

## WU Moves LBP management program

### Exercises:

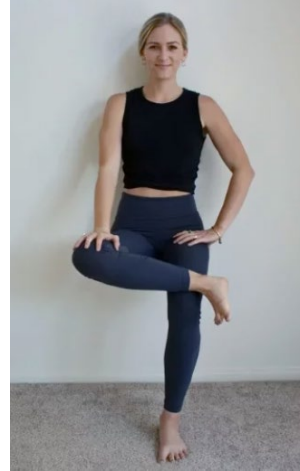
- The goal is to begin with “Core Stability/mobility” for the **first 2-weeks** and progress to the next category of exercises “Core strength/stability” for the **final 2-weeks**.
- You should perform each exercise for the prescribed sets and repetitions **twice per week** before moving onto the next category.
- If any exercise consistently reproduces low back pain then discontinue the exercise and speak with a WU moves employee to ensure the exercise is being performed correctly.
- If you are unable to safely get to and from the ground lying positions, then perform the first category of exercises for the entirety of the program, repeating each exercise twice per week. After two weeks you can progress these same exercises to three times per week after the first 2 weeks.

## Core Stability/mobility exercises:

(focus on stability of spine and hips with little spine movement)

### 1. Figure 4 on the wall

- Start with back on the wall, step your toes out about two feet away from wall.
- Pick up one foot and cross ankles over the thigh of the opposite leg.
- The raised leg should have the knee at 90 degrees and you should feel a stretch on that side of the outer hip.
- Hold for 30-20 seconds then switch sides, repeat on each side 3 times.



### 2. Wall Supine Twist

- Stand with your back on the wall, stepping your feet just a few inches away from the wall.
- Pick up one knee and hug it into your chest, on the next breath use the opposite hand to cross that raised leg across your body.
- Straighten the arm on the same side of the body as the leg straight out on the wall turning your head in the same direction.
- Hold in this position for 20-30 seconds on each side and repeat 3 times.



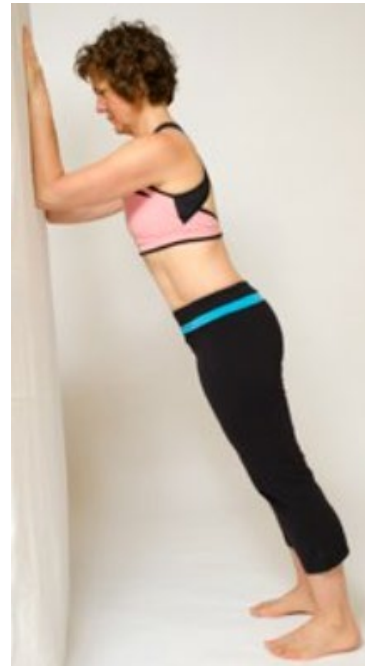
### 3. Wall Downward Dog

- Begin with hands shoulder-width apart on the wall.
- Walk your feet back as you crawl your hands down the wall until they are at or near hip height.
- If a certain point reproduces pain anywhere in the body, return to just before that point and hold the stretch.
- Press your palms into the wall and lower your chest down to feel the stretch along the chest and shoulders.
- Hold this stretch for 20-30 seconds and repeat for 3 times. Slowly walking feet and hands back up between each repetition.



### 4. Wall plank Tuck + Kick

- Begin in a wall plank like in the picture shown to the right.
- Stabilize the spine by squeezing the core muscles before bringing one knee up towards the elbows, stopping when you hip/back flexibility is limited.
- Then kick that same leg back and out straightening at the hip and knee.
- Then return leg back to the start and repeat on the other side.
- No bending/rotating of the spine is allowed in this movement, limit your range of motion to ensure the spine is not moving.
- Perform alternating repetitions, 10 on each side for 3 rounds resting between.



## 5. Wall single leg raises

- Begin with back lying on wall with heels just a few inches away from the wall like the picture on the right.
- Squeeze your abdominal muscles before bringing one straight leg directly out and up, only bending at the hips.
- Control it back down when your hip/back flexibility limits your movement.
- No spine movement is allowed in this exercise, tense your core up very strongly while performing the exercise and shorten the range of motion if your hips hike up or spine bends.
- Perform 15-18 repetitions on each leg and repeat 3 times total.



## 6. Standing Hip Abduction

- Begin standing on both feet with hands stabilized on a chair, wall, or any stable surface.
- Standing on one foot, bring the opposite foot straight out to the side keeping the toes facing forward.
- Stop once you feel the need to bend in the lower spine and control the leg back down to the start without touching the ground again.
- Squeeze the core muscles while performing each repetition to ensure there is no spine bending, shortening the range of motion if needed.
- Repeat on each leg for 15-20 repetitions for 3 sets.

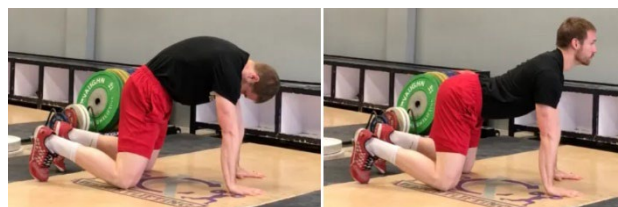


# Core strength/stability exercises:

(focus on core stabilization as well as bending/twisting properly)

## 1. Cat – Camel

- Begin in an all 4's (quadruped) position on the hands and knees.
- Slowly arch your entire spine and hips as high as possible, ending with your head looking down towards the ground (camel position), holding this position for a few seconds.
- Then moving into the opposite downward position with the spine extended with the head looking up (the cat position).
- Making sure you do not move into a painful position but just into a light stretch.
- Repeat each position for 5 cycles before performing the next exercises.



## 2. Curl Up

- This is not a traditional curl up exercise
- Begin lying on your back with one knee bent and the other out straight. Place both hands flat and under your back keeping the natural curvature of your spine.
- Pick your head up off the ground only a few inches, holding that position for 10 seconds at a time. If resting head on pillow imagine putting zero weight through that pillow for the 10 seconds.
- The goal is to perform the curl-up without any movement in the spine (like a traditional curl-up).
- Perform a 10 second hold 5 times in each different leg position (bent knee and straight leg) alternating each time.



### 3. Side Plank

- Begin by lying on your side with your legs bent and upper body supported by your elbow like shown in the picture to the right.
- Raise your hips so that only your knee, foot and arm support your bodyweight.
- Hold this position for 10 seconds on each side with 20 seconds rest between each. Again focus on zero spine movement and using the muscles of your core and hips to stabilize your spine in its natural curvature.
- Repeat on both sides for 5 total sets.



### 4. Bird Dog

- Begin in an all 4's (quadruped) position with back in a natural position.
- Without allowing movement to occur at the lower back, kick one leg backwards while simultaneously raising the opposite side arm until both fully straightened.
- Think about kicking the heel straight back and making a fist and squeezing the arm muscles.
- Hold each position for 10 seconds alternating sides each time.
- Rest for 20 seconds between and repeat each side 5 times.



## 5. Hip Bridge

- Begin lying on your back with your knees bent, feet flat on the floor.
- Squeeze your butt muscles before lifting your hips off the ground, picking your toes up and driving heels into the ground.
- Squeeze your butt muscles in the hip extended position for 5 seconds before relaxing back down.
- If your hamstrings are working the hardest, try bringing your feet a bit closer to you.
- Focus on only pushing through the hip muscles, with zero motion at the spine. Shorten the range of motion if needed.
- Perform 10 repetitions consecutively and repeat for 2 sets.



## Resources

Y. Aoki, S. Sugiura, K. Nakagawa, A. Nakajima, H. Takahashi, S. Ohtori, K. Takahashi, S. Nishikawa. "Evaluation of Nonspecific Low Back Pain Using a New Detailed Visual Analogue Scale for Patients in Motion, Standing, and Sitting: Characterizing Nonspecific Low Back Pain in Elderly Patients", *Pain Research and Treatment*, vol. 2012, Article ID 680496, 4 pages, 2012.  
<https://doi.org/10.1155/2012/680496>

<https://exrx.net/Testing/CurlUpTests>

A. Horschig. (June, 2018) The McGill big 3 for core stability. *Squat University*. Retrieved by  
<https://squatuniversity.com/2018/06/21/the-mcgill-big-3-for-core-stability/>