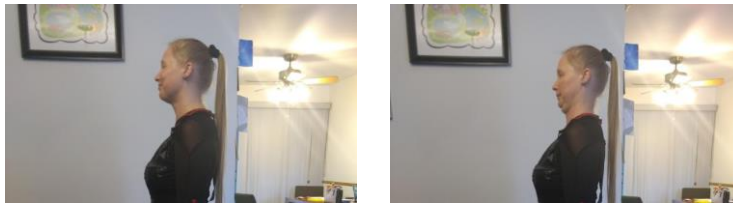


Exercises to Re-program the Body

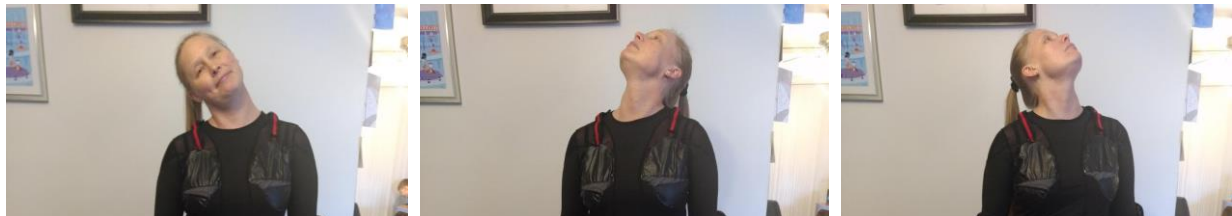
Note: Stretches should feel comfortable, it's not necessary to push until they are painful. Stretches should be held for 3 seconds. The stretches may be repeated.

Exercises should also feel comfortable, it's not necessary to push through pain.

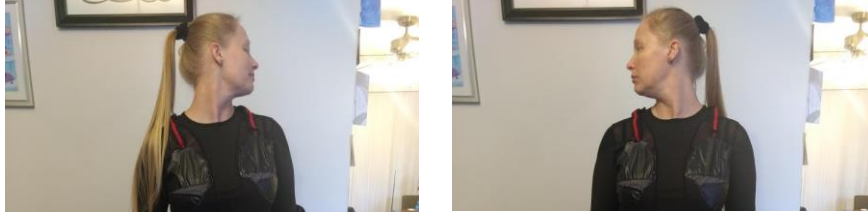
Head retraction – In this exercise you will tuck your chin drawing your head back (make as many double chins as you can), make sure that you draw your head straight back, do not raise or lower your chin. This can be completed with or without resistance. (Resistance suggestions: clasped hands behind head, car head rest, and mattress – no pillow.) Complete between 3-10 repetitions, holding each for 5 seconds.



Stretch Scalenes – These are the muscles in the front of the neck. They attach and run in all different directions, so to stretch them we need to use several varied positions. These can be done in any order as long as you complete all 6, 3 on each side. To complete each one, you will need to tuck your hand into your opposite back pocket or tuck it under your leg (sit on your fingers) so that you can keep your shoulder stable (so it doesn't move with you). Next you will complete the 3 stretch positions. 1st bring your ear toward the shoulder opposite to the side you are stabilizing (hand behind or tucking your fingers). This stretch should feel good, you should only go until you start to feel a little stretch, it should not hurt so don't push it. Hold this stretch for 3 seconds. 2nd bring your chin 45° toward the hand behind or tucked and look up (moving your head like you're trying to touch the back of your head to your shoulder). Hold this stretch comfortably for 3 seconds. 3rd turn your chin 45° away from hand behind and look up as before. Holding comfortably for 3 seconds.

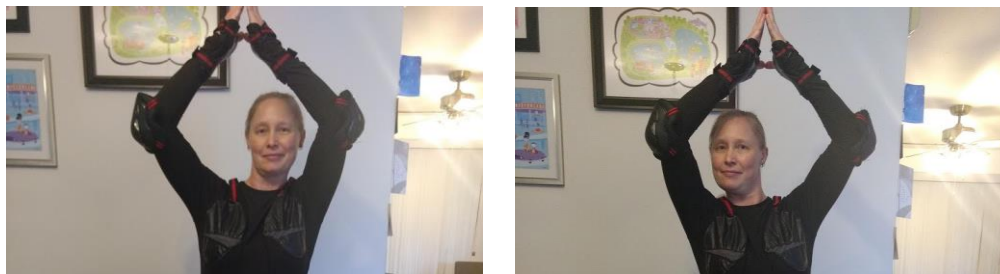


Head Turning (Range of motion increases) –To complete this activity turn your head as far as you are able to comfortably to one side, aiming to look over your shoulder. hold this for 3 seconds then repeat turning your head to the opposite direction and hold again for 3 seconds. In this activity you should keep your head level, try not to tilting your head in any direction.

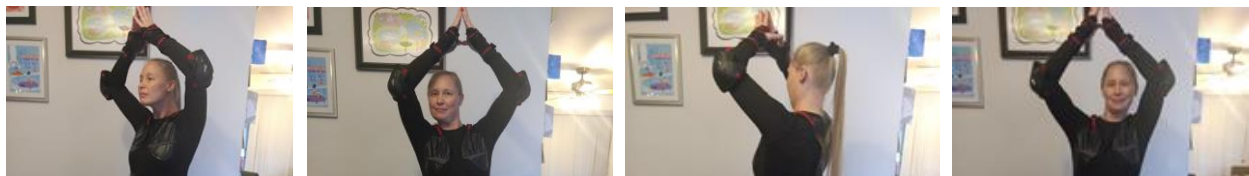


Neck side glides – To complete this activity shift your head to the side of your mid-line, keeping your head level (like you're trying to put your ear over the end of your shoulder. Try not to let your head tilt. Hold for 3 seconds then repeat on the opposite side.

Note: I find putting my arms up helps me navigate this exercise.



Neck circles – To complete this activity you are going to shift your head to one side (like in the side glide), then shift your head forward (like you're trying to put you chin over your toes), then to the opposite side (like side glides), then to the back (like a chin tuck). Complete each movement painlessly and try to flow from one position to the next without stopping. Note: This is not rolling your neck/head. Complete this circle in one direction 2-3 times then switch directions for another 2-3 times. See worksheet for picture.

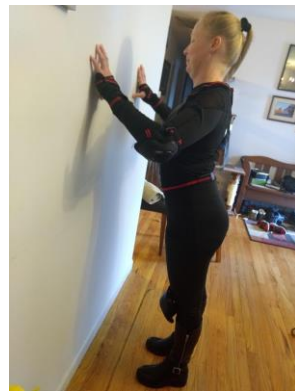
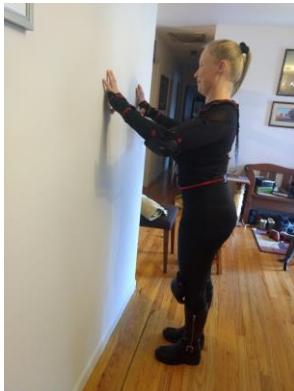


Shoulder shrugs – Complete this exercise by bringing your shoulders up toward ears then slowly lower them into a gentle stretch (of the trapezius/top of the shoulder muscles). Complete between 3-10 repetitions moving slowly and with control throughout each of the repetitions. Start with less repetitions and add more as you get more comfortable with the exercise.



Rhomboid and Serratus Anterior contraction – In the exercise you will use your muscles to draw the points of your shoulder blades back and down (like they are pointing at the opposite butt cheeks). You can break this down into 2 movements. One is to bring your shoulder blades together, like you're sticking your chest out. The second is to bring your shoulders down, like in the down phase of shoulder shrugs. Then complete between 3-10 repetitions holding each one for 5 seconds. Start with less repetitions and increase as you are more comfortable with the exercise.

Note: Taking a deep breath will facilitate a neutral shoulder position after pressing shoulders down or back.



Shoulder protraction/retraction – These are like horizontal shoulder shrugs. First place arms out in front of you (you can use a wall to help give you a focus point if it helps you) then press hands forward, like you are trying to push something away from you. Then draw them back, complete the opposite movement, like drawing your shoulder blades together (as in the last exercise). Complete between 3-10 repetitions, moving slowly and with control throughout each of the repetitions. Start with less repetitions and increase as you are more comfortable with the exercise.



External rotator strengthening – To help facilitate correct exercise posture, place a folded hand towel under your arm, in your arm pit. Then position your shoulder in neutral, at rest like when your arm is at your side, and your elbow at 90 degrees. Then to complete the exercise rotate the arm you're exercising out/away from body as far as possible without turning the body, keeping your forearm level with the floor. This can be completed with or without resistance; such as a weight in your hand or by using an exercise band attached to a wall. Complete 10 repetitions and repeat on the opposite side.

Note: Try not to drop the towel. Try to start and stop the motion in neutral, NOT crossing the body. This exercise should be pain free, if it is not, decrease the amount of motion (or arc), resistance, or stop.

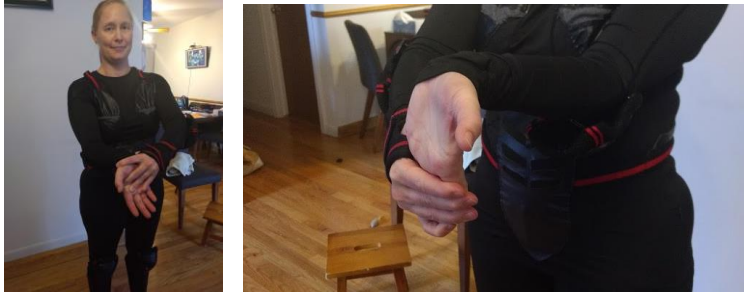


Pectoral lengthening (pec major, pec minor, biceps) – To complete this stretch, position your arm at 145 degrees of your arm arc (if you think of having your arm straight out to the side at 90 degrees and having your arm straight up by your ear as 180 degrees, you want about half way between). Next squeeze shoulder blades together (like in the protraction/retraction exercise), then turn head away from arm that you are stretching. Hold this stretch for 3 seconds and repeat on the opposite side.

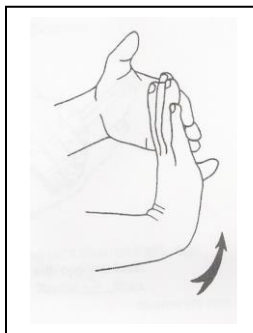
Note: There is a tendency to drop the arm toward 90 degrees when you turn your head, concentrate on keeping the arm up at 145 degrees.



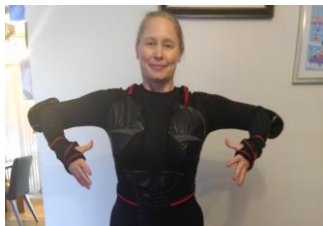
Stretching the forearm flexors – This stretch helps to rebalance the wrists. To complete this stretch turn one hand so your palm is facing up with your elbow bent, then place the opposite hand around your wrist with your thumb on the underside and grab wrist, then pull on wrist (like you’re trying to pull your hand off), then extend hand (stretching your hand, moving the back of your hand toward the back of your arm), and continue the stretch by extending your arm (stretching the inside of your arm). Hold this stretch after you have both positions completed for 3 seconds. Repeat on the opposite side.



Stretching finger flexors – This stretch helps to rebalance the hand muscles. To complete this stretch place palms together making sure your finger tips are also together. Next press one set of finger tips into the opposite (example right finger tips press into your left, the right fingers are the “working” ones), then hold the pressure for 3-5 seconds. Next relax hands. Then extend the “working” fingers back (like trying to touch the back of your fingers to the back of your hand), apply some gentle pressure with the “non-working” hand (to create a deeper stretch in the fingers), and hold for 3 seconds. Repeat with the opposite fingers “working”.



Diaphragm – The diaphragm is the main muscle we use for breathing. I explain the torso muscles as a barrel to help understand how the muscles are related. The diaphragm is the “lid of the barrel”. In order to exercise this muscle, we are going to use thoracic/rib expansion. To complete this exercise, you will first take a deep breath by: 1st breathing into your belly, 2nd filling the top part of your lungs, 3rd when you feel like your lungs are full sniff (just a little more air in), then slowly exhale. Complete between 3-10 repetitions, breathing slowly and with control throughout each of the repetitions. Start with less repetitions and increase them as you get more comfortable with the exercise.

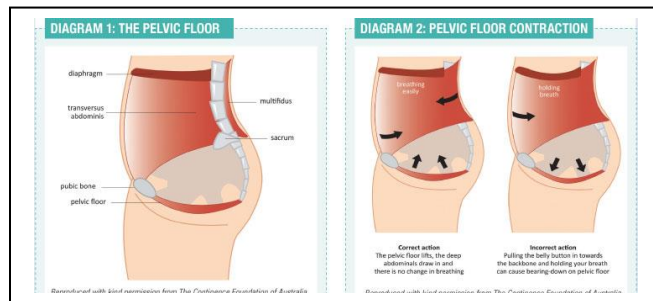
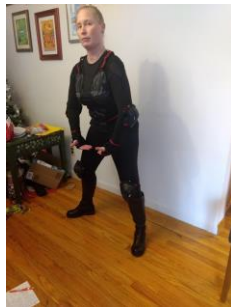


Transverse abdominis – This muscle is often described as your corset (support), I refer to this muscle at the middle of the “barrel”. To complete this exercise, you are going to draw in your stomach (like touching your belly button to your backbone or like you’re trying to touch the points of your hip bones together), this is NOT done using your diaphragm, by holding your breath. If you struggle with this distinction, try to draw your stomach in during an exhale. Complete between 3-10 repetitions holding each initially for 5 seconds building to 10 seconds. Start with less repetitions and increase as you are more comfortable with the exercise.

Note: This exercise is easiest in the lying position and becomes exponentially harder with sitting and standing.



Pelvic Floor – I refer to this as the bottom of the “barrel”. You have 2 distinct parts to this muscle, the front, which ultimately controls urine flow, and the back, which ultimately controls your anal sphincter. It is best to start by contracting both the front and the back together; as these get stronger you will be able to contract each part individually. To contract these muscles, you will draw up the pelvic floor (visualize stopping the flow of urine and stopping the passing of wind/gas at the same time), the visualization will allow for the contraction to occur. Begin with 5 repetitions holding each for 3-5 seconds building to 10 repetitions holding each for 10 seconds. Start with less repetitions and increase as you are more comfortable with the exercise. Once you are comfortable with contracting both muscles together and have increased your repetitions to 10 then begin again contracting only the front and then only the back and build up repetitions again.



Pelvic tilt – To complete this activity you will tilt your pelvic girdle forward (as if pointing your pubic bone towards the floor), creating an exaggerated arch in your lower back, then rotate back (pointing your pubic bone toward the ceiling) flattening your lower back. The movement comes from the pelvic girdle not from leaning forward/backward with your head. Repeat the rock in both directions between 2-4 times in each direction. Next you will find the neutral position of your pelvis (you should feel like you are sitting on your sits bones (the bony part of your behind) and your tail bone at the same time).

Note: As your hips return to normal movement it will become easier to sit and stand in a neutral position.



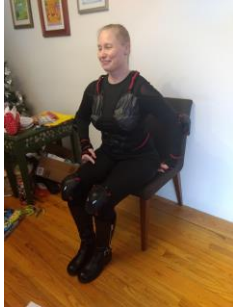
Side bending and quadratus lumborum lengthening – This exercise is completed using a wall. You will set up your exercise by leaning against the wall (it helps to place your feet about a foot and a half away from the wall), interlace your hands behind your head, then flatten lower back against the wall, keeping your upper body and head/clasped hands against the wall. To complete the stretch you will side bend until you feel just the very beginning of a stretch, then keep the bottom elbow on the wall and peel off the top elbow until you feel a gentle lower back stretch. Hold for 3 seconds and repeat the other direction.



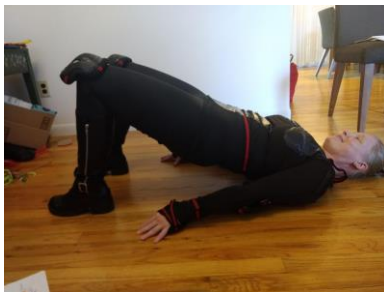
Hip stabilization/orientation – To set up this exercise you will lay on your back, knees up, with both feet on the floor. You will then bring one leg up to 90 degrees keeping the other leg in the starting position. To complete the exercise you will create resistance against the leg bent at 90 degrees, by placing both hands against your knee and pressing here (about 10% effort/resistance) and at the same time you will press the other foot into the floor (about 10% effort/resistance). Hold this resistance in both directions at the same time for 5-10 seconds, then repeat on the opposite side.



Gluteal squeezes – This exercise can be completed in sitting or standing, sitting is easier. To complete this exercise, you will contract/squeeze your Gluteal muscles in 3 stages and release them in 3 stages. 1st contract the Gluteus minimus (similar to contracting the back of the pelvic floor), 2nd contract the Gluteus medius (this creates a slight outward pull on the hips brings the knees away from each other), and 3rd contract the Gluteus maximus (this is the rest of the cheek). When you release the contractions, release them in the opposite order, max (the majority of the cheek), med (letting knees come back in a little), and min (like releasing the pelvic floor). Repeat the contractions and releases in order (1, 2, 3 then 3, 2, 1) for between 5-10 repetitions. Start with less repetitions and add as you become more comfortable with the exercise.

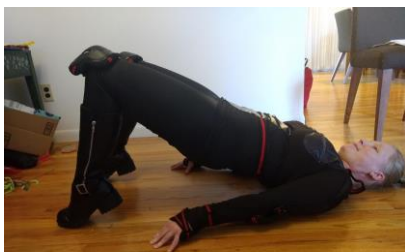


Add a core bridge to the Gluteal exercise – To complete this exercise you will contract your glutes (min, med, max) then lift your back and butt up into a bridge position, (making sure your level/in a straight line from knees to neck), then release in the reverse order as you come down from your bridge, max, med, min. Complete between 3-10 repetitions. Start with less repetitions and add as you become more comfortable with the exercise.



Adding calf raises to core bridge exercise – To complete this exercise you will contract your glutes (min, med, max), then lift your back and butt up into a bridge position, (making sure your level/in a straight line from knees to neck), next lift heels up as far as you are able. To release you will relax the muscles in the reverse order, flatten feet, come down from the bridge, and release max, med, min.

Note: This can be done in lying, sitting, or standing, each progressively harder.



Stretching the Iliopsoas – This stretch is for the main hip flexors. To complete this stretch you will take a big lunge step backward keeping your heel off the floor (take your normal stride length and add 2-3 inches, stay on your toes), keep your torso upright (like someone hung your head from the ceiling), make sure both hips are pointed forward, then tuck your pelvis (like you're pointing your tail bone to the floor), hold for 3 seconds. If you need more of a stretch, you can bend your front leg.

Note: This can be done in standing or kneeling.



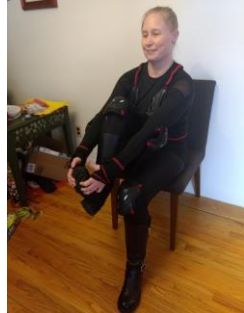
Hip mobilization/Fishing – To set up this exercise you want to be on a bottom stair or stool, making sure you have a place to hold on (for safety). Next you will balance on one leg, using the free leg to complete the exercise, turning your hip in and swinging your leg through like your dipping your foot into the water, then reverse going the other way, turning your hip out and swinging in the opposite direction. Complete 10 repetitions and repeat on the opposite leg.



Calf stretches – There are 3 different stretches completed in this activity, they are equally important so should always be completed together. 1st stretch the Gastrocnemius (the big double headed calf muscle), in sitting, place your leg straight and actively bring your toes toward your nose, hold for 3 seconds (If you need more of a stretch you can use your hand or a strap to create some over pressure). 2nd stretch the Soleus (the flat muscle underneath the Gastroc), in sitting, bend your knee to at least 90 degrees, then actively bring your toes toward your nose, hold for 3 seconds. (If you need more of a stretch you can use your hand or a strap to create some over pressure). 3rd stretch your Peroneal muscles (the muscles along the outside of your calf), in sitting, tilt your foot so the sole is facing the

other leg (make sure you don't have any weight on this leg and make sure there is no pain), hold for 3 seconds.

Note: These stretches should always be completed in a non-weight bearing state (sitting).



Foot alphabet – This exercise will help to strengthen all of the ankle and foot ligaments and tendons). To complete this exercise, you will write the letters of the alphabet in the air using your feet. Complete at least one alphabet with each foot, make sure that you switch between capital letters and small letter as they create different movements. This exercise can be completed in laying, sitting, or standing.

