

INTERPOD®

WHAT'S NEW



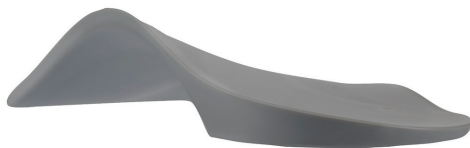
High Stiffness



Low Stiffness

0 degree High and Low Stiffness Flex

Neutral post, heel cup, improved 1st ray cut out and declination, plantar fascial groove, replaceable full length eva top covers, made from neuroflex™ plastic composite.



High Stiffness



Low Stiffness

6 degree High and Low Stiffness Flex

Improved 1st ray cut out and declination, plantar fascial groove, replaceable full length eva top covers, made from neuroflex™ plastic composite.



High Stiffness



Low Stiffness

3 and 4 degree High and Low Stiffness Slimtech

1st ray cut out and declination, plantar fascial groove, replaceable ¾ length eva top covers, made from neuroflex™ plastic composite.



High Stiffness



Low Stiffness

0 degree High and Low Stiffness Soft

Neutral post, 2mm eva base for sticking additions, 2mm anti-microbial mid-layer, nylon mesh top cover, made from polyurethane, poron top cover option.

Interpod Orthotics and Injury Management and Prevention

Some professionals say orthoses are used to treat an overuse injury, but others maintain they are used to manage an unprepared tissue injury. The difference is subtle on paper but very different in reality.

Training load errors

For athletes and those involved in regular activity, orthoses are used to treat a training load error. For example, a long-distance runner may train consistently 100K a week without injury. So high loads or volumes of training is not necessarily always a problem i.e. doing a lot of activity. Injury tends to occur when there's a sudden spike or rapid increase in activity that the athlete is simply not used to (unprepared).

Weekend Warriors

Exercise makes tissues weaker - it's the rest after exercise, the recovery period, during which they get stronger. Weekend warriors that train at low volumes on a regular basis are more likely to get injured when they decide to run a 20K race having only ever completed 10Ks. The sudden increase in training and the tissues can't cope and injury occurs.

Reducing the likelihood of injury

Orthotics fit into an athletes' training program because they've been shown to decrease the loads placed upon the working tissues. They can reduce the likelihood of injury caused by a spike in training by helping to decrease the loads on the tissues for the average athlete. They can also allow the more experienced athletes to train more, to increase their volume, without getting an injury.

In an article from the Foot and Lower Extremity Biomechanics II, Dr Kevin Kirby wrote *"Foot orthoses work by altering the magnitudes, plantar locations and temporal pattern of ground reaction force (GRF) acting on the plantar foot by causing an orthosis reaction force (ORF). The goals of foot orthotic therapy are:*

1. *Reduce the pathological loading forces acting on and within the structural components of the foot and lower extremity that are the cause of injury.*
2. *Optimise gait biomechanics.*
3. *Prevent additional injuries from occurring".*

The use of orthotics fits into a treatment regime when, despite all other methods to allow the tissues to recover, symptoms

persist. Often patients don't want to change their training by decreasing activity, stretching or strengthening muscles. Despite wearing the best training footwear, they either do too much too soon or just too much. Using orthotics can decrease the strain and loads on the tissues to a level where the athlete can still train pain-free.

How to Prescribe an Orthotic

An assessment needs to be made to ensure a prescribed orthotic meets the needs of the patient. Interpod, an established Australian manufacturer of off-the-shelf orthotics designed and developed by podiatrists, suggest the following 4 steps:

Step 1. Determine how much orthotic support the patient needs:

- Use the keystone device to measure supination resistance.
- Design features - such as rearfoot wedging, arch height and orthotic stiffness can be prescribed.



pictured above: keystone device

Step 2. Check the windlass mechanism:

- Do jack's test and check 1st met and 1st ray motion.
- Design features - such as lateral pads, plantar fascial groove, 1st cut away, or rearfoot wedging can be prescribed.

Step 3. Lunge test:

- Decreased dorsiflexion can push the orthotic into the arch causing discomfort.
- If soft tissue work fails then heel lifts can be used to immediately increase dorsiflexion.

Step 4. Fit to foot and shoe:

- Check patient footwear.
- Sometimes the patient must be advised to wear a more supportive shoe to accommodate the orthotic. If the patient is unwilling to compromise a slimmer orthotic may be needed.

What is the Interpod Orthotic Library?

By using the 4 steps above, you can select from the Interpod Orthotic Library, which is a custom range of premade orthotics, the best solution for your patient.

The advantages of using the Interpod Orthotic Library over other orthotic manufacturing methods such as plaster casting, CAD CAM or 3D printing include:

- Immediate fit, observation and patient review.
- Known levels of support - arch height, rearfoot and midfoot control.
- Shoe fit and comfort are immediately determined.
- Elimination of lab errors.

Short and Medium Term use of Orthotics

Orthotics can be used effectively in the short term to treat injuries because alternative treatment options such as increasing the ability of the tissues to take the load, or to find other ways to reduce the load, take time. Other treatment methods such as mechanobiology techniques - like eccentric loading exercises or changing running form - also take time.

Long Term use of Orthotics

If a patient will not comply with exercises needed to help adapt the tissues to the demands placed upon them, or where the repetitive loads on the tissues are too high then the long-term use of orthotics maybe necessary. Excessive repetitive loads can also be due to an individual's biomechanics where high joint moments are a result of the individuals joint axis position. Excessive body weight can also be a contributing factor.

The Interpod Orthotic Library is only available to practitioners

To view the Interpod Orthotic Library visit www.algeos.com or call 0151 448 1228 to request an Interpod brochure.