

## FOOT AND ANKLE EXERCISES

# **FOOT CORE EXERCICES**

The health of our feet is the foundation of our overall well-being, and we often neglect it until a problem arises. However, therapeutic exercise is a powerful and fundamental tool not only for restoring functionality but also for preventing future ailments. It goes beyond simple stretches; it is a scientific and personalized approach designed to strengthen the foot and ankle muscles and retrain the movement of one of the most complex parts of our body.

The concept of the "Foot Core" refers to the complex network of bones, ligaments, and, above all, the intrinsic muscles of the foot. Just as the "core" of the trunk (abdomen and back) provides stability and strength, the "Foot Core" does the same for your feet. Its primary function is to dynamically support the plantar arch, acting as a shock absorber and propulsion platform for the body with every step we take. Strengthening these muscles is not just for athletes or people with ailments; it is an investment in your long-term health.

Its benefits, supported by scientific research, include improved stability and balance, which significantly reduces the risk of falls and sprains. By strengthening the arch of the foot and correcting imbalances, it can relieve pain associated with common conditions such as plantar fasciitis and flat feet. It also helps prevent problems in upper structures such as knees and hips, as a stable foot is the foundation for good body alignment. For runners and athletes, a well-trained foot core improves stride efficiency and propulsion capacity. Integrating specific foot core exercises into your routine is key to ensuring your feet support you firmly and without discomfort in every step of your life.





#### **SHORT FOOT EXERCISE**



Seated. Knees and ankles at 90°. Bring the base of your big toe toward your heel without flexing your toes, keeping your heel and forefoot flat on the floor, as if trying to make your foot shorter. Hold each contraction for 5 seconds.

## Perform:

- 1 set.
- 10 repetitions with each foot.

#### Advance:

- Seated: 1 x 10 repetitions.
- Standing: 1 x 10 repetitions.
- Supporting only one leg: 1 x 10 repetitions.

- Activation and strengthening of the intrinsic muscles of the foot.
- Improvement of neurosensory function of the foot.
- Rehabilitation and prevention of common conditions such as plantar fasciitis.



#### **ARCH LIFTS EXERCISE**



Very similar to the short foot exercise. Sit in a chair with feet flat on the floor or stand with feet hip-width apart. Contract your foot, trying to raise the arch of your foot. Your heel and toes must remain on the floor. Hold the contraction for 5 seconds.

#### Perform:

1 set of 10 repetitions with each foot.

### Advance:

- Seated: 1 x 10 repetitions.
- Standing: 1 x 10 repetitions.
- Supporting only one leg: 1 x 10 repetitions.

- Activate and strengthen the intrinsic muscles of the foot.
- Strengthen the muscles that support the arch of the foot.
- Prevent flattening of the arch.



#### **TOE SPREADING EXERCISE**



Standing. Place your foot on the floor and raise all your toes. Place your fifth toe on the floor and spread your toes until your first toe rests on the floor. In this position, place and extend all your toes without losing their spread. Hold for 5 seconds and relax.

## Perform:

- 1 set.
- 10 repetitions with each foot.

## Progress:

- 1: Seated pose: 1 x 10 repetitions.
- 2: Standing pose: 2 x 10 repetitions.
- 3: Standing pose: 2 x 10 repetitions, holding for 10 seconds.

- Increase toe mobility.
- Strengthen the abductor muscles and dorsal interossei.



#### TOE CURLS TOWEL SCRUNCH EXERCISE



Standing or sitting. Place a small towel on the floor. Place your foot on the towel and use the toes of one foot to curl the towel toward you, gripping it with your fingers. Repeat until the entire towel is gathered.

#### Perform:

- 1 set.
- 10 repetitions with each foot.

## Progress:

- 1: Seated pose: 2 x 10 repetitions.
- 2: Standing pose: 2 x 10 repetitions.
- 3: Standing pose: 3 x 15 repetitions.

- Strengthens the intrinsic muscles of the foot, especially the toe flexors and the muscles of the sole of the foot.
- Increases support and strength of the plantar arch.
- Improves proprioception.
- Prevention and rehabilitation of various foot pathologies.



#### **BIG TOE LIFTS EXERCISE**



Standing or sitting. Foot flat on the floor. Lift only your big toe, keeping the other four toes flat on the floor.

#### Perform:

- 1 set.
- 10 repetitions with each foot.

## Progress:

- 1: Seated pose: 2 x 10 repetitions.
- 2: Standing pose: 2 x 10 repetitions.
- 3: Standing pose: 3 x 15 repetitions.

- Improve coordination and fine muscle control of the foot.
- Strengthen the plantar arch.
- Increase proprioception, balance, and overall foot stability.
- Optimizes the toe-off phase during walking and running.



#### **BIG AND LITTLE TOE LIFTS EXERCISE**



Standing or sitting. Foot flat on the floor. Lift only your big toe, keeping the other four toes flat on the floor. Next, keep your big toe flat on the floor and lift the rest of your toes. Hold each lifting movement for 5 seconds.

#### Perform:

- 1 set.
- 10 repetitions with each foot.

## Progress:

- 1: Seated, 1 x 10 repetitions.
- 2: Standing, 1 x 10 repetitions.
- 3: Supporting only one leg, 1 x 10 repetitions.

- Improve coordination and fine muscle control of the foot.
- Activate and strengthen intrinsic muscles, especially those such as the interossei and the abductor hallucis.
- Increase proprioception, balance, and overall foot stability.



#### MARBLE PICK-UPS EXERCISE



Seated. Place several marbles or small balls on the floor. Using only the toes of one foot, pick up one marble at a time and place it in a container. This exercise is excellent for dexterity and control of the intrinsic muscles of the foot.

#### Perform:

- 1 set.
- 10 repetitions with each foot.

## Progress:

- 1: 1 x 10 repetitions.
- 2: 2 x 10 repetitions.
- 3: 3 x 10 repetitions.

- Improve fine dexterity of the intrinsic muscles of the foot.
- Increase toe grip strength.
- Increase neuromuscular control of the sole of the foot.



## **CALF RAISES EXERCISE**



Standing, step up and down on the balls of your feet using both feet. Initially, use a chair or table for balance.

### Perform:

- 1 set.
- 20 repetitions.

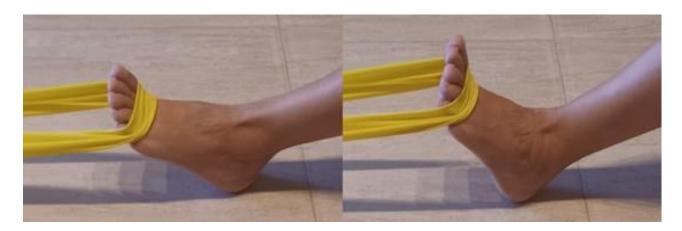
## Progress:

- 1: 1 x 20 repetitions.
- 2: 2 x 20 repetitions.
- 3: 2 x 30 repetitions.

- Strengthen the calf muscles (gastrocnemius and soleus).
- Aid in propulsion while walking or running.
- Improve ankle stability.
- Improve arch support.



## TOE AND ANKLE DORSIFLEXION EXERCISE WITH ELASTIC BAND



In a seated position, using a resistance band around the forefoot, dorsiflex your ankle and toes, then return to the starting position.

#### Perform:

- 1 set.
- 10 reps.

## Progress:

- 1: 1 x 10 reps.
- 2: 2 x 10 reps.
- 3: 2 x 10 reps.

- Strengthen the intrinsic muscles of the foot.
- Strengthen the tibialis posterior, tibialis anterior, gastrocnemius, and soleus muscles.
- Improve balance and proprioception.
- Improve ankle stability.



## SINGLE-LEG BALANCE EXERCISE



Stand with your feet shoulder-width apart and your back straight. Lift one leg, bending your knee and keeping your raised foot behind you. Balance on the standing leg for 30 to 60 seconds. You can lean against a wall or chair at first. Switch legs.

## Perform:

- 1 set.
- 30 to 60 seconds.

## Progress:

- 1: Perform the exercise without support.
- 2: Increase the exercise time.
- 3: Use unstable surfaces.

- Strengthen hip, knee, ankle, and foot muscles.
- Improve balance and coordination.
- Increase proprioception.



## **TOE SEPARATOR SQUEEZE EXERCISE**



Seated. Knees at 90°, feet flat on the floor. Place toe separators between your toes. Compress the separators. Hold for 5 seconds and relax.

#### Perform:

• 1 set of 10 repetitions with each foot.

## Progress:

• Increasing the number of sets.

### Goals:

- Strengthening the intrinsic muscles of the foot.
- Improving proprioception and motor control.
- Increasing gait stability and balance.

<u>Make an appointment with Dr. Jordi Jiménez</u>. He will see you in the center of Palma de Mallorca and help you regain your quality of life.