

Re-patterning Exercises For Healthier Movement

by Scott Tribby 05_01_06

When embarking upon a new path towards a more active lifestyle, many folks haphazardly begin a regimen without first creating a point-of-reference with which to gauge progress. Some of the more enlightened who choose to either hire a coach or spend a few minutes doing some research of their own will discover certain testing protocols useful in creating that point-of-reference. Overhead squats, vertical jumps, forward rolls, reach tests, and many others are great for determining one's level of fitness and flexibility/ROM. Utilizing these on a regular basis in a program will increase the body's ability to work as a cohesive unit and reinforce fluid motion.

While these testing methods are effective for recognizing gross inadequacies and imbalances, they often fail to show smaller, more minute problems (unless one has access to video analysis under a well-trained eye). Smaller, more intrinsic movements can have profound effects on the body's movement patterns, and need to be addressed to ensure proper mechanics. In order to do this, one has to "peel away the layers" (imagine the body as an onion) and find what is hidden beneath. This can be a very complex issue because of the nature of the human body and all of its intricacies, but there are some simple concepts and exercises that can be utilized to help in this. The concept of motor patterning is key here, and what the following exercises aim to do is re-pattern, ensuring proper movement and somatic awareness. The great thing about these is that they can be used effectively by everyone. Beginners will benefit from using them as testing methods to identify weaknesses/imbalances, while more experienced persons can use them to help reinforce the proper movement patterns sometimes compromised by a vigorous, highly-active lifestyle. For both, the benefit of becoming more "somatically-aware" will help in proprioception and intrinsic awareness. Try the following exercises for a couple of weeks, paying special attention to how the movements feel (be patient, these can take a few times to get comfortable with, and don't get frustrated if you cannot do them completely at first).

Toes Up, Foot Up

Sit down with your back straight against a wall. Legs should be straight out in front, hip-width apart, knees in alignment with hips and the second toe in line with the knee. Repeat the following slowly with control:

1. Toes up: lift toes upward towards the nose
2. Foot up: bring ball of foot up toward nose
3. Knee up: move heel toward the knee, keep leg in proper alignment
4. Knee down: extend heel back out until leg is straight
5. Foot down: drop ball of foot towards the floor
6. Toes down: point toes down like a ballerina

Rock and Roll

1. Roll back and forth from metatarsal one to metatarsal five on ball of foot creating both clockwise circles and counter clockwise circles.
2. Rock back and forth from heel to toes several times.
3. Rock from medial to lateral arch several times.

Roll up/Roll down

Stand with back against a wall. Step feet out from the wall half a step, with back remaining against the wall. Vertebrae by vertebrae slowly roll down, starting with the head, towards the floor with the head, neck and shoulders as relaxed as possible. Bending at the knees to help in this motion is allowed. Once you've completely rolled over, roll back up one vertebrae at a time, all the way up to the head. Push with your feet into the floor as you roll, pushing the spine into the wall. Pay special attention to sections of the spine which tend to move in "blocks", instead of each vertebrae moving one by one.

Pelvic Clock

Small clock: the superior edge of the sacrum is the 12 o'clock position, left lateral edge is 3 o'clock, zero position is 6 o'clock, and the right lateral edge is 9 o'clock.

On a carpeted or padded surface, assume the Zero Position (lying on back, arms down by sides, legs bent at 90 degrees with feet flat on floor). Make sure you've removed shoes, belt, wallet, or anything else that comes between your body and the surface. Move pelvis into Zero Position (as perfect position as possible, relaxed and straight). Using very small, intrinsic movements, find the clock positions on the sacrum. Press both feet into the floor to find 12 o'clock, then relax to go back to 6 o'clock. Press the right heel into the ground to rock over to 3 o'clock, and the left for 9 o'clock. Repeat at least three times to get the feel of the movements. Contraction of the abdominal muscles is not where these movements originate, so try to keep them as relaxed as possible. |

Once you've mastered these movements, you can try going all the way around the clock, locating all 12 positions. This requires a lot of practice and greater somatic awareness and concentration. This will do wonders for the spine/pelvis relationship and your posture.

Spinal Imprint

Start in Zero Position (see previous exercise), noticing the distance between your low back and the floor. Place your hand, palms down, under your low back with the fingertips meeting at the midline. Contract your transversus by bringing your bellybutton toward the spine, which should put a slight pressure on your fingers. Maintain this throughout the entire exercise, with minimal, if any, contraction of the rectus abdominus.

Level 1: keeping one leg in Zero Position, straighten one leg at a time keeping the heel on the ground. Repeat 5 times each leg.

Level 2: keeping one leg in Zero Position, bring the other leg into box position (knee and hip flexed at 90 degrees). Straighten box position leg until heel touches the floor, then back to box position. Repeat 5 times each leg.

Level 3: with both legs in box position, straighten legs until the heels touch the floor and then raise back to box position. Repeat 5 times.

These exercises should be done either before a training session or on an off day, not after training. Since you're trying to reinforce proper movement patterns, it's best done before training with resistance in order to ensure proper movement mechanics during the session.