



## Fenton Physical Therapy

400 Rounds Drive  
Fenton, MI 48430  
(810) 750-1996

## Linden Physical Therapy

319 S. Bridge Street  
Linden, MI 48451  
(810) 735-0010

## Milford Physical Therapy

135 S. Milford Rd  
Milford, MI 48381  
(248) 685-7272

## Slip, Slidin' Away...

### *Decrease Pain, Improve Function, and Stay Fit With Posterior Slides*

I am often asked what exercise is the best choice for a specific muscle. I explain that I do not know the best exercise for every muscle, but I do know the best movements for better fitness. The Posterior Slide is one of my favorite exercise activities. It is easy to learn, can be scaled to any fitness level, and requires minimal equipment. The Posterior Slide will not only improve your appearance, but more importantly, it will enhance your ability to move. See the next page for detailed instruction on the Posterior Slide.

#### **Why Posterior Slides**

Your exercise program should make you a more efficient movement machine. Performing Posterior Slides requires the coordinated action of a team of muscles called the "lateral subsystem". The lateral subsystem holds you stable on one leg and is the focus of injury prevention in athletic medicine. Posterior slides are single leg biased and require focus and attention to maintain balance. You will not be able to relax any portion of your body as you normally do during seated machine based training. Seated training produces minimal carry over to real life movement. Remember, you are not seated or strapped into a machine when you play sports, lift, carry, transfer, walk, or run.

#### **Decreased Spinal Compression**

Many individuals have poor tolerance of spinal loading. Traditional squats, lunges, and back extension exercises that are used to strengthen the legs and hips often end up aggravating a lumbar disc or an unstable sacroiliac joint. Posterior Slides are single leg biased and permit strengthening of the hip/lumbar connection with far less compressive force on the spine. I have trained many

sensitive low back pain patients/clients very successfully with Posterior Slides.

#### **I've Fallen and I Can Get Up...**

The posterior slide strengthens the movement pattern that gets you up off the ground. Getting up off the floor is a crucial life skill that you learn as a baby and lose when you become deconditioned. Not being able to transfer efficiently from the ground to upright onto both feet makes you more likely to be injured and less likely to be able to live independently.



#### **Make Your Even---Steven**

Having a movement asymmetry makes you more prone to injury during sports or in the competitive arena. You are far more likely to develop pain if one side of your body works well and the other side does not. Posterior Slides will make you aware of limitations in movement that are present on one side and absent on the other. Training away that deficit in mobility or strength should be a primary goal of your fitness program.

*Michael S. O'Hara, P.T., O.C.S., C.S.C.S.*

# Posterior Slide Progressions

Before you perform Posterior Slides, you should be able to stand on one leg, unsupported for ten seconds and be comfortable performing a basic step up. If you are unable to pass these tests, leave the Posterior Slides alone and work on single leg balance. The order presented below progresses in difficulty from easiest to hardest. It is by no means the only method of advancing in the performance of Posterior Slides. Furniture sliders can be purchased at many stores at \$15.00 for a pack of four.

## 1. Assisted Posterior Slides



Line yourself up with a mirror for visual feedback. Stand with 85% of your weight on the right foot. The left foot is placed on the slider with the heel off the ground and the left knee bent. Place the left hand onto a bar, table, counter, or table for balance. Slide backward with the left leg and bend at the right knee. Keep the torso tall, and allow the left knee to reach toward the floor. The

right knee should bend but not move forward. Push back up to a tall position with the right gluteals and hamstring muscles. Use the left arm as needed for balance. Work on performing the movement in a smooth and deliberate fashion. Start with sets of five repetitions on each side. If one side does not perform as well as the other, then add an extra set on that side and train that deficit away.

## 2. Fully Balanced Posterior Slides

As your balance improves, perform the Posterior Slide without assistance. Place the hands at the hips or behind the head to increase the stability demands. For many people, this is all the resistance they will need. Use a mirror and work on keeping a tall posture. Progress the exercise by adding repetitions, and work up to sets of twelve on each side.



## 3. Resisted Posterior Slides I: Opposite Shoulder Load

You can add resistance to the Posterior Slide in several ways. Functionally, your hip and its opposite side shoulder work together when you move. In athletics, better hip to shoulder girdle connection improves performance. To enhance this connection, place a kettlebell or sandbag at the opposite side shoulder. For a very challenging exercise, try holding the kettlebell overhead during the exercise. Start with light loads for five to ten repetitions.



## 4. Resisted Posterior Slides II: Inside Tubing Resistance

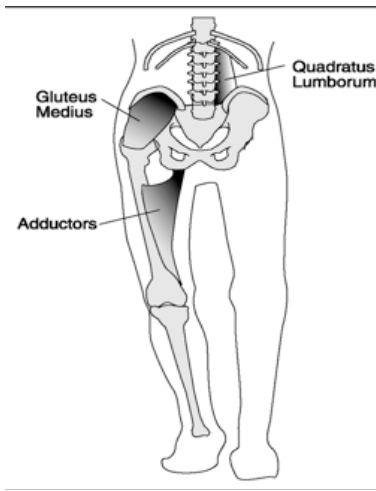


The *lateral subsystem* (next page) consists of the muscles on the outside and inside of the hip (abductors and adductors), along with the quadratus lumborum—an important spinal stabilization muscle. These muscles must work together to keep your lower back and knee injury free. Posterior Slides with tubing resistance from the inside of the front leg

is a great exercise to improve lateral subsystem control. Attach light resistance tubing at a level just above your bellybutton, and align your body at 90 degrees to the pull of the resistance tubing. Keep the arms extended and try to maintain hip position and tall torso. For females involved in athletics, this should be part of your anterior cruciate ligament injury prevention program. Perform four sets of five repetitions on both sides.

# Exercise Injury Prevention

## *Training Your Lateral Subsystem*



When you stand on one leg, what holds your pelvis level and prevents you from falling over? What series of muscles keep your knee from collapsing when you plant your foot to change directions? How is a pitcher or tennis player able to transfer rotational force from the ground through the hip to the

opposite shoulder? The answer to all of these questions is the “*lateral subsystem*” of muscles.

The lateral subsystem is a series of muscles made up of the hip adductors (groin muscles), gluteus medius (side hip muscle), and the quadratus lumborum (deep back muscle) on the opposite side. These muscles are not visible in the mirror, so most of us have no idea of their location or function. These muscles work as a team to limit or control lateral (side to side) and rotational (twisting) motions. They

are very active during single leg activities, and weakness in this system will limit single leg balance and produce inefficient deceleration. Since most fitness exercises are performed on two legs, or in a seated position, no lateral or rotational stress is created, so this muscle system is rarely trained in the gym.

Many of the injuries suffered by athletes are the result of weakness in the lateral subsystem muscles. Lateral subsystem weakness prevents proper control of deceleration—slowing down—during athletic activity. This lack of control causes excessive stress loads at the knee and lumbar spine. Female athletes are far more likely to have weakness in the lateral subsystem. Anatomically, women have wider hips, and this makes stabilization of lateral forces even more important for knee safety. Female athletes tend to depend more on their quadriceps muscles, and in proportion, they have far weaker gluteal and adductor muscles. Anterior cruciate injuries in female athletes have reached very high levels, and training that emphasizes better lateral subsystem control has been identified as an injury preventative in several studies.

## Small Group Personal Training

Small group personal training is for individuals who want the benefits of working with a personal training professional and enjoy the company of other avid exercisers. Small group training helps you lower the cost of personal training services; and since training sessions are limited to 6 clients, the personal trainer can still give the necessary attention of a private session. These training sessions will be challenging, invigorating circuits combining cardiovascular and functional strength training exercises. Training sessions will be different every week, so you will be learning tons of new exercises to incorporate into your program.

For further information contact Craig Fisher at Fenton Fitness and Athletic Center at 810-750-0351.



## Join Our Email List

This newsletter, published monthly, is available by email. If you would like to be added to our email list, simply give your email address to any staff member or send your request to [bohara430@earthlink.net](mailto:bohara430@earthlink.net). You will receive the newsletter, as well as updates on events at our physical therapy clinics and fitness center.

404 Rounds Drive  
Fenton, MI 48430  
810-750-0351



Hours  
Mon-Thur: 5:30am-10pm  
Friday: 5:30am-9:00pm  
Saturday 8am-5pm  
Sunday 8am-2pm

## The Fifteen Dollar Fitness Fix



Simple furniture sliders are one of the most economical fitness tools you can own. While Posterior Slides are one of my favorite exercises, several other slider exercises are also very beneficial. You need two sliders for these

drills, and since they come in packs of four, you can have one set at home and keep another in your gym bag.

### Slider Supine Leg Curls



This exercise will strengthen your hamstrings, and teaches the nervous system how to simultaneously

control the gluteal muscles, hamstrings, and core stabilization muscles. Lay on your back with the legs fully extended and the back of the heels each on a slider. Hold the ankle in a dorsiflexion (ankle bent) position. Lift the hips off the floor and bend the knees. Keep the gluteal muscles tight, and use the hamstrings to pull the sliders across the floor. Start with five repetitions and work up to sets of twelve. When twelve with both legs gets easy, progress to single leg slider curls.

### Body Saw

In strength and conditioning, the Body Saw is called an "anti extension exercise". It provides the strength



an athlete requires to stay tall when someone or something is

trying to push him or her over. Get into a push up position with a slider under each foot. Prop on the elbows and raise the hips off the ground in a plank position. Use the shoulders to move the body forward and back while maintaining a solid position in the midsection. Perform five to ten repetitions.

### Slider Push Ups



The connection between the shoulder blade (scapula) and the rib cage (thorax) must be strong in order for the shoulder to work well and the neck to remain pain free. Push ups have always been a superior method of developing this connection, and Slider Push Ups are one of the best variations. Place a slider under each hand and get into the push up position. You can have your knees or toes on the ground depending on your strength level. Let one hand travel upward with the elbow fairly straight while the other arm performs a traditional push up. Reverse the arm movements on the next repetition. You will find that this alternating arm motion creates a strong core stabilization demand. Start with three repetitions on each side for a total of six repetitions and work up to a goal of twelve.

*Michael S. O'Hara, P.T., O.C.S., C.S.C.S.*