

The ToePro Foot/Ankle Exercise Platform

## Thank you for purchasing the ToePro. To read the full article about the benefits of using this product and/or to watch a video of the ToePro being used, go to www.humanlocomotion.org.

Unlike other foot exercise devices, the ToePro Foot/Ankle Platform has been designed to improve performance by strengthening muscles of the foot and leg in their lengthened positions. The 10° sideward tilt lengthens the outer leg muscles, the 10° backward tilt lengthens the calf and arch muscles, and the crescent-shaped elevation in the front of the ToePro lengthens the toe muscles. **Exercising muscles in their lengthened positions has been proven to build muscle at up to 4 times the rate of conventional exercises (such as towel curls, marble pick-ups, and band exercises).** To warm-up, perform 20 repetitions of the exercise illustrated in figure 1.

**Fig. 1. ToePro Warm-Up.** Place the ToePro near a wall or any stable surface and position your toes along the base of the foam (**A**). Now, keep your hips and torso aligned as you slowly lean forward while pushing down vigorously with your toes (**B**). Your fingertips should be close to but not touching the wall. Lean forward as far as you can safely go and hold this position for 3 seconds. You should be pushing your toes into the foam as hard as possible with each repetition.



Next, while contacting a wall or stable surface, place the tips of your toes into the center of the front crest (A) while shifting your weight to the outside of your feet; i.e., keep your arches raised (B). Now, raise your heels while pressing down firmly with your toes, gradually shifting weight from your outer to your inner forefoot (C and D). Shifting your weight inward forces you to use the peroneal muscles, which can improve running performance and help prevent injuries such as plantar fasciitis, Achilles tendinitis, and ankle sprains. When raising your heels, focus on driving your inner forefeet and toes firmly into the foam and hold this position for a few seconds (D). Gradually build up to 4 sets of 25 repetitions moving at a moderate pace: spend 2-seconds going up and 2-seconds going down. If you fatigue at any time during the exercise, lean against the wall to take stress of your feet and legs. The first 2 sets of this exercise are performed with your knees straight. Subsequent sets are performed with the knees slightly bent, which better isolates the leg and arch muscles. It is important that you spend less than 30 seconds resting between each set, as short rest periods have been proven to accelerate muscle remodeling. Finish the exercise by holding your heels 1-inch off the ground for up to 60 seconds. Try to balance with hands close to but not touching the wall for the final 60 seconds. Repeat this routine 5 times per week for 12 weeks.



Peroneus brevis muscles

Peroneus longus muscles





Note that throughout the entire exercise, your toes should be forcefully grasping the crescent-shaped toe crest. Contact with this initial portion of the crest causes you to recruit the short toe flexors, while contacting the center groove forces you to contract the long toe flexors (Fig. 3). Strengthening the short toe flexors is important when treating plantar fasciitis, as flexor digitorum brevis has the ability to offload the plantar fascia.



Fig. 3. The flexor digitorum brevis (FDB) and flexor digitorum longus (FDL) contact the beginning and center of the crescent-shaped crest (A and B respectively). Tension created in the FDB muscle can absorb force that would otherwise be placed on the plantar fascia. The long toe flexor muscles play an important role in preventing metatarsal stress fractures by distributing pressure away from the forefoot towards the tips of the toes.

> Abductor hallucis muscle

During the final part of the exercise, make sure you roll in as far as you can onto the inner portion of the big toe and hold this position for a few seconds. Resistance from the foam strengthens the abductor hallicus muscle (Fig. 4). Maintaining a strong abductor hallucis is especially important in people with bunions, as this muscle helps maintain alignment of the big toe. To increase resistance as you get stronger, place the ToePro a few feet back from a wall and push against the wall as you drive your toes downward. You increase resistance beneath the toes by pushing into the wall with more force. Lastly, although counterintuitive, after strengthening your foot and arch muscles, you actually have to teach the newly strengthened muscles how to fire while walking and running. To do this, practice pushing off with the tips of your toes while walking or running for five minutes, twice a day. The deliberate action of pushing down eventually becomes an ingrained movement pattern, and the strength gains achieved with the ToePro exercises can be used while walking and running.





After exercising, stretch the calf by shifting your weight back while keeping your arches elevated (arrows). Performing this stretch with your arches elevated allows you to stretch your calf and not overstretch your plantar fascia. Hold the stretch for at least 30 seconds.

## WARNING AND DISCLAIMER

User assumes all risks associated with use of the ToePro Foot/Ankle Exercise Platform. Because injury may result from inappropriate use, such as placing on an unstable surface, and/or being poorly stabilized by not resting your hands against a stable surface, all of which is beyond control of the manufacturer and distributor, user assumes all risks. The ToePro Foot/Ankle Exercise Platform is designed to strengthen foot and ankle muscles and increase range of motion. Should the user feel that this result is not achieved, the manufacturer will refund the purchase price. Under no circumstances shall the buyer be entitled to damages associated with the use of this product. Use of this product constitutes agreement to these terms.