

Active support for correct walking.

Spiraldynamik® exercises for active training
with the BORT Helix S Spiraldynamik®
lower ankle joint support



Med



Spiraldynamik
intelligent movement

THE BORT-BENEFIT: Spiraldynamik®

Exercises for active training

The lower ankle joint is a key region for the treatment of most foot complaints and several foot and toe deformities. The calcaneus and carpal scaphoid form an elastic bond – a kind of trampoline. The talus transfers the body weight and body impulses to it.

In cases of Pes planotransversus and several cases of toe mal-positioning of the toe, the lower ankle joint and the surrounding ligament structures have lost their elasticity (or flexibility). The arch of the foot flattens and the foot widens, causing load-dependent pain. Sometimes, the toes are deformed.

In order to counter such foot complaints, it is therapeutically necessary to support the lower ankle joint in its function. That is what exercises according to the Spiraldynamik® concept – a three-dimensional movement and therapy concept – and wearing the BORT Helix S support do. The support stabilises the foot and activates the body's awareness for its physiological function. It transforms normal walking to a foot exercise.

TRAINING TIPS

- Repeat each exercise approx. 10 times daily
- In case of pain, interrupt or don't start training
- If necessary, consult your doctor or physiotherapist

1

HAMMOCK



Straightening of the pelvis and reduction of lumbar spine lordosis

Aids: Towel

Initial position: Lying on your back

Implementation: Place a towel twisted as a tight roll under the sacral bone and lower the lower back slowly, vertebra for vertebra. The pelvis tilts without tension to the navel. When you have reached the end, move the pelvis up again slowly and return your back to the starting position.

2

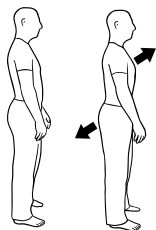
WATERFALL

Straightening up and alignment of the entire spine

Aids: –

Starting position: Freestanding

Implementation: Stretch as far as possible between the heel and vertex. Ensure that the weight burdens the feet centrally and that you work with little muscular effort. Keep looking forwards. Then release the tension slowly.



3



FOOT SCREW

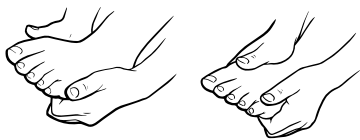
Perception of the spiral-shaped foot screw connection

Aids: –

Starting position: Sitting

Implementation: Support your knee and span your heel with one hand and the forefoot with the other hand. Then move your forefoot forward towards the floor helically. Ensure that the ankle joint and heel are not moved. The foot and shank should remain set at a 90 degree angle.

4



ARCH

Mobilisation of the transverse arch

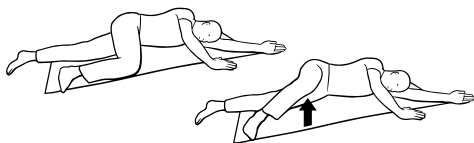
Aids: –

Starting position: Sitting

Implementation part 1: Splay your foot using your hands. Repeat the exercise, actively using the foot muscles in the movement.

Implementation part 2: Splay your foot using your hands, starting from the large and small toes. Then actively use your muscles again.

5



CROCODILE

Strengthening the hip outer rotators

Aids: –

Starting position: Lying on your side

Implementation: Angle the upper leg at 90 degrees. Then lift your knee towards the ceiling, the inner edge of the foot and torso remain on the ground unmoved. Lower the knee again but do not support it and then move it upwards again as far as possible.

6

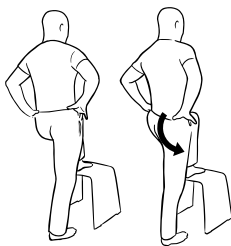
SKY PROPELLOR

Initiation of 3D pelvic movement

Aids: A chair

Starting position: Standing

Implementation: Place one leg on the chair and straighten yourself up as far as possible. As a result of straightening the spine, the pelvis tilts towards the supporting leg. Avoid lateral evasive movement.



7

FOOT TENSION



Activation and strengthening of foot screw connection

Aids: Thera tape

Starting position: Sitting on the ground, knee laterally rested.

Implementation: Place the tape between the first and second toes with the short end at the top. Put the upper end underneath the sole of the foot and guide the long end around the ball of the toe and stick it between the knee and the wall under tension. Move the ball against the resistance of the tape towards the ground in order to then have yourself pulled back again slowly.

8

FOOT OCTOPUS



Activation of the muscle forming the transverse arch

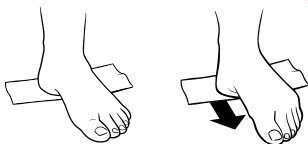
Aids: Half a tennis ball, half a walnut shell, small ball or similar.

Starting position: Sitting

Implementation: Let your foot drop slowly with the forefoot on the ball. Try to grasp the ball with relaxed toes. Maintain the position and lift your foot again slowly, the ball remains on the floor then.

9

FOOT CATERPILLAR



Strengthening of the muscle forming the transverse arch

Aids: Sliding base, e.g. a sheet of kitchen tissue

Starting position: Sitting

Implementation: Place the base on the heel. Pull your foot with the shorter foot muscle forward without the toes clinging on. Release the tension, lift the toes and place them as far forward as possible.

10

FOOT FROG



Strengthening of the muscle forming the transverse arch

Aids: Board

Starting position: Sitting

Implementation: Press the tips of your toes on the board. At the same time, keep the heel on the ground, the metatarsus is lifted and forms an arch. Release the tension and lower the foot again. Ensure that the front toe joints remain stretched and do not roll up.

Didactic concept and its implementation in the BORT Helix S Spiraldynamik® support

The Spiraldynamik® is a training theory which pays particular attention to the helical twisting connected with each movement of the body.

When walking and running, the entire body is captured by a rotary motion. Therefore, a dynamism arises which ensures stability and flexibility at the same time.

The motion sequence starts in the tarsal, in the lower ankle joint. The BORT Helix S Spiraldynamik® support focuses precisely on this and thus promotes a natural, physiological gait pattern - where it actually originates.

Attaching the Helix S Spiraldynamik® support correctly

The Helix S Spiraldynamik® support promotes the awareness for correct heel-to-ball movement of the foot, making daily walking become conscious exercise.

1



Slip into the dressing aid with your foot.

2



Release the support strap. To ease putting the support on, pull it over the dressing aid on the foot. Check the correct fit.

3



Then, take hold of the dressing aid at the tip and pull it forwards out of the support. To simplify putting the rest on, we recommend – if possible – placing the foot on the thigh on the opposite side.

4



Guide the elastic strap around the ankle joint and over the instep to the outer surface of the foot.

5



Guide the strap underneath the sole of the foot to the inner surface of the foot. If necessary, the heel bone can be pulled towards the middle of the body using the other hand in this phase to support the restraints.

Close the elastic strap by placing the Velcro tip on the velour field intended for this purpose. Finally check and, if necessary, make corrections to the fit and the individual strap tension of the aid.



The support benefit for your insoles.



BORT HELIX S SPIRALDYNAMIK® LOWER JOINT ANKLE SUPPORT COMBINED WITH ORTHOPAEDIC INSOLES

- An ideal supplement for orthopaedic insoles in case of Pes planotransversus and hallux valgus
- Dynamic straightening of the arch of the foot using the support restraint
- Can be worn combined with insoles in the shoe
- Support if no shoes can be worn, e.g. in home surroundings when wearing socks or barefoot

BORT GmbH
P.O. Box 1330 | D-71367 Weinstadt
Am Schweizerbach 1 | D-71384 Weinstadt
Phone +49 (7151) 99200-0
Fax +49 (7151) 99200-50
www.bort.com | medical@bort.com

M2082/GB-12/2018_001



4 005862 071355