



Pronation and supination – footwear and injuries

To avoid injuries, it is important for people to wear the correct footwear for their foot type and activity. Smartplay, Sports Medicine Australia's sports injury prevention program funded by VicHealth and the Department of Planning and Community Development (Sport and Recreation Victoria) explains why.

Pronation

- A pronated (flat) foot type is generally referred to as a flattening of the arch on the instep of the foot.

It is important that people who have flatter foot types have shoes that are more supportive when exercising. This means shoes should have their own arch built into the sole and midsole of the shoe, and have a straight last, meaning the shoe is flat and wide under the sole.

It is also important that the shoe has good width as the flatter arch takes up more room. Thinner width shoes can lead to blisters or sore muscles due to restriction.

Wearing the incorrect footwear when you have pronating feet, is also more likely to lead to injuries such as:

- Heel pain
- Shin splints
- Back pain
- Tired muscles in the legs and feet
- Sore calf muscles

These injuries can often affect walking and training and often take some time to heal.

Supination

- A supinated (high arch) foot type is determined by a high arch on the instep of the foot. The foot is also narrower.

It is important that people who have a supinated foot type wear shoes that are neutral in their making. This means they should not have an extra arch built into their sole and midsole region. Neutral made shoes also tend to be a thinner width.



SMARTPLAY

With the supinated foot type it is important to have the right width as too much room in shoes can lead to blisters and rubbing. This can lead to pain and time away from activity. Opposite to pronated shoes, supinated footwear are often more of a curved last, for 'C' shaped feet.

Wearing the incorrect footwear when you have supinating feet, is also more likely to lead to injuries such as:

- Ankle sprains
- Shin pain
- Stress related injuries such as fractures and achilles pain

Along with a shoe to suit your foot type, the type of shoe for specific activity is also important. For walking and running, often walking or running shoes are the most suitable. They are made for the surfaces we tend to exercise on, offer the correct support, and are made from material that is not too heavy or make us sweat too much.

For other surfaces, cross trainers are a good option as they are often made out of different materials to suit specific sports and their surfaces.

For further information visit www.smartplay.com.au