

# How do I know if my muscles are balanced?

Running uses your body as an interconnected machine, with every muscle group working together. You may mostly run with your legs, but your core muscles also play a critical role getting you to the finish line. Having a strong core is essential for balance, flexibility, breathing, and endurance. Exercising deep core muscles is much more challenging than normal core work, but it improves your efficiency and helps you maintain proper form as your muscles get fatigued during a tiring run. Many runners only work the surface core muscles, which can make it difficult to improve or, worse, can open them up to injury.

Injuries occur when a particular muscle group is weak or is not in sync with the others. Every time we put too much stress on our bodies and don't give them the proper time to heal and recuperate (which is most of the time), our muscles become unbalanced. Over time, this adds up and presents itself as tight or sore muscles, or backaches. Having balance in the muscles allows our bodies to function at a higher level. If you aren't sure about your own muscles, there are also some at-home range-of-motion tests you can do to determine where specific imbalances may be.

## Range-of-Motion Tests

### 1. Trunk Rotation:

- Sit in a chair nice and tall with your legs uncrossed.
- Throughout this entire test, keep your hips facing forward.
- Cross your arms across your chest.
- Slowly rotate your trunk to one side, then to the other.
- It may be helpful to have someone watch you as you do this test and answer these questions:
  - Is it easier to rotate to one side than the other?
  - Are you rotating farther to one side than the other?
  - Do you feel your hips or trunk pulling away from a full, upright position on one or both sides?

**If the answer to one or more of these questions is "yes", you may have some muscle imbalances in your trunk area.**

### 2. Leg Lift:

- Lie flat on your back.
- While keeping your knee straight, slowly raise one leg as high as you comfortably can.

- Repeat with the other leg.
- *Questions:*
  - Can you lift one leg higher than the other?
  - Do your legs lift straight up or are one or both legs trying to angle themselves?
  - Can you lift your leg up without bending your knee at all?

**How high you can lift your leg will vary by person, but if one is easier to lift or can go higher than the other one, this can be cause for concern as there is no reason why both legs shouldn't be equal. Also, this should not be a painful exercise. If it is, that is another sign of imbalanced muscles.**

### **3. Hip Rotation:**

- Lie flat on your back.
- Rest your legs so they are about shoulder-width apart.
- While keeping your knee straight, slowly rotate one leg in and then rotate your leg out.
- Repeat with the other leg.
- *Questions:*
  - Can you rotate farther one side than the other?
  - Do you experience any pain during this test?
  - Can you rotate your legs without bending your knee at all?

**Again, your range of motion may vary, but both sides should be the same, and there should not be any pain or discomfort during the test if your hip muscles are properly balanced.**

## Next Step

If you answered “**yes**” to one or more of the questions in the range-of-motion tests above, it is important to recognize these imbalances and try to even out the stress you put on your muscles. It may also be beneficial to consult a professional who specializes in the musculoskeletal system. As an osteopath and a certified fitness instructor who specializes in stretching to balance the body, I can help identify muscle imbalances and provide in-office assessments with osteopathic manipulative

treatment (OMT). I can also help design at-home training programs to help regain balance in your muscles.