Over-Pronation

The foot
provides us with 2 main functions: STABILITY (a solid base of support in weight-bearing) and MOBILITY (allowing us to propel, mobilise, absorb shock and to handle uneven terrain). Pronation describes the natural ‘rolling in’ of the arch of the foot as we walk to take the shock from the impact forces exerted by the ground. Problems occur however, when there is too much roll in – known as over-pronation. Studies indicate that a large percentage of the population have this problem (as much as 65-70%).

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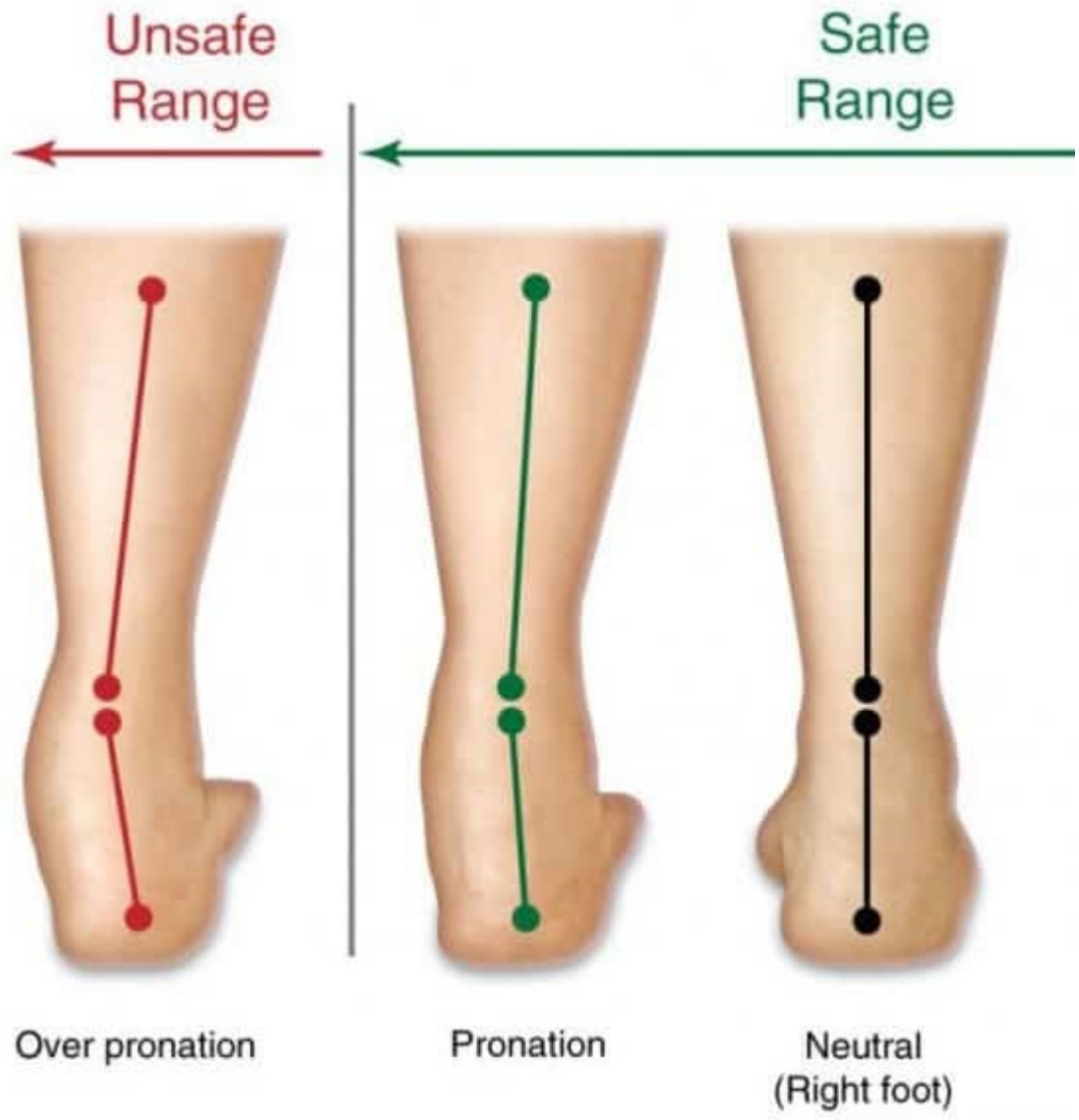

Over pronation of the foot, alters the geometry and loading patterns of the lower limb generally. This can lead to a range of injuries including but not limited to:

- Shin Splints
- Iliotibial Band Syndrome
- Plantar Faciitis
- Patello-femoral Syndrome
- Hip/Pelvis/Lumbar

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Spine dysfunction
- Heel
  Spurs
- Metatarsalgia
- Bunions

RISK FACTORS

- Hypermobility
  – excessive joint movement/hyper flexibility
- Flat
  Feet
- Leg
  Length Discrepancy
- Poor
  footwear choices (especially when running) – reduced shock absorption, lack of support
- Obesity
  – increased load on the feet
- Weakness
  of the muscles of the hip and lower limb

TREATMENT

Over
pronation is essentially a movement control issue. Whilst certain external factors such as hypermobility, weakness or being overweight may challenge this control to a greater degree, the mainstay of treatment should always be corrective rehab exercises aimed at improving loading patterns and control of the lower limb. Depending on the nature of
symptoms and degree of additional contributing factors, changes to footwear and use of orthotics to support the arch may also be considered.

Often while
you are working on improving the mechanics of the foot, activity modification also needs to be considered. While you
should aim to keep as active as possible, it is important to ensure that you are exercising within a safe range, reducing undue loading on the joints and

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tissue of the foot and lower limb in order to prevent injury.

Your physiotherapist can provide you with a thorough assessment of the contributing factors as well as guidance on safe levels of exercise, an appropriate rehab program and advice on footwear and orthotics.

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