



EMPOWERED WITH EMILY

Warm Up and Mobility Guide

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WHY SHOULD WE WARM UP?

Warming up for your training session *isn't* just about lessening the chance for injury. Warming up optimizes your ability to reap the **maximal** benefits from exercise, with a body that has increased circulation, increased internal temperature, “turned on” muscles that intend to be targeted, and a prepared central nervous system, musculoskeletal system, and cardiorespiratory system.

HOW SHOULD WE WARM UP?

Our three pillars for warming up are **Circulate**, **Mobilize**, and **Prime**. You will use these three pillars in that order, and each to the extent necessary depending on the workout and your specific needs.

These three pillars are flexible, so it's important to understand your needs in each of the three pillars and how they may be different on any given day. This will be based on your readiness to exercise to ensure your warm up is optimal, yet still efficient.



STEP ONE: CIRCULATE

First, we want you to move your body to increase blood flow, and quite literally, warm up your body/increase internal temperature. This systemic warmup prepares your body to shuttle more nutrients to working tissues.

Depending on how active or sedentary you were just before going into your workout will change how much time is needed for this step.



Depending on your current state, you may require spending closer to 10 minutes on this step.

This would include:

- Early morning workouts / having recently woken up
- Sitting, driving, or generally being sedentary leading up to the session
- Being sore in muscle groups required for the workout

If you have been generally active in the time leading up to the session you may spend just a couple minutes here and then move on. This would include:

- Chasing your kids around
- Walking your dog
- Biking or walking to the gym

Circulate can be completed with any cardiovascular activity:

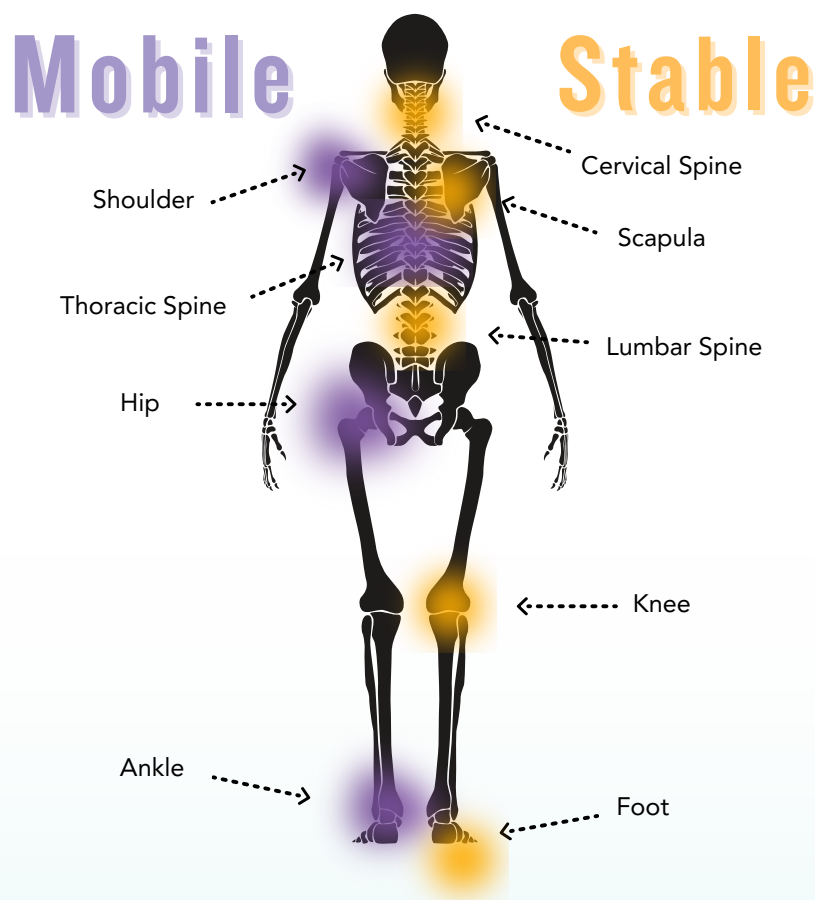
- Walk
- Jog
- Row
- Bike
- Elliptical
- Ski Erg Machine
- Jump Rope
- Stair Master
- Jacob's Ladder
- Other cardio varieties

To maximize the benefits here, it's ideal to choose a version that includes movement of the muscle groups to be used. For example, before an upper body targeted workout, a stationary bike would be less ideal as the warmup option, instead, try an elliptical with handles, a rower, walking or jogging with arms pumping, a ski erg, a jump rope, or a Jacob's Ladder, which would all include working of the upper body.

Circulate can be effectively accomplished for the general population before resistance training at an intensity of up to 60-70% of Max HR, or an RPE (perceived difficulty level) up to ~5 out of 10. This intensity would feel like not being able to sing a song, or speak unbroken in a conversation; you'd be starting to breath heavy enough to only be able to comfortably say about one or two sentences at a time.

STEP TWO: MOBILIZE

Second, you will want to learn and know your body's restrictions, as well as what your workout entails. Proper mobility work allows for your whole body to move more optimally. Our bodies work as a chain, alternating which joints should be most mobile and most stable. When we lack mobility in one area, we not only have issues at that site, but likely also cause issues in the joint above and/or below that site. When we lack mobility in a joint that should have adequate range of motion, the stable joint above and/or below it has to compensate for certain positions and movements, creating not only a lack of mobility at the more mobile joint, but now a lack of optimal stability at the more stable joint. **Check out this graphic to understand what areas we want to target for mobility (the left side of the graphic):**



Knowing this chain pattern, here are two questions you can ask to decide where you should focus your mobilizing: (1) **Do you lack ankle mobility, hip mobility, thoracic spine mobility, or shoulder mobility?** If yes, target the ones that are required for the exercises to be performed. If you are unsure if you lack mobility in these areas, your coach will be able to inform you via the form videos you attach to your check-ins! (2) **Do you have discomfort in any of the joint areas labeled more stable?** If yes, target the joints directly above and below this area for mobility. If further work is needed on an area that should be more stable, this will be addressed in the third and final step of warming up.

Mobilizing is done by stretching (both static and dynamic), moving joints through full ranges of motion, and getting into positions that transfer over into the movement patterns of your workout. Next you will find a list of mobility exercises that you can choose from based on your needs.

STEP TWO: MOBILIZE CONT.

For each need identified as a target, choose 1-3 exercises from the below list. Dynamic stretches may be performed for time or reps. Static stretches will be performed for time (ensuring we do not exceed ~45 seconds as significant time over that has the possibility to negatively impact your workout when completed beforehand). Moving through a range of motion, or accessing challenging positions, can be performed for time or reps. The time and/or reps listed beside the exercises below are general recommendations, but you may find more success with more/less depending on how it's benefiting you.

HIP MOBILITY

- Deep Squat Hold (60-90sec)
- Boot Strappers (10-15 reps)
- Samson Stretch (5-10 reps each)
- Alternating Scorpion Stretch (5-10 reps each)
- Leg Swings (5-10 reps each)
- Dynamic Couch Stretch (60 sec each)
- Goblet Squat Pause (10 reps)
- Walking Toe Touch (8-10 reps each)
- Walking Quad Stretch (8-10 reps each)
- Squat Internal Hip Rotation (8-10 reps each)
- Hip 90/90 Rotations (8-10 reps each)
- Dynamic Frog Stretch (60 sec each)
- Adductor Rocking (60 sec each)
- Foam Roll Glutes (60sec)
- Foam Roll Hamstrings (60 sec)
- Foam Roll Quads (60 sec)
- Bodyweight Windmill (8-10 reps each)

ANKLE MOBILITY

- Deficit Gastroc Stretch (45 sec each)
- Deficit Soleus Stretch (45 sec each)
- Kneeling Toe Stretch (45 sec)
- Foam Roll Calves (60 sec)
- Loaded Ankle Flexion (45 sec each)

SHOULDER MOBILITY

- Foam Roller Snow Angels (10-12 reps)
- Banded Shoulder Distractions (45 sec each)
- Foam Roll T-Spine (60 sec)
- Foam Roll Lats (60 sec)
- PVC Overhead Passovers (10-15 reps)
- Lat Box Stretch (45 sec)
- Dead Hang (45 sec)
- KB Halo (8-10 reps each way)
- Single Arm Wall Circles (8-10 reps each)
- Wall I-Y-T (5 reps each)
- KB Trap Mobilization (45 sec)

THORACIC SPINE MOBILITY

- Lat Box Stretch (45 sec static or 10 reps in and out of the stretch)
- Forward Fold with T-Spine Rotation (8-10 reps each way)
- Standing Roll Ups (8-10 reps)
- Foam Roll T-Spine (60 sec)
- Bodyweight Windmill (8-10 reps each)
- Thread the Needle (8-10 reps each)

To ensure you are selecting mobility exercises that are benefiting your specific needs, the name of the game is: **Test and Retest!** Before doing the exercises you (and your coach, if needed) decide on, **Test** the movement pattern you are wanting to achieve, then complete the Mobilize step, then **Retest** the movement pattern. If it improved, great, stick with these and continue to improve over time. If it did not, you will want to ensure you were completing the mobilizing work properly, or you may need to select other exercises by reassessing the two questions just beneath our Mobility-Stability graphic on Page 4.

STEP THREE: PRIME

Lastly, based on the exercises in the workout, we want to prepare your body for the type of work you are about to put it through under a load or at a higher demand. To do this, we want to replicate movement patterns of the workout's compound lifts, under lighter loads than working sets. This step can simply consist of "warmup sets," but is also the place for extra preparation work if needed or suggested by your coach or prescribed by another relevant professional.

The suggested warmup sets are included in your programming, before the first working set of your workout. This typically looks like 2 sets of the first compound exercise in the workout, at an intensity of RPE5-6 (difficulty level of a 5-6, out of 10), for around 5 to 10 reps.

Any extra preparation work would be assigned based on the possibility that you may need to enhance a certain muscle groups ability to activate properly, a certain restriction or limitation that mobilization does not fully address, stabilizing exercises like core or single-sided work based on an imbalance or weakness, "prehab" exercises protecting from injury in at-risk areas, etc. If you are concerned about extra prep-work, a hands-on assessment of your limitations or weaknesses by a trained professional (likely a Doctor of Physical Therapy) is a great place to seek guidance outside of form video assessments with your coach.



EXAMPLE LOWER BODY WARMUPS

Rolling out of bed at 5am to warm up = **Circulate** for 10min

- Can choose to walk, bike, elliptical, jump rope, etc.

Has tight hips & some low back pain, and lacks ankle range of motion =
Mobilize Hips, Thoracic Spine, & Ankles

- May choose Deep Squat Hold (60-90 sec) and Deficit Gastroc & Soleus Stretch for (45 sec each)
- in addition to Bootstrappers (10-15 reps)
- in addition to Thoracic Spine Extensions (10-15 reps) over a Foam Roller

Then, **Prime**

- May perform Alternating Bird Dogs (10-12 each) to increase lumbar spine stability,
- and then complete the warm up sets prescribed in the programming to start the workout.

Going from an active on-your-feet job to the gym = **Circulate** intentionally for 1-2min

- Can choose to walk, bike, elliptical, jump rope, etc

Has no clear joint target but has tight hip flexors = **Mobilize** hip flexors

- May choose Dynamic Couch Stretch (5 each direction, each side) and Alternating Scorpion Stretch (5-8 each)

Then, **Prime**

- May perform Pause Glute Bridges (10-12) to reinforce hip flexor release with an active core and glutes, and then complete the warm up sets prescribed in the programming to start the workout.



EXAMPLE UPPER BODY WARMUPS

PUSH

Leaving desk job to go to the gym = **Circulate** for 10min

- Can choose rower, elliptical, jump rope, ski erg, Jacobs Ladder, walk with arms pumping, jog, etc. (something with arms moving)

Lacks shoulder range of motion, and has trap tightness and neck discomfort = **Mobilize** shoulders and traps

- May choose Single Arm Wall Circles (10-12 each) and PVC Passovers (10-12 reps) in addition to KB Trap Mobilization (5-10 each side)

Then, **Prime**

- May perform I-Y-T Raises (5 each way) to enhance shoulder activation and scapular awareness, and then complete the warm up sets prescribed in the programming to start the workout

PULL

Going from walking the dog to working out = **Circulate** intentionally for 1-2min

- Can choose rower, elliptical, jump rope, ski erg, Jacobs Ladder, walk with arms pumping, jog, etc. (something with arms moving)

Has no problem areas = **Mobilize** back musculature

- May choose Lat Box Stretch (60-90 sec) and T-Spine Rotations (10 each way) in addition to Thoracic Spine Extensions (10-15 reps) over a Foam Roller

Then, **Prime**

- May perform Scapular Pull-Ups (10-15) to increase scapular stability and improved movement pattern, and then complete the warm up sets prescribed in the programming to start the workout

HOW TO USE THIS GUIDE

The goal is that this guide gives you a foundation in how to properly warm up and help you be able to identify exactly what your personal warmup needs are.

Some general rules of thumb to always implement:

“If It Hurts, Don’t Do It” - When testing new ranges of motion, new positions, difficult stretches, you should be careful to move slowly, maintain control, and only go to the extent that you may find challenging or slightly uncomfortable, not painful.

“If You Can’t Breathe In It, You Don’t Own It” - Breath is a major component of your movement capabilities. To be able to access a stretch, position, or range, in a way that is functional for exercise, you must be able to breathe well in it. If you get yourself into a stretch so deep that it takes your breath away, you shouldn’t be there. If you get into a squat hold deep enough that it comes with forced breathing, that’s not your squat depth.

“Test, and Retest” - The best way to know what’s working for you, is to test/try the goal movement pattern before you implement warmup work, and then to retest it again after the implementation. If you’re choosing warm-up work that has either no effect, or worsens your movement, that’s not the exercise(s) you’ll want to be using.



REFERENCES

Dr. Grey Cook, FMS

Dr. Kelly Starrett, Mobility WOD

Dr Aaron Horshig, Squat University

Dr. Ian Jeffreys, The RAMP Warmup

Dr. Stuart McGill, The Big 3

ACSM EP-C Textbook

NSCA CSCS Textbook

