

FLAT FEET

This is also called 'pronation'. The shape of the foot will vary between individuals but typically there is a combination of the heel rolling in, the forefoot pointing outwards, and foot tipped upwards. The arch may be flattened.

This position is considered normal when it occurs briefly with each step. This enables the foot to become flexible and absorb shock before becoming rigid to aid propulsion.

Pronation is abnormal when it occurs throughout the walking cycle. This means that the foot is too flexible and unstable. This may result in over use of muscles and ligaments in the feet, leg and back. Bones and joints can also be affected in some people. When the arch collapses the leg and hips will internally rotate. This may result in pain, fatigue, or tripping up. Symptoms can start suddenly or gradually.

There are many causes of an abnormally pronated foot. Usually it is to compensate for a problem higher up the leg. A few examples include, tight hamstrings or Achilles tendon or different leg lengths. Mal-alignments of various bones and joints, such as bow legs or knock knees, can cause pronation.

Children: Children under the age of two will have feet that appear flat due to the early stage in their development and normal extra fat pad around the foot. This is also exaggerated by hips, which, normally, are outwardly rotated. As a result, when walking, the body weight is transferred across the centre of the foot forcing the arch to flatten. It is normal for children around the age of two to have a moderate amount of bowing to their legs, and the resulting compensation gives a flat foot appearance.

Adults: Flat feet in adults can cause the pelvis to tilt and increase the lumbar curvature, causing low back pain. Knee pain and postural fatigue are common as well as plantar fasciitis and bunions development.

If symptoms like pain, fatigue or swelling are present your Podiatrist can help. Podiatrists are trained in gait analysis and the biomechanical investigation of the lower limb. A diagnosis of the cause of the flat feet can be made and treatment may involve insoles, splints, or exercises. Further investigations may also be recommended.

