How Your Orthotics Work

Understanding Your Custom 3D-Printed Foot Orthotics

Your orthotics have been designed specifically for your foot, your loading pattern, and your rehabilitation goals. Understanding how they work — and what they can and cannot do — will help you get the most from them.

1 What Orthotics Do

Mechanism	What it means for you
Redistribute plantar pressure	Shift load away from painful or vulnerable areas of the foot, reducing localised stress on tissues that need protection or recovery.
Control foot motion	Limit excessive pronation, supination, or first ray hypermobility, keeping the foot in a more functional position during walking and activity.
Improve alignment	Influence how load travels up through the ankle, knee, and hip — small changes at the foot can have meaningful effects further up the chain.
Provide sensory feedback	The interface between the orthotic and your foot constantly feeds information to your nervous system, improving stability, balance, and motor control.

2 What Orthotics Cannot Do

> Orthotics are a tool — not a cure.
>
> They cannot:
> • Reverse structural deformity (e.g., bunions, flat feet)
> • Replace strengthening — muscles must still do the work
> • Eliminate pain in isolation
> • Work effectively in unsuitable footwear

Key message: Orthotics work best as part of a programme that includes exercise, load management, and appropriate footwear. They support your recovery — they do not replace the work.

3 Getting Used to Your Orthotics

Your feet and body need time to adapt to orthotics. Follow this gradual introduction protocol:

Week	Daily wear time	What to expect

Week 1	2–3 hours/day	Some awareness or mild ache is normal as your foot adjusts to the new contact and pressure distribution.
Weeks 2–3	Build to full-day wear	Discomfort should be settling. Gradually increase wear time as your comfort allows.
Week 4+	Wear as prescribed	Report any persistent pain or pressure points to your clinician — adjustments at this stage are normal and expected.

Warning

If you develop a blister, skin breakdown, or sharp pain — remove your orthotics and contact your clinician. Do not continue wearing through significant or worsening discomfort.

4 Getting the Best Results

Tip	Why it matters
Wear in appropriate footwear (adequate depth, firm heel counter, removable insole)	Orthotics cannot function correctly in flat, flimsy, or slip-on footwear. The shoe provides the structural environment the orthotic works within.
Follow your exercise programme alongside orthotic use	The orthotic supports the work — it does not replace it. Strengthening exercises address the underlying muscle function that orthotics alone cannot change.
Report any pressure points or discomfort early	Adjustments are normal and expected — especially in the first few months. Early reporting prevents skin problems and ensures the best functional fit.
Bring your orthotics to follow-up appointments	Your clinician needs to assess fit, wear patterns, and function to determine whether modifications or progression is needed.

5 Key Takeaways

KEY TAKEAWAY 1

Your orthotics were designed for your specific loading pattern — they work by redistributing pressure, controlling motion, and improving alignment.

KEY TAKEAWAY 2

Orthotics work best alongside strengthening and the right footwear — not instead of them. They are one part of your overall rehabilitation programme.

KEY TAKEAWAY 3

An adaptation period of 2–4 weeks is normal — if you have concerns about fit or comfort, report them early rather than persisting through significant pain.