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## Healthy Hip Movement Promotes a Healthy Back for Cyclists

recent report concluded that back pain is more common than severe headaches or allergies in the United States.<sup>3</sup>
Low back pain in the cyclist is especially common, regardless of age, gender or type of bike.<sup>2</sup> Having a proper bike fit by your physical therapist is essential because cycling creates tension in your back muscles as they stretch and move during your ride. The motion at the hips relates directly to the forces going through your low back, so improving hip flexibility can decrease your back pain as well as improve your efficiency on the bike.



If you've ever cycled in a group you may have noticed someone in front of you with limited movement, or range of motion, related to their hips. As they pedal, one (or both) of their knees may bend out to the side at the top of the pedal stroke (*see figure to the left*). They may not be aware of this movement, but this loss of internal rotation is causing them to lose power and possibly irritate their low back, knee, or foot on that side.

Through a Bike Fit, it may be determined that moving the cleat sideways could assist with proper knee and foot alignment on the bike, or it may be as simple as consistently working at increasing hip mobility with the following exercises.

## ASSISTED STRETCHING INTERNAL ROTATION

Stand on your right leg with resistance tubing attached to the right (assisting you toward the right). With your left leg, step across your body toward the right (the band will assist with extra motion).

Repeat 15 times





## MODIFIED HURDLER STRETCH

Lay on your back or sit with your knees bent outward at 90 degrees of flexion. Hold for 20 seconds.

Repeat 3 times





Increased flexibility in general can play a key role in reducing stress and pain on your entire spine, legs and hips. If you are riding more than twenty hours a week, maintaining correct lower body mechanics can prevent injuries as well as improve your position, efficiency and power on the bike.

If you have pain preventing you from enjoying you're cycling or are interested in a more personal and specific program, you can find your local Therapeutic Associates Physical Therapist at: <a href="https://www.therapeuticassociates.com/Locations">www.therapeuticassociates.com/Locations</a>

## References:

- 1. Cook, Gray, et. al., "Movement: Functional Movement Systems: Screening, Assessment and Corrective Strategies", 2010
- 2. Salai, M., et.al. "Effect of changing the saddle angle on the incidence of low back pain in recreational bicyslists" Br J Sports Med 1999; 33:398–400
- 3. Jacobs Jea. The Burden of Musculoskeletal Diseases in the United States. Chapter 2: Spine: Low Back and Neck Pain: American Academy of Orthopaedic Surgeons; 2011.
- 4. Rognili, Pete. "Knock out Knee Pain", Bicycling Magazine, December, 2012
- 5. Moen, Erik, "How to Get an Overuse Injury: Common mistakes in endurance bicycling". Bikept.com, November 2011

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