

FROM THE SOLE

Tips to keep you running at your best



intraining

running injury clinic

Podiatry | Physiotherapy | Dietitian | Massage | Pilates

33 Park Road, Milton
ph: 07 3367 3088
sales@intraining.com.au

Indooroopilly Shopping Centre
ph: 07 3378 5588
indro@intraining.com.au

AGING FOOTWEAR

By Emily Donker
intraining podiatrist

Running shoes deteriorate as they age, losing cushioning and integrity. Old footwear therefore can be a significant contributor to increased injury risk for many runners and athletes.

The cushioning materials in new shoes offer protection to the joints by providing shock attenuation to reduce peak and subsequent impact forces during the gait cycle. They also provide support (varying degrees of medial and lateral support depending on the type of shoe), which encourages the foot through it's desired range of motion with the aim of limiting the overload to soft tissue structures like tendons and muscles. With age, both these functions of the shoe are compromised, so their ability to support and protect the feet, legs and body during running is considerably affected.

When cushioning deteriorates, there is a lot more stress on the ligaments, tendons and cartilage of joints within the feet as well as the ankles and knees, making runners much more prone to injuries like tendonitis and chondromalacia patella (irritation of the cartilage behind the kneecap). Muscles within the legs and feet are also recruited more to assist with shock attenuation, and therefore more prone to both acute and chronic overuse injuries such as muscle strains.

Aging shoes can also become unbalanced if the support and cushioning wears unevenly through different parts of the midsole and creates a wedging effect. Runners with unusual biomechanics and/or gait patterns are generally more likely to develop this uneven wear patterns, but this can also become an issue with wear if runners are fitted in the wrong shoes. Wedging can significantly increase the strain on both joints and soft tissue structures. It can also increase the risk of acute injuries like lateral ankle sprains if the lateral border of the shoes is excessively worn.

Wearing old shoes can also extend the rehabilitation process when recovering from injury, because they're not providing optimal support and cushioning.

Footwear durability is highly dependent on many factors, including gait pattern, use type and frequency. Ensure your running shoes are replaced regularly to reduce your injury risk. Visit the intraining Running store, or book an appointment with one of our podiatrists to get yourself a new pair of shoes and keep you on your feet.



RECOVERY SMOOTHIES

By Liz Lovering,
sports dietitian, runner,
coach and chef

In hot weather an icy cold smoothie can be a delicious way to help you meet your recovery goals after training. Here are a few suggestions. All the recipes contain a mix of carbohydrate and protein, just place smoothie ingredients in blender, process until smooth and enjoy.

SMOOTHIE RECIPES

Tropical Green

- 1 kiwifruit, peeled
- 1 cup pineapple pieces
- Handful greens e.g. baby spinach leaves
- 20g almonds
- ½ cup yoghurt
- Few ice cubes

Mango Mint

- 1 mango cheek
- ½ banana
- 3 tablespoons skim milk powder
- 1 cup milk
- Few fresh mint leaves
- Squeeze fresh lemon or lime juice
- Few ice cubes

Berry Beet

- 1 x small cooked beetroot (about 30g)
- 8 large strawberries
- ½ banana
- 1 orange, peeled
- 1-2 scoops protein powder
- Few ice cubes

Chocolate, Cinnamon, Oat

- ½ banana
- ¼ cup oats
- ½ cup milk
- ½ cup plain yoghurt
- 3 heaped teaspoons chocolate powder
- Drizzle honey
- Pinch ground cinnamon
- Few ice cubes

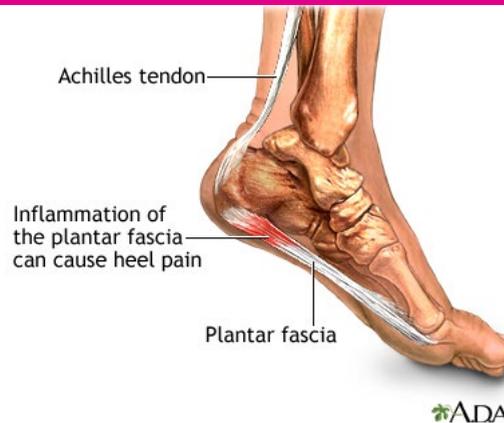


PLANTAR FACIITIS AND PLANTAR FASCIOPATHY

The Plantar Fascia is a thick, fibrous band of connective tissue which acts to attenuate shock and disperse force during weight-bearing and gait, as well as to provide support and maintain integrity of the medial longitudinal arch of the foot. Unlike other soft-tissue structures, the Plantar Fascia is not very elastic and has only a limited capacity to stretch and elongate, and thus is prone to injury.

Plantar Fasciitis (or Fasciopathy) is one of the most common foot complaints seen by podiatrists and physiotherapists. The term 'Fasciitis' specifically refers to acute injury presentations, whereas 'Fasciopathy' is a more generalised term describing injury to the fascia, which also encompasses chronic pain. These injuries are characterised by inflammation and pain, typically surrounding the fascia's insertion point at the medial heel, but sometimes also through the arch of the foot. Rupture can also occur, although this is very uncommon due to the strength and integrity of the Plantar Fascia.

Sufferers will usually complain of sharp, stabbing pain that is worst in the mornings and after periods of inactivity. During rest, soft tissue structures cool down and tighten, so they're over-stretched with excessive load on return to activity. Exercise and extended periods of weight-bearing and walking will also usually aggravate symptoms due to increased load and strain through the aggravated Fascia. Pain may be tolerable during activity, but worse



resolution will not only prolong recovery time, but can also increase the risk of developing other injuries due to compensation.

Plantar Fasciopathy affects both active and less-active individuals and there are many causative factors to consider. Injury develops due to excessive loading and increased traction of the Plantar Fascia at the insertion. Over-use is the most commonly cited reason for injury development – walking and standing for extended periods of time increases load on the Plantar Fascia. Athletes in particular need to consider their daily activities in addition to their training load (volume and intensity). Footwear also plays a significant role – both during exercise and day-to-day. Wearing shoes with insufficient support and cushioning will increase strain on the Plantar Fascia.

afterwards or with fatigue. In chronic injury presentations, there is typically less inflammation and the pain is more inconsistent. Chronic pain without appropriate treatment and

[>>> READ FULL ARTICLE](#)

By Emily Donker
intraining podiatrist

COACHING KIDS

How much is too much? Overtraining and children.

I have been coaching kids for over 30 years and the most common question I am asked by their parents is about how much training should their child do. In most cases this is because the child keeps asking to do more rather than the parent wanting them to do more. This is the key factor in knowing how much is too much running. If the decision to run more comes from within then it is a self motivated and usually OK. If it is enforced or even encouraged from outside then it could be a problem.

The IAAF has guidelines around the recommended maximum distance that children should be allowed to race. However I think they are skewed towards the long term development of the child into an elite athlete which really does not apply to over 99% of children. The childhood obesity epidemic and poor diet has got a lot of press lately. However the hidden risk factor in children's health is low fitness and low activity levels. As with adults the risk factor to mortality and morbidity is much greater from low fitness than obesity.

Few children walk or ride their bikes to school anymore. They no longer spend the afternoon after school running around with the neighbourhood kids. It is much more likely that they will be doing homework or spending time on a screen. While the reality is that children are safer now than they have ever been the perception is that the world is a dangerous place and children must be protected from it. Unfortunately this over-protection has led to a much more widespread and significant issue for their lifetime health status.

The risk to children from overtraining is similar to adults. Too much training load of intensity or quantity will lead to overuse injuries.

Children can get some of the same injuries that adults get. The advantage they have is generally lower body weight so less impact forces and much better healing potential. Injuries in

children are sometimes dismissed as 'growing pains' when they actually need to be addressed just like an adults injuries.

Growth related injuries can happen in children particularly if they have grown significantly over a short period of time. The bone can grow a few centimetres over a few weeks. The soft tissue of muscles and tendons can take a few months to catch up. Very active children during this catch up phase are more susceptible to damage to the growth plate at the heel (Severs) and knee (Osgood-Schlatters and Sinding-Larsen). This causes what is called a traction apophysitis where the tight muscles



pull on the growth plate irritating it. It is generally managed well with a temporary reduction in activity and correction of biomechanical issues.

The main goal of children's participation in sport should be to develop a lifetime love of exercise and being active. Competition is a focus of many of the children and some of the parents which can help keep the kids motivated to do the training. However few kids can win races while every child is able to win at life by being fit and active.

I approach programming for kids the same way I do with adults. I look at their goals to make some realistic but challenging targets then look at their training history, ability and experience to determine the safest and most effective training plans to achieve those goals. Because kids are kids they have less experience and have less of a training base than adults. Building in gradual training load progression takes longer for this reason.

What I do like to do is have some progressive training goals over each year. That can be doing the longest run ever or the fastest 1km or 400M. I also like the kids to be focussed on their own PB's which is in their control rather than placing in events which is not always able to be controlled. I believe in frequent racing so that they can lose any fear of competition but I also will set some fun goals in races like starting or finishing faster or hitting specific pacing targets.

The big issue is when kids ask to train more or race further. As a coach I try to convince them of the value of gradual progression and that they should be wanting to run at their best when they are older not when they are 12. That can be hard for them to accept especially if they are being beaten by peers who are training twice as hard as they are.

I am more worried about children doing too much intensity than quantity. Excessive volume of intense sessions or racing in training can stress the developing endocrine system triggering anxiety, depression or even eating disorders. Easy running will help develop capillary networks and help develop the love of running that will establish a healthy behaviour of exercise for life.

From age 13 Gebreselaise had to run to school and back 20km every day but in Australia most races have age restrictions. They usually must be 16 to run a half marathon and 18 to run a marathon. There is no scientific evidence for long races being dangerous for kids. In fact it is the middle aged men who are most likely to get into trouble in races and should probably be banned from participating.

I think every child should be able to run/walk a 5km from around age 6 to 7. By age 8 to 10 they should be able to run a 10km. By age 12 to 13 a half marathon. They should initially approach these as long training runs rather than races. The attempt at these longer events must be something the child wants to do. The risk of injury to the child is the same as anyone doing a race. The worse case scenario is that they may stop wanting to do these races in a few years when other experiences become more exciting. If the long races have been positive life experiences then they will remember them with fondness and come back to maintaining fitness later in life.

The risk experienced by the majority of children in Australia of not running is much greater than the risk of long running for children. As long as the running is driven by the child's own interest then it should be encouraged. As parents you should exert a calming influence on your child to wait to train more and race further. But if they have the love of running then perhaps let them run with it as far as they desire.

By Steve Manning
intraining podiatrist and coach



intraining
**MARATHON
SCHOOL**

Conquered parkrun?
Set yourself a new
challenge in 2017.

Part of the intraining Marathon School program.

More information online at
www.intraining.com.au/marathonschool

intraining

running injury clinic

BALANCE, CORE & SPORTS REHAB STUDIO

33 Park Road, Milton



- ◆ Podiatry
- ◆ Massage
- ◆ Physiotherapy
- ◆ Pilates
- ◆ Dietitian

Call or email to book an appointment

Ph: 3367 3088 | Email: clinic@intraining.com.au

www.intraining.com.au

Podiatry and Physiotherapy appointments
also available at Indooroopilly Shopping Centre
(intraining located on 3rd Level)

Podiatry

Physiotherapy

Dietitian

Massage

Pilates