

We are vertical beings. If we do not work on what we are standing on—our feet—our overall alignment and function is greatly affected. Consider this: By age 70, a person's feet will have clocked an average of 70,000 miles. Walking even a fraction of that without proper alignment will create overcompensation and imbalances in other areas of the body, leading to back pain, body aches and stiffness.

In addition to being vertical, we are connected beings. The foot is a

complex network of 35 joints and 28 bones, bonded by 120 ligaments and 20 muscles. Even more fascinating, there are more than 7,000 nerve endings in each foot—that's more than any other part of the body—tasked with sending messages to the brain. Current studies in neuroscience validate the idea that it is the feet, and their vast number of nerve endings, that ultimately lead to the neurological connections in the brain. What does that mean? That, on top

of helping us to stand and walk, the feet serve as a vital communication channel for the body and how efficiently it moves.

During my years as a teenager and young adult, I struggled with severe movement restrictions in my feet and ankles caused by a mild form of cerebral palsy. At the time, I was an athlete and a dancer driven to compete. Despite not being able to afford traditional rehabilitation, I knew that I needed to strengthen

my feet and ankles to perform. It was through building my own rehabilitation program—and journaling the results along the way—that I was able to begin to understand that the feet have a more important role.

The work that I did to rehabilitate my own weaknesses and the understanding that I gained for the feet-to-brain connection continues to serve as a foundation for my work today—how I assess a client's situation, develop programs and design equipment.

For example, I worked with a pro basketball player with debilitating pain and complications resulting from a dislocated shoulder. He came to me after three (failed) months of trying to work through it by strengthening his upper body. The program I designed

for him focused on combining a neuro and biomechanical approach. I applied my Feet to Brain exercises to fire up the nerve endings in the feet, broadening the scope of information going to the brain and enhancing overall function. His workouts also focused on strengthening the abdominals, to help build a foundation that could take on the strain; diverting the strain from the shoulder to the abdominals helped the arms to move more freely. After just three sessions, my client's pain had dissipated, and soon, he was back to basketball without his shoulders overcompensating.

In the following exercises, I've incorporated a number of props, to help stimulate the nerve endings in your feet. The really nice feature of

the band is that both the resistance and width can be customized to your capabilities and size; use whatever feels comfortable. The ball helps to teach how the joints move by providing tactile cues; for example, if one ankle moves more easily than the other, the ball provides feedback on how to adjust the foot. It's the same for the Arcus equipment I've designed. The Arcus Bar, shown here, contours the body, which facilitates nerve stimulation, improves joint articulation, reduces muscle strain and enhances sports performance; it's adaptable for all ages and abilities.

Do this series three times a week or even daily—with gentle abdominal support, to help improve movement quality for your entire body. Time to sweep you off your feet! PS

# **BACK TO FRONT TRACKING**

**PROPS:** chair; small firm ball **PURPOSE:** teaches proper ankle and foot mechanics while building movement awareness **SETUP:** Sit tall on the front edge of a chair, with a 90 degree bend in your hips and knees, and palms on your thighs.

- **1.** Place the arch of one foot on the ball, dropping your heel and rolling it backward.
- **2.** Roll the ball forward in the center of your foot, keeping your foot neutral.
- **3.** Continue rolling the ball forward, driving the arch of your foot over the front of the ball. Do 10–15 reps on both feet, breathing naturally throughout.

**TIP:** Concentrate on rolling the ball in a straight line to promote optimal foot mechanics.

**MODIFICATION:** If you start to experience muscle cramping, reduce your range of motion.



McEntire Pilates The Arcus Bar (\$495; www.mcentirepilates.com)

Sanctband Resistive Exercise Bands (\$7.50-\$13.75; www.optp.com)

(Editor's note: Trent brought his own sand-filled small ball to the shoot, and advises to use any firm ball on hand.)







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# HEEL LIFT

**PROPS:** chair; heavy band **PURPOSE:** helps to establish a stronger ankle movement pattern while beginning to challenge stability

**SETUP:** Sit tall on the front edge of a chair, with a 90 degree bend in your hips and knees. Place the band under the ball of one foot, cross it in front of your ankle, and hold onto the ends on top of your thigh.

- **1.** Distribute your weight equally throughout your entire foot, flattening it against the floor.
- 2. Lift your heel, increasing the pressure on the ball of your foot while pushing your arch forward. Do 8–10 reps on both feet, breathing naturally throughout.

**TIP:** To get the maximum tactile feedback, make sure all your toes are covered by the band.

**MODIFICATION:** If you start to experience muscle cramping, reduce your range of motion.





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# ARCH ACTIVATOR

PROPS: chair; heavy band

**PURPOSE:** promotes a deep muscular activation in the arch of the foot

**SETUP:** Same as Heel Lift.

- 1. Repeat steps 1–2 of Heel Lift.
- 2. Press through your toes to bring your foot slightly off the floor, fully pointing it forward. Do 8–10 reps on both feet, breathing naturally throughout.

**TIP:** Be mindful that equal work is distributed throughout your ankle, arch and toes.

**MODIFICATION:** If you start to experience muscle cramping, reduce your range of motion.

## **ANKLE CIRCLES**

**PROPS:** chair; heavy band **PURPOSE:** increases foot mobility; strengthens the ankle in a greater range of motion

**SETUP:** Same as Heel Lift, but lift your foot slightly off the floor.

**1.** Fully point your foot as much as you can, pressing

the top of your foot forward into the cross of the band.

- **2.** Slowly bring your ankle and arch inward, maintaining control of the band.
- **3.** Bring your foot into a fully flexed position by pulling the top of your foot back

and driving your heel down while centering your foot.

**4.** Finish the circle by pressing your ankle and arch outward. Do 5 reps each way on both feet, breathing naturally throughout.

TIPS: To get optimum tactile feedback, make sure

all of your toes are covered by the band. The secret to maintaining control over the band is to move at a consistent pace.

**MODIFICATION:** If you start to experience muscle cramping, reduce your range of motion.









# INTERMEDIATE-ADVANCED SIDE-LYING

PROP: light band

**PURPOSE:** challenges and strengthens the connection between the feet and hips

**SETUP:** Lie on your side, with your body in a straight line, from feet to head, while maintaining the natural curves of your spine. Rest your head on your bottom arm, and prop your top hand in front of your chest.

- **1.** Maintain spinal alignment while lifting your top leg to about hip height.
- **2.** Flex your foot back without dropping your top leg or moving your bottom leg. Do TK reps on both sides.

TIP: Lie along a wall to help keep your body in a straight line throughout.

**MODIFICATION:** Omit the lift of your top leg, resting it on your bottom leg.

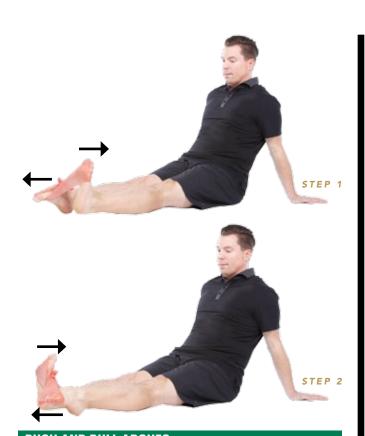


STEP 1



STEP

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## PUSH AND PULL ARCHES

PROP: light band

**PURPOSE:** challenges the coordination of the feet while further developing muscular activation and nerve stimulation **SETUP:** Sit comfortably, with your parallel legs outstretched in front of your body hip-width apart, and tie the band around the balls of your feet. Lean back onto your hands to support your upper body. Fully flex your feet to 90 degrees at your ankle.

- **1.** Push one arch into a full point, while pulling your other arch back into a flexed position.
- **2.** Repeat on your opposite side. Do 8–10 reps, breathing naturally throughout.

**TIPS:** Make sure to maintain a few inches between the balls of your feet at all times, so that both feet track forward and back without sideways deviations.

**MODIFICATION:** Firmly hold onto a folded towel between your thighs to help maintain the leg position.

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## ANKLES TO INNER THIGH

**PROP:** Arcus Bar with a medium band tied in a loop on each end

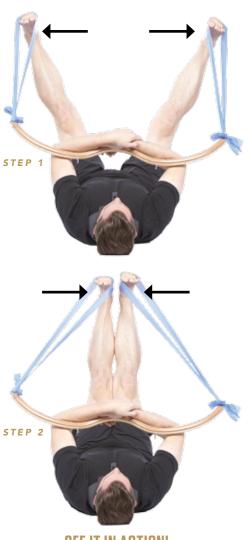
**PURPOSE:** strengthens the foot-to-inner thigh connection

**SETUP:** Lie on your back, maintaining the natural curves of your spine and pelvis. Gently engage your abdominals, and place the arches of your flexed feet in the bands, holding the bar in front of your chest.

- **1.** Elongate through your legs to shoulder width or wider, reaching, reaching through the heels of your feet.
- **2.** Maintaining the elongation, close your legs together, deepening your abdominal support. Do TK reps.

**TIPS:** Maintain proper spinal and pelvic alignment throughout. Keep your foot position consistent while moving your legs.

**MODIFICATION:** Use a small folded towel as a headrest, to help align your spine and promote abdominal engagement.



SEE IT IN ACTION

Watch Trent demonstrate this move at www.pilatesstyle.com.

## TWISTING ARCHES

**PROPS:** light band; Arcus Bar with a light band tied in a loop on each end **PURPOSE:** increases strength in the feet and calves while improving ankle alignment and arch articulation

**SETUP:** Same as Push and Pull Arches.

- **1.** Allow the band to assist in moving your feet inward, so that your toes lightly touch.
- **2.** Use the outside of your ankles and calves to press the balls of your feet outward. Do 8–10 reps on both feet, breathing naturally throughout.

**TIPS:** Keep your legs in parallel throughout—don't roll them in or out while moving your feet. The band should be snug, but not too tight, so that your feet are free to stretch the band.

**MODIFICATION:** Firmly hold onto a folded towel between your thighs to help maintain the leg position.

**VARIATION:** Do the exercise with the Arcus Bar, which allows for greater abdominal support, while providing an alternative and powerful angle for the band.





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#### TRENT McENTIRE.

PMA®-CPT, became a professional dancer after rehabilitating his own severe movement restrictions established at birth due to cerebral palsy. McEntire understands how quality of life is affected by how well you can (or can't) move your body. For nearly 20 years, he has been sharing his discoveries and neuroscience-supported methods with those seeking to overcome their own movement limitations. This has culminated in the design and release of his equipment line, Arcus by McEntire. McEntire has presented his work at conferences, including the Pilates Method Alliance, Pilates On Tour and the Body Mind Expo Conference, and all over the world. The McEntire School International is the home for his educational courses, workshops, and mentoring that has grown out of his original and ongoing discoveries. McEntire is the former president and current chair of the PMA's Heroes in Motion. For more information, visit www.mcentirepilates.com.

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