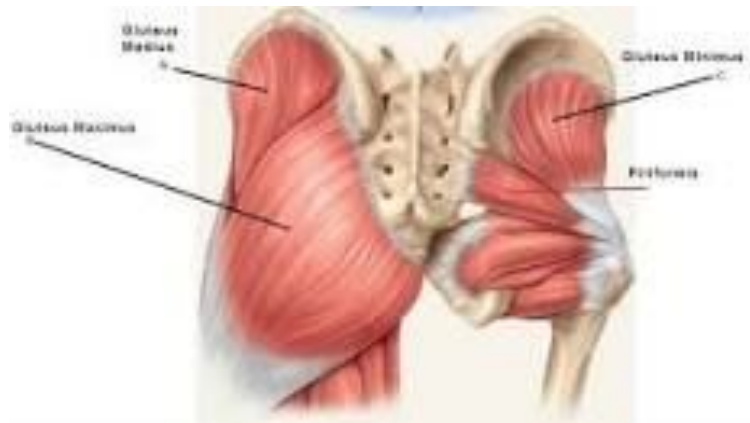
- Slouched shoulders
- Hunched back
- Extended neck



## GOOD POSTURE

- Relieves back & neck pain
- Improves confidence
- Helps realign your body

- Hips - for those of us who are sitting frequently throughout the day, our hips are staying in flexion for extended periods of time. This will cause excessive tightness of our hip flexors and weakness of our hip extensors (glutes!). By “releasing” your hip flexors, your hips will be able to extend further, which will allow for greater firing of your hip extensors.
- Shoulders- a lot of us elevate our shoulders and hunch at our mid back during prolonged sitting; we are fighting gravity. This will cause tightness of our pecs and upper shoulder muscles, and weakness of our mid back and shoulder blade muscles (lats!). We need to address that tightness to restore normal posture, before activity.
- Proper posture puts those weaker muscles at a more advantageous position to fire.



# Movement Patterns and Over-Facilitation

- Regardless of what is causing the poor movement patterns from tight muscles, whether its pain or posture, the body has to adapt
- Our bodies will always take the path of least resistance; if doing the bare minimum allows us to complete a task, our body will comply - meaning we can get by using a few muscles rather than all of them
- What results is overfacilitation of certain muscles that pick up the slack of other muscles that are not firing - those of you who have had issues with rotator cuff tendinitis, patellar/knee cap pain, piriformis syndrome are a few examples here
- Active release allows us to “turn off” those muscles that are doing too much and work on activating those bigger muscles that haven’t been working; hamstring <-> glute.
- Active release can reset the system

# Benefits of Active Release Review

- Decreases muscular guarding at the site of an injury which can lessen or even eliminate pain
- Improves extensibility of overly-tight muscles resulting in greater motion at your joints and more effective muscle firing
- Restores normal posture and proper bony alignment, which provides your muscles a greater opportunity to activate
- Eliminates faulty movement patterns and allow your muscles to work as one unit



# When Do Should You Do Active Release

- The more the merrier
  - Definitely before activity - ensures our all of muscles are firing properly
  - Morning - for those who have a lot of tightness/pain due to sleep positioning
  - Out of alignment
- Only when your in pain? Not always
  - Active release can be more beneficial in injury prevention, rather than as a treatment for pain
- Post Activity?
  - Symptom dependent: if you have pain after exercise, you can use releases to reduce that pain

# Demonstration

- Next I will give a demonstration on how to do self-releases so that you can learn to lessen your pain and improve your posture on your own
- The muscles I have picked to go over are ones that I use most often in the clinic
- Remember that all of these demos are available on our React Youtube Channel as well.
- A lacrosse ball works best, but you can also use a golf ball, baseball, or tennis ball if that is all you have.
- I will not be going over any specific foam rolling techniques, but I can review a couple if anyone is interested.

# Active Release Guide

- Fish around the targeted muscle for a “hot spot”, meaning an area with increased soreness. You may not always find a hot spot, and that doesn’t mean you shouldn’t perform the release to that muscle
- Spend anywhere from 30-60 seconds on a muscle
- Ideally, you will feel the muscle release, or you will find that your range or smoothness of motion improves
- Try to stay relaxed throughout your body when targeting a muscle
  - Some muscles may be really sore and it is easy to tense up your body as a guarding mechanism; you will want to avoid this because it can delay or even prevent a muscle from releasing
- Be patient and take your time; proper release techniques can be a big contributor to achieving your rehab and exercise goals!