



## Flat Feet

### Fact Sheet

Having flat feet describes the biomechanical and structural positioning of one or both feet, which is characterised by rolling in at the ankles and showing little to no arch on the inside (medial) border of a foot. This is how the term 'fallen arches' was coined.

Flat feet are medically referred to as pes planus, with the term for rolling in at the ankle joint when walking known as pronation. It should be noted that:

*Flat feet are relatively common, and that having flat feet **does not** mean you are guaranteed to have foot or leg problems.*

*Pronation is also a natural and necessary part of each step we take, helping our feet to absorb shock and adapt to uneven surfaces. It is excess pronation that can be problematic.*

Flat feet are linked with a greater incidence of foot problems because of the effect that this position has on your bones, joints, muscles and ligaments. This happens because we pronate for longer than is optimal for a healthy walking pattern.

### What are the symptoms of flat feet?

When a foot flattens during gait, it stresses and places pressure on a number of tendons and tissues in the foot that can cause tendinopathies and other issues to

develop. These tend to be exacerbated by long periods of time on the feet and high-impact activities.

When podiatrists evaluate the severity of flat feet, they often look for **signs** as opposed to symptoms. These include:

- Shoes wearing out quickly on the inner side
- Talonavicular bulging (a bulge on the inside of the foot)
- Abducted forefoot (seeing your toes pushing out on the outside of the feet when looking at the foot from behind the heel)
- The position of your heel bone and whether it's rolling in or out
- The shape of your arch
- Talar head palpation (being able to feel the head of your talus bone at the ankle evenly when you're standing)
- The curvature below your malleoli (bony bumps on the sides of your ankle)
- The position of your feet in a 'neutral' position (referred to as 'subtalar joint neutral') versus their position when standing relaxed

### What causes flat feet?

Often, it comes down to the biomechanics of your feet and the way your bones, joints, muscles and ligaments are working together. Some people may have flat feet from birth and others may develop them over time and in association with other conditions. Causes may include:

- Bone or joint irregularity
- Muscle weakness
- Tendonitis, such as in the posterio tibial tendon
- Ligament laxity
- Obesity
- Pregnancy
- Injury
- Arthritis
- Diabetes
- Other medical conditions

## Caring for flat feet at home

If your flat feet do not cause you any problems or pains, then no further action is required - unless something is concerning you. It is always a good idea to wear supportive and stabilising shoes and keep the muscles in your feet and legs strong to promote healthy function.

If pains do develop, you should cease the activity that is causing the pain, rest and ice your feet appropriately, and book in to see your Podiatrist. If icing, do not do so for longer than 20 minutes every 2 hours.

## When to see a Podiatrist & how they can help

You should see a Podiatrist for flat feet if they become symptomatic or start interfering with your everyday life.

Your Podiatrist will start with performing a biomechanical examination and gait assessment to understand the extent of the effects that your flat feet are having on the rest of your body. They may measure the angle of your shin bone relative to your heel bone (calcaneus), or use the Foot Posture Index (FPI) to help grade the level of pronation and best direct treatment where it is indicated. They may then discuss with you:

- Choosing the best shoes for your feet
- Using orthotics to control and reduce the overpronation
- How best to manage and alleviate the symptoms that your flat feet have created
- Using strapping or bracing to help reduce your symptoms
- Using stretching and strengthening to help restore strength and movement

*Disclaimer: This document is an informative guide only and is not a tool for diagnosis or a replacement for a consultation with a Podiatrist. If you are experiencing any symptoms arising from a flat foot posture, or you are worried about having flat feet, we recommend that you see your Podiatrist for an accurate diagnosis and an appropriate management plan. Referrals are not required to see a Podiatrist.*