

September 2018 Newsletter

Turramurra Trotters
Running since 1974

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The Newsletter

Re-cap of the month, plus announcements:

Dear all

Apologies for the lateness of this newsletter, I have had some computer problems.

Alex and Pam Rosser did a superb job with the drinks during this month and Michael Fortune will be handling the drinks during October, except for the first two weeks which will be handled by Ralph and Clare Pain from the reserves bench. Early message for George and Ursula Chmiel who are booked to do the drinks in November.

I plan on making a booking soon for our Christmas Party. I am thinking of Tuesday or Wednesday, 11 or 12 December, venue to be decided. Les is checking the Asquith Leagues Club in Waitara. Are there any other suggestions in our catchment area? Otherwise we may need to fall back to the Blue Gum Hotel.

Robert Thomson and a number of other TT members competed? In the Medoc Marathon on 8 September. See Robert's report attached.

Matt Henshall competed in the Yurrebilla Ultra (56km) last Sunday (23 September).

Finally, Dennis Williams was at the World Masters Athletics held in Malaga, Spain in early September, see his report.

We had a good representation at the recent Blackmores Running Festival. I have noted the times of runners I am aware of who competed. Jon Fowler sent me a report on his effort in the Blackmores Marathon, also attached.

Blackmores Running Festival

Marathon

Jon Fowler	3:30:34 PB
Mel Duncan	Sweeper

Half Marathon

Phil South	85:54
Michael Fortune	93:41 PB
George Chmiel	120:38 PB
Lyanne Pix	124:23
Hideko Sato-Fraser	158:53 – assisting Achilles blind runner
Hideko Yamamoto	137:31

10k Bridge Run

Caroline Dean	59:18
Ursula Chmeil	81:17

Regards

Alan

Hi Les and Alan,

Turrumurra Trotters made their mark at the Dubbo Stampede held in the Western Plains Zoo last Sunday (26 August 2018).

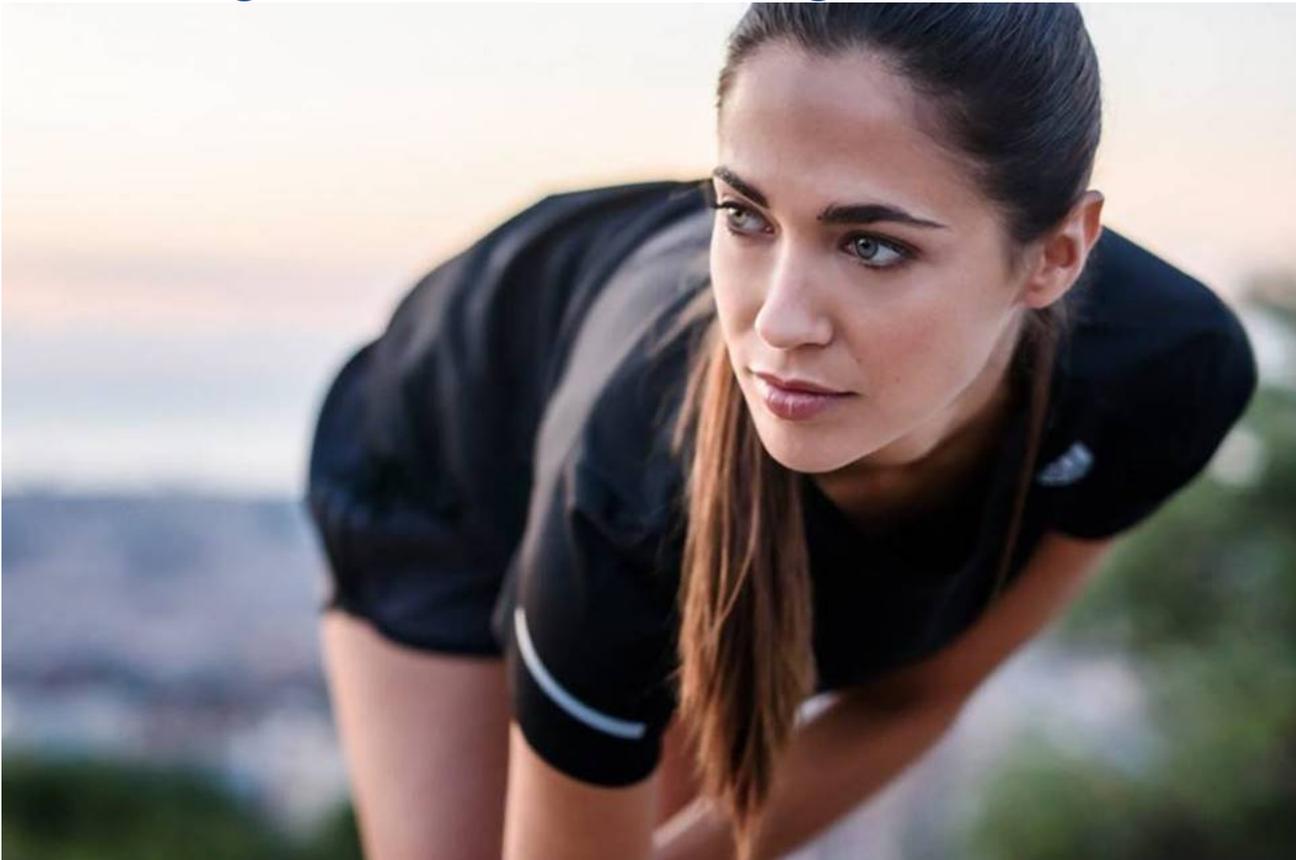
Alexander (son) won the Rhino Ramble Marathon and set a new record of 2:30:21, taking 6 minutes off the record he set in 2014. Alexander finished 20 minutes ahead of the second placegetter.

Brian (husband) won his age group in the Cheeta Chase 10K in 58 minutes and I walked the 5.3K Dingo Dash avoiding the wild animals.

The Dubbo Stampede would be a lovely weekend for the Trotters to attend as the races all begin in the zoo and participants and their families have a free pass to the zoo for the day. It was very well organised and the courses were interesting. Could be well worth considering for 2019. The 2019 date has not been announced yet but as this year's run was held in late August, it is likely to be around the same time next year.

Lynne (Matthews)

Are You a Beginner Runner? These 8 Challenges Await You



To relieve stress in everyday life, lose weight, or get in shape: there are plenty of good reasons to start running. But the initial motivation for running can disappear as quickly as it came.

Sometimes running turns out to be tougher and more complicated than a lot of beginners might have thought. Furthermore, the body first has to learn how to accommodate the physical stress and strain of the sport.

Here you'll find the 8 most common challenges that await you in this new sport to prepare you for the first sessions.

1. Side stitches

You have enough energy for a longer loop, but painful side stitches force you to take regular walking breaks?

Side stitches are a particularly annoying problem for beginners. If you are often bothered by side stitches, you should reevaluate how you eat. Your stomach is usually responsible for this problem.

What can help:

Try to not eat anything up to two hours before your run. Strengthening your core and breathing better can provide some relief, too. If you get a stitch, walk for a bit and press your hands on the spot that hurts while breathing slowly. As soon as the pain eases up, you can start running again at a slower pace.

Check it out:

Here are some more tips to avoid side stitches:

2. Stomach problems

Does your stomach give you more trouble than the running itself either while you're running or after each workout?

Stomach cramps during or after a run are quite common. After all, your stomach gets shaken up quite a bit when you run, which puts stress on your digestion. Depending on your body, it may react to this unfamiliar situation with cramps.

What can help:

Think about how you eat and drink before you go running. Avoid putting additional strain on your stomach with high fat, sweet, or spicy foods. Also, make sure that you stay hydrated to prevent cramps. As soon as running becomes a routine activity, your body will learn to cope with the special challenges it presents.

3. Sore muscles

The muscles in your legs hurt so much for days after each run that you have a hard time taking care of everyday tasks?

Sore muscles can be very painful and are quite common among beginner runners. Usually the pain starts a few hours after the workout and can last up to a week. It is caused by the unfamiliar movement and sometimes improper technique, which strains the muscles. Unfortunately, there's no way to totally avoid sore muscles.

What can help:

The best thing you can do is to slowly increase the scope and intensity of your workout, so that your body can adjust to the exercise.



4. Breathing problems or shortness of breath

Before long you have to slow your pace because you can't breathe? You can only run if you take walking breaks?

Beginner runners often experience shortness of breath when they start out. This can be caused by shallow breathing that doesn't fit with the running rhythm. Usually the volume of the exhaled air does not equal the amount inhaled; the runner quickly becomes short of breath.

What can help:

Pay attention to how much you exhale while you're running. Inhaling will then happen automatically. When you start, it's helpful to count your steps when you breathe. Breathe in for two steps and out for two steps. This way the inhaled and exhaled volume stays the same. After a while, this unfamiliar rhythm becomes natural and you won't have to consciously regulate it.

5. Pain in your feet

Your feet hurt or are really tense? They feel especially cramped and stiff in the morning?

The ball of your foot, the heel, or the arch: pain can develop in different parts of the foot. Often you will even notice the pain when you're walking or standing.

Interesting fact:

Your feet are under particularly high strain while running. After all, they have to accommodate eight to ten times your bodyweight with each step.



The feet also are the foundation for an efficient, dynamic running technique. They are not accustomed to this kind of muscular exertion in daily life. They have to slowly adjust to the impact and develop the muscles for good foot strike.

What can help:

Regular stability training and mobilization of the feet can strengthen the muscles. Altering and optimizing your running style can often help change the impact and strain on your body.

6. Sluggish running

Your body feels heavy and lethargic? Every step is hard work?

The first steps usually feel heavy and awkward for beginners – running seems exhausting. Often there is absolutely no spring in your step or any kind of rhythm to your movement.

What can help:

Evaluate and improve your running technique regularly. Professional runners have to diligently improve their running style, too, so they can continue running fast and efficiently.

Regularly running barefoot on grass, doing special motor skills training, and keeping your body flexible with stretching exercises can help here. This way you'll avoid having to fight your own body when you run. Your running style will become more relaxed.



7. Problems falling asleep after a run

You have trouble falling asleep after an evening run? Or you lie awake for a long time?

Running should actually be a good way to get away from the bustle of daily life and reduce stress. However, the body is often so focused on action after a run that calmly drifting off to sleep is impossible.

Our body reacts very slowly to the physical stress of running and often processes the workout hours after the run. This afterburn effect that we appreciate so much when trying to lose weight makes it harder for us to fall asleep after a run.

What can help:

The length of time your body continues this after burn depends on the intensity of the run and your individual fitness level. If this phenomenon regularly robs you of sleep, it's better to schedule easier, shorter runs for the evenings. Your body releases stress hormones during easy runs and can relax quickly after a session. Do your intense or long runs in the middle of the day or early afternoon.

8. Back pain

Since you started running your back hurts when you run? It feels tense when you're not running, too?

The back is what keeps your body upright when you run and acts as a “shock absorber” for all the pounding. At the same time, it is the control center for the coordination of all movements in your upper body, arms, and legs. It plays a major role in running. Usually the cause of back pain while running is a combination of improper running technique, a weak core, and a lack of flexibility.

What can help:

Do regular stretching and strength training to build up the muscles in your core. This will keep your back from getting exhausted as quickly and will reduce the pain. Also, evaluate and improve your running technique. You'll reduce unnecessary strain while running, which makes your back work harder and leads to fatigue.

Summary

Everything is tough at the start. Don't let the initial challenges get you down. Running is a very complex activity that challenges your body in many ways. That's why it is so effective and popular.

- Stay focused on your personal goal – it will keep you on track, even when the running gets harder.
- Every run is different, and your body reacts accordingly.
- Pain or minor problems that arise are totally normal and happen all the time – for beginners just as much as competitive runners. But keep your chin up!

As soon as your body has adjusted to the special challenges of running, it will be easier for you to handle them.

What Is Plantar Fasciitis?



Story at-a-glance -

- Plantar fasciitis is a condition wherein patients experience pain and inflammation in their plantar fascia ligament found across the bottom of your foot
- Plantar fasciitis occurs when the plantar fascia ligament that runs along the sole of your foot becomes inflamed, causing intense pain
- While a one-size-fits-all solution to completely eliminate plantar fasciitis does not exist, there are various techniques that you can follow if you want to prevent this condition from wreaking havoc on your body

Plantar fasciitis occurs when the plantar fascia ligament that runs along the sole of your foot becomes inflamed, causing intense pain.¹ This thin and web-like ligament, the longest in the foot, is attached to the bottom of your heel bone.² It stretches and contracts to help maintain overall body balance, and provides the feet with support and strength for walking and other daily activities.^{3,4}

Patients with plantar fasciitis often feel pain at the back of the arch and right in front of the heel. This condition is one of the most common complaints among runners and in the field of orthopedics.⁷

Causes of Plantar Fasciitis

Too much physical stress is never a good thing, and plantar fasciitis patients can attest to this because they feel immense pain when the plantar fascia is stretched too far and becomes inflamed. The inflammation usually occurs where this ligament fastens to the heel bone.⁹ Although the plantar fascia is able to absorb stress placed on the foot,¹⁰ too much pressure in the heel and other tissues may contribute to the development of plantar fasciitis.¹¹

In some cases, your foot's pronation, or tendency to move sideward while walking or running,¹² becomes excessive to the point that it leads to pain.¹³ This typically occurs in your subtalar joint, found below your ankle.¹⁴

Who Is Most Prone to Having Plantar Fasciitis?

People with the highest risk for plantar fasciitis are those between 40 and 60 years old,¹⁵ and this condition is slightly more common among women compared to men.¹⁶ Plantar fasciitis not only causes crippling pain, but burdens the wallet too, since a whopping \$192 to \$376 million are spent annually for treatment. One million visits per year are made to medical professionals who treat plantar fasciitis, affecting approximately 10 percent of the U.S. population.¹⁷

Risk Factors for Plantar Fasciitis

These risk factors may predispose you or someone you know to plantar fasciitis:^{18,19}

- **Obesity** — Sudden weight gain can increase pressure on your plantar fascia.²⁰
- **Pregnancy** — Plantar fasciitis may arise because of pregnancy weight gain. Women, in order to prevent thigh chafing, may walk with their feet far apart from each other, place extra strain on their feet and in effect increase their risk for plantar fasciitis.²¹
- **Foot structure** — These include people who have flat or high-arched feet, unusual walking patterns or a tight Achilles tendon.²²
- **Having an occupation that keeps you on your feet** — Factory workers and restaurant servers, who spend long hours walking or standing on hard surfaces, can injure their plantar fascia.
- **Increased physical or athletic activity** — While incorporating physical movement into your lifestyle is great, too much can be a bad thing. Plantar fasciitis risk is high among people who:
 - Run regularly or add additional minutes to their running time
 - Perform activities or workouts that require heavy lifting or raise stress levels
 - Exercise on hard or uneven surfaces

Dancers, including those who do ballet or aerobics, may be predisposed to plantar fasciitis too, since some movements may place additional stress on the foot.

Symptoms of Plantar Fasciitis

Patients affected with plantar fasciitis typically experience intense pain at the bottom of their foot, near the heel. Some patients with this condition describe it as a dull pain, while others feel a sharp twinge. In some instances, patients may experience a burning or ache at the bottom of the foot that extends outward from the heel.²³ The pain may vary in different degrees and can occur:

- **While performing physical activity** — Even the simple act of taking a few steps upon waking up in the morning or going up or down a flight of stairs can be agonizing, because the plantar fascia band suddenly elongates, and stretches and pulls on your heel.^{25,26,27}

- **After exercising or working long hours** — Plantar fasciitis is not only common among runners, especially those who do long distance running, run downhill or run on uneven surfaces,²⁸ but also in people with jobs that require them to be on their feet for most of the time, such as factory workers or restaurant servers.²⁹

If you have been sitting or standing down for long periods of time, there could be pain once you start moving again. Fortunately, a few minutes of walking can help alleviate the pain.³⁰

Signs Your Doctor Looks for if You Have Plantar Fasciitis

If you or someone you know is affected with crippling pain, consult a physician or a podiatrist (doctors who diagnose and address problems related to the legs, feet and ankles³¹) immediately. According to the American Academy of Orthopaedic Surgeons, after you describe your symptoms, your physician will examine your foot and look for these potential plantar fasciitis indicators:³²

- A high arch
- An area of maximum tenderness at the bottom of your foot, in front of your heel bone
- Pain that exacerbates when your foot is flexed and when your physician pushes on the plantar fascia, although the pain can improve when you point your toes down
- A limited upward motion of the ankle

Imaging Tests That Can Help Diagnose Plantar Fasciitis

Your physician may recommend that you undergo imaging tests to ensure that the heel pain is caused by plantar fasciitis, and not another condition:^{33,34}

- **X-rays** — Although I don't recommend these unless absolutely necessary, by providing clear images of bones, X-rays may be helpful in making sure that the heel pain is not caused by fractures, a pinched nerve or arthritis. Plus, if you have heel spurs that were undetected, an X-ray can spot them.³⁵
- **Other imaging tests such as magnetic resonance imaging (MRI), ultrasounds,³⁶ blood tests or bone scans³⁷** — Again, I don't ordinarily recommend MRIs unless no other diagnostic tool is available, but an MRI scan could be ordered by your physician if your heel pain has not been addressed by initial treatment methods. Take note, however, that these other types of imaging tests are rarely ordered and not frequently used to diagnose plantar fasciitis.

Plantar Fasciitis Could Progress Into Worse Complications

If left untreated, plantar fasciitis can lead to chronic heel pain, change the way you walk, and result in further injuries to your legs, knees, hips and back.³⁸ The plantar fascia can also rupture and trigger heel hypoesthesia and flattening of the foot's arch.³⁹ Certain treatments such as steroid injections can weaken and rupture your plantar fascia as well.^{40,41}

If you ignore chronic plantar fasciitis pain for a year or more, it can develop into plantar fasciosis because avascular scarring may develop in the plantar fascia. Plantar fasciosis is painful, since the scarred tissues run low in blood supply and the pain is resistant to anti-inflammatory treatments

Dancers, including those who do ballet or aerobics, may be predisposed to plantar fasciitis too, since some movements may place additional stress on the foot.

How to Treat Plantar Fasciitis

If you or someone you know is struggling with plantar fasciitis, don't fret — there are multiple, non-surgical home treatments for pain caused by this condition:^{43,44}

<p>Getting adequate rest — An important step in eliminating plantar fasciitis-related pain is to lessen or stop activities that cause it, such as athletic activities wherein your feet pound on hard surfaces, heel-stressing activities, or standing or running for long periods of time.⁴⁵</p>	<p>Placing ice on the affected area — Applying a cloth-covered ice pack on your foot for 15 to 20 minutes, three to four times a day, can be effective.</p> <p>However, if the pain has not subsided after two to three days, adding heat to the area using a hot compress or hot packs may help.</p>
<p>Taping the foot — This stabilizes the affected ligament and limits its movement. Taping may help the plantar fascia avoid abnormal movement or excess strain, preventing tears from developing.</p> <p>Consult a physician to learn the proper way of taping the foot and the schedule you should follow when applying and removing the tape.⁴⁶</p>	<p>Stretching and strengthening exercises — These exercises may promote flexibility and strength in muscles supporting your foot, and hopefully lower your plantar fasciitis risk.⁴⁷</p>
<p>Extracorporeal shockwave therapy (ESWT) — Often utilized when conventional treatments fail to work, ESWT entails directing sound waves toward the affected area to hopefully address the pain and promote healing.</p> <p>However, there are no consistent findings on ESWT's effectivity, so it's not commonly performed. It has also been said to trigger bruising, swelling, pain, numbness or tingling.</p>	<p>Physical therapy — Consult with a physical therapist who can work with you on an exercise program that concentrates on stretching and strengthening your lower leg muscles and plantar fascia.</p>

Use the Right Type of Footwear

The next time you purchase a pair of shoes, don't just think about how good they look; rather, take the time to examine how comfortable they are, and how they are made and structured, since these factors could affect your plantar fasciitis risk.

According to the Occupational Health Clinics for Ontario Workers Inc., shoes with high heels, hard soles, poor support, and inadequate sizing and width often have poor cushioning. These types of shoes call for more flexibility in your calf muscles by increasing foot length and requiring the foot to bend further back while walking.

However, if your foot isn't able to bend back any further, it causes increased tension on your plantar fascia.⁴⁹ Tighter calf muscles, meanwhile, make it hard for you to flex your foot and bring your toes upward toward your shin.⁵⁰

It is recommended that plantar fasciitis patients wear an insole that can be bought over-the-counter or online to help relieve the pain.⁵¹ You can also use or purchase orthotic shoes⁵² that may aid in supporting your feet and arch, addressing foot problems and decreasing rotational movements.⁵³

Shoes that provide ample support to your feet are valuable as well, especially if they have firm soles and extra cushioning, as they lessen pain when you are performing activities such as running or walking.⁵⁴

When you take a step and your heel strikes the ground, tension is placed on your plantar fascia, leading to the formation of microtrauma or tiny tears in the tissue. Cushioned shoes or inserts work by decreasing tension and microtrauma formation.⁵⁵ Another option for potentially lessening foot pain is to put soft silicone heel pads in your shoes. They work by cushioning your heel and potentially reducing pain.⁵⁶

Night splints are also helpful for plantar fasciitis patients, since most people sleep with their feet pointed down. This prompts your plantar fascia and Achilles tendon to shorten, and may increase your risk for heel pain. By using these, you can stretch your plantar fascia while sleeping.⁵⁷

Stay Away From These 'Ideal' Treatment Methods

Nonsteroidal anti-inflammatory drugs (NSAIDS), despite their "ability" to eliminate inflammation, aren't the best choice for addressing plantar fasciitis. Different studies have shown that NSAIDs can cause side effects such as an upset stomach, nausea and vomiting, heart problems, GI bleeding, kidney problems, hypertension and even death.⁵⁸

Avoid steroid injections for plantar fasciitis as well.⁵⁹ The use of steroids even for a short period of time may increase your risk for broken bones, blood clots or life-threatening sepsis.⁶⁰ In some cases, people may develop more adverse effects such as fluid retention and swelling of the lower legs, high blood pressure or blood sugar levels, oral thrush or fungal infection in the mouth, and weight gain.⁶¹

Is Surgery Advisable for Plantar Fasciitis?

Surgery may be recommended for some plantar fasciitis patients, but remember it is not the be-all or end-all of plantar fasciitis treatment, especially since effective nonsurgical methods are available. In fact, around 95 percent of people with plantar fasciitis can opt for pain relief sans the surgery. If you or someone you know has plantar fasciitis, take note that a surgical procedure should only be considered if:^{62,63}

- Conventional nonsurgical treatments don't work
- Other treatment methods you've been using for at least six months have been ineffective in treating your pain
- Your ability to do work or moderate exercise has been affected because of heel pain

Surgical Procedures for Plantar Fasciitis

Two types of surgery can be performed on plantar fasciitis patients:⁶⁴

- **Gastrocnemius recession** — This procedure aims to add to the motion of your ankle. A gastrocnemius recession involves a surgical lengthening of calf muscles, especially if they are tight, since they may increase stress on your plantar fascia. This is done via a traditional, open incision or by making a smaller incision and looking inside the area using an endoscope, a device that has a small camera.

- **Plantar fascia release** — Patients who complain of continuous heel pain but have a normal range of motion in their ankle are usually recommended by their physicians to undergo this type of surgery. In this procedure, the plantar fascia ligament is partially cut to decrease tension in the tissue.

A plantar fascia release can be performed via an endoscopy, wherein the endoscope is inserted into the area. However, it's arguably easier to do a plantar fascia release with an open incision since it also has a lower risk for nerve damage.

Potential Risks for Plantar Fasciitis Surgery

Because it's an invasive procedure, you must be aware that there are potential complications linked to plantar fasciitis surgery. Take note of the following risks associated with these surgical procedures:⁶⁵

A pinched nerve or tarsal tunnel syndrome or posterior tibial neuralgia, wherein the tibial nerve in your tarsal becomes compressed ⁶⁶	Recurring heel pain
Neuroma, a benign yet painful tumor comprising nerve tissues felt between your third and fourth toes, and can lead to a burning sensation, and tingling or numbness between the toes and in the ball of the foot ⁶⁷	Wounds that take a long time to heal
Delays in performing normal activities	Infection
Worsened symptoms post-surgery (although rare, it is a possibility)	Nerve injury and long-term muscle weakness ⁶⁸
Risks caused by anesthesia	

Exercises for Plantar Fasciitis

Just because you have plantar fasciitis does not mean that you should stop making an effort to work out. Exercises that stretch both your plantar fascia and calves are helpful in relieving pain caused by the condition.^{69,70} Here are five plantar fasciitis exercises recommended by Lulu Peelle, a yoga therapist and Ayurvedic counselor.⁷¹

Wall Stretch

Stretching and elongating your calf muscles are the primary objectives of this move:

1. Stand about an arm's length from the wall.
2. Step forward with your left leg, while moving backward with your right.
3. Bend your left knee and press down with your right heel.
4. Hold this position for 20 to 30 seconds and then switch legs.

Tennis Ball Massage

The rolling motion in this tennis ball massage helps loosen up your plantar fascia,⁷² potentially reducing pain. Peelle suggests doing this exercise on a soft surface such as a yoga mat, carpet or rug, as hardwood surfaces will make the ball slide:^{73,74,75,76}

1. While sitting down, place a tennis, lacrosse or golf ball underneath the big toe of your left foot.
2. In a backward and forward motion, gently roll the ball beneath your foot. Once you locate a tender spot, stop and flex your toes upward and downward.
3. Continuously roll the ball for about a minute or two, then repeat on the other foot.
4. You can also do this tennis ball massage while standing up, but make sure you can fully support yourself first.

Picking Up a Sock or Towel Using Your Toes

Tone your plantar fascia and develop arch strength by doing this simple exercise any time of the day. Simply curl your toes around a washcloth, towel or sock, pick it up and then release the item.

Seated Calf Stretch

Peelle's version of a Seated Calf Stretch involves lifting and straightening your leg, pointing your toes forward just like a ballerina, flexing and keeping them as wide apart as possible. Repeat this step for a couple more times. After this, move your ankle in circles and point and flex your toes while doing a circular motion. This allows the ankles to remain strong and provides support for your feet.⁷⁷

However, if you want to take it up a notch, you can do this ankle flexion exercise from ACE Fitness. Although the movement comes from your ankle, this exercise targets your calves and shins. It's similar to the seated calf stretch, although it uses resistance bands or cables:

1. Start by sitting with one leg stretched in front of you. Wrap a cable or resistance band around the ball of the outstretched foot, in order to pull the bottom of your foot away from you.
2. With your toes pointed away from your body, slowly pull them toward your shin. Go back to the starting position slowly and, with control, repeat the first step.

Avoid bending or fully extending your knee during this exercise, and make sure to align your foot and ensure it faces forward. Sit up as straight as you can, and avoid arching or slouching on your lower back.⁷⁸

Belt Stretch

You can do this stretch while sitting or lying down:^{79,80}

1. Take a belt, towel or yoga strap and place it under the ball of your foot. Slowly pull the belt toward you and allow the toes to come toward your body.
2. Try to continuously release and stretch your foot, especially your plantar fascia. Hold this position for around 15 to 30 seconds to feel the stretch in your calf, while relaxing your shoulders, neck and jaw.
3. Release the foot back to the starting position, repeat the move two to four times and then change sides.

Preventing Plantar Fasciitis

While a one-size-fits-all solution to completely eliminate plantar fasciitis does not exist, there are techniques you can follow if you want to help prevent this condition.

These Food Items Are a Must in Your Diet

If you want to avoid plantar fasciitis, begin with your diet. Given that this condition is characterized by the inflammation of the plantar fascia,⁸¹ a diet composed of potent anti-inflammatory and low-sugar foods, and non-vegetable carbohydrates is highly recommended. These include:

- Herbs and spices that include ginger, cloves, rosemary and turmeric
- Fermented and traditionally cultured foods that are able to control inflammation by "reseeding" your gut with beneficial bacteria, resulting in improved immune function
- Shiitake mushrooms, as they have strong compounds that have the natural ability to impede inflammation. One example is ergothioneine, which could prevent oxidative stress

Don't forget to increase your intake of healthy saturated fats. Various studies have shown that saturated fats are NOT linked to heart disease and that they actually offer these health benefits:

Helping with mineral absorption	Acting as carriers for fat-soluble vitamins (A, D, E and K)	Delivering building blocks for cell membranes, hormones and hormone-like substances
Converting carotene into vitamin A	Serving as optimal "clean" fuel for your brain and mitochondria	Helping in providing satiety

Your best sources for healthy fats include:

Animal-based omega-3 fats, such as <u>krill oil</u>	Coconuts and <u>coconut oil</u>	Grass fed butter	Organic pastured egg yolks
<u>Avocados</u>	Black sesame, cumin, pumpkin and hemp seeds	Raw nuts, such as macadamia nuts and <u>pecans</u>	Third party-certified, high-quality olive oil and olives

Complement all of these healthy dietary changes by incorporating as much real food into your meals as possible — this means unlimited amounts of fresh and organic vegetables and moderate portions of high-quality grass fed meats.

You Can Exercise, but Not Intensely

If you regularly set aside time to exercise, follow these tips from Runner's World Magazine, which not only will help you make the most out of your workout, but also evade plantar fasciitis:

- Slip on well-cushioned shoes and see to it that the heels don't become significantly worn.
- Run on soft surfaces such as grass, trails or a good track, and avoid asphalt and concrete.
- Maintain your mileage to a constant level. Raise your total weekly miles by no more than 10 percent a week, especially if your training remains relatively the same.
- When beginning speedwork, ensure that you ease into it gradually via a several-week buildup.
- Regularly perform exercises that stretch your Achilles tendon.

Frequently Asked Questions About Plantar Fasciitis

Q: Where does plantar fasciitis most often hurt?

A: The plantar fascia ligament, found across the bottom of the foot, bears the biggest brunt of the pain. It's considered the largest ligament in the human body and connects the heel bone to your toes.⁸³ One of the many symptoms of plantar fasciitis is intense pain that gradually develops near the heel of your foot.⁸⁴

Q: How long does plantar fasciitis pain last?

A: According to the University of Pittsburgh Medical Center, plantar fasciitis symptoms may go away on their own. If they don't, plantar fasciitis recovery time may last between six and 18 months, if the condition is untreated. However, the more you prolong a checkup despite immense pain, the more devastating the condition can be, and it may take longer to heal from plantar fasciitis. If symptoms arise, make sure to have yourself checked immediately.⁸⁵

Q: Is a massage ideal for plantar fasciitis?

A: Having a massage or performing exercises involving a massaging motion on your foot can be beneficial. Massages release endorphins or hormones that help induce relaxation, relieve pain, and lessen levels of stress chemicals like cortisol and noradrenaline. The tennis ball massage is an exercise you should perform the rolling motion enables the plantar fascia to loosen up, helping lessen irritation in the foot.^{86,87}

Q: Is acupuncture effective for plantar fasciitis treatment?

A: Yes. Some studies have shown that acupuncture can be effective in treating plantar fasciitis and other forms of heel pain.^{88,89,90} Evidence presented in a 2012 Acupuncture in Medicine study highlighted that this form of treatment may be effective for people with plantar heel pain (PHP).⁹¹

Q: Is a brace ideal to treat plantar fasciitis?

A: Plantar fasciitis patients can wear a night splint, which is a brace⁹² that provides enough support to your calf and foot.⁹³ a common scenario among plantar fasciitis patients is morning heel pain caused by sleeping with the feet pointed down. By wearing a night splint, the plantar fascia is stretched during sleeping hours, potentially reducing pain.⁹⁴

Q: Can socks work for plantar fasciitis relief?

A: Plantar fasciitis socks and compression sleeves may be effective. These aim to increase pressure to the plantar fascia, while stabilizing the foot and stretching the ligament. These socks can be worn during the day or night, under regular socks, or even while you sleep.⁹⁵

Q: How do you tape your foot for plantar fasciitis recovery?

A: Two types of athletic tapes can be used: kinesiology or kinesio tape and regular athletic or medical tape.⁹⁶ Runner's World suggests the following steps when taping a foot affected by plantar fasciitis. To do these, you'll need tape measuring 1, 1.5 or 2 inches, and pretape spray (if possible):⁹⁷

- *"You may [pre-measure] and cut the tape before you start. Measure using the nonadhesive side. You will need [two 1-]inch strips and [four] to [six] wider strips. The 1[-inch] strips will measure along the outside border of the foot starting behind the small toe, around the back of the heel and ending behind the big toe.*
- *Take your first [1-]inch strip and begin behind your small toe, running along the outside of your foot, behind the heel and finish just behind your big toe joint. This is your base strip.*
- *Next take your wider tape and apply beginning at the heel. Attach the tape even with the top of the base strip on the outside of your foot and pull up snugly across the bottom ending even with the top of the base strip on the inside of the foot. Overlap by one-half all the way up the foot ending behind the ball of the foot.*
- *Try to make sure there are no wrinkles in your skin or the tape. Finish the tape job with a [1-]inch strip the same way you started, covering all the ends of your wider tape starting behind the small toe, running around the back of the heel and ending behind the big toe again. It should make the foot feel better, if it doesn't then take it off and start again."*

Q: Is surgery needed for plantar fasciitis?

A: Patients with plantar fasciitis may undergo surgery, provided that:⁹⁸

- Conventional treatments did not work⁹⁹
- Treatment protocols utilized for at least six months were ineffective
- Your ability to do work or moderate exercise has been severely impacted due to heel pain

Surgical procedures that are typically performed for plantar fasciitis patients are the gastrocnemius recession or the plantar fascia release.¹⁰⁰

Q: How long is the recovery time from the surgery?

A: Those who undergo a gastrocnemius recession often make a full recovery in around three to four months.¹⁰¹ Meanwhile, patients who undergo a plantar fascia release may experience a complete recovery in around six months or more (depending on the condition of the patient), although your doctor may allow you to return to your normal routines six to 12 weeks after the operation.¹⁰²

Remember to always discuss both the risks and benefits of the surgery with your physician before undergoing an operation for plantar fasciitis, as there are potential risks that may affect you, such as infections, recurring heel pain and slower recovery time for wounds

Wearable monitors can help your heart if you know your device

Wearable technology is becoming an important tool to track and improve heart health, but consumers must understand what their device is measuring



Fitness wearables are increasingly popular among the health conscious, and they are helpful tools for monitoring existing health problems and identifying illnesses, but the technology is not foolproof.

On a recent Sunday, an otherwise healthy Hong Kong man in his 60s saw an alert on his smartwatch signalling his heart rate had skyrocketed to 160 beats per minute.

He was so concerned that he went to the hospital. That decision saved his life.

“It turned out to be a very severe blood vessel problem,” says Dr Jeffrey Fung Wing-hong, clinical director of the cardiac electrophysiology laboratory at Hong Kong Adventist Hospital – Stubbs Road.

One patient [who saw a smartphone warning] thought he was in good health. He had a very severe blood vessel problem [and immediate surgery was needed]

“He thought he was in good health. When he came in, his vitals were OK, but an electrocardiogram showed further investigation was needed.”

Fortunately, the hospital’s Hong Kong Heart Center had the advanced equipment to provide him with a thorough examination, which led doctors to determine that a surgical procedure was needed immediately.

The doctors operated on him on the same day and he is now “doing very well”, Fung says.

Help or hindrance?

This is just one real-life example of how technology to monitor the heart and health has benefited someone who may never have known they were on the cusp of a major medical problem.

Yet while a smartwatch may have saved the man's life, the technology is not always foolproof, Fung says.

"The problem is that these devices do have their limitations," he says. "Sometimes an increased heart rate could be just a false alarm."

Heart rates tend to fluctuate, even when there is no underlying health issue.



Short-lived stress, excitement and activity can affect the number of beats per minute.

Rest and exercise, the natural variation among healthy adults and the limitations of your tracking device also play a role, and that can be confusing for anyone relying on consumer-grade technology to track their health.

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Wearable variables

The American Heart Association says a typical human heart beats about 100,000 times each day.

While the resting heart rate is about 70 beats per minute, the range can fluctuate between 40 and 90 beats per minute in adults.

The gadgets that track this wildly variable data are known as wearables.

These devices often look like a watch and feature a range of built-in sensors which can connect to the internet to relay and store data.

German market research portal Statista.com says sales of wearable devices are forecast to total US\$26.43 billion dollars globally this year.

The wearables market is growing fast and highly competitive.

Among the most popular wearables are those made by brands such as Fitbit, Huawei Watch and Garmin Vivosport.

Yet not all wearables are created equal and the data they produce is not always easily understood, Fung says.

“Often, we have cases where the patient thinks the device is correct and [there is a problem] but when they come in, it’s nothing, or something very mild,” he says.

How people should react to such data depends on how effective the devices are at detecting the heart’s rhythm, and not just heart rate.

Follow the rhythm

The British Heart Foundation defines heart rate as the number of times the heart beats in a minute. It is a measure of the number of times the muscle pumps to push blood around the body.

The heart’s rhythm is the pattern in which it beats.

Rhythms may be broadly described as regular or irregular, fast or slow.

When the heart beats with an irregular or abnormal rhythm, it is known as an arrhythmia and this is the most common issue that Fung has to treat.

Electrical impulses spark the heart into life and are measured by an electrocardiogram, which is sometimes known as an ECG or EKG.

Monitoring the heart rate and this information can help adjust lifestyles. If a person has hypertension, wearable technology can remind them to walk more, and that’s helpful

An irregular flow of electricity can result in arrhythmia.

The abnormality is often caused by a short circuit that has been present since birth or it may be the consequence of disease.

The list of problems known to cause heart disease includes high blood pressure, coronary artery disease, faulty heart valves, muscle diseases or cardiomyopathy, thyroid problems, sleep apnoea and lung disease.

Useful tools

Fung says wearable devices are a useful technology that will be increasingly used to monitor existing problems and identify illnesses.

“It’s about monitoring the heart rate and this information can help adjust lifestyles,” Fung says.

“For example, if the person has hypertension, the technology can remind them to walk more and that’s helpful.”

High blood pressure or hypertension is a cause of some heart conditions, including thickening of the heart muscle.

The research suggests walking frequently can reduce hypertension in many patients.

The Hong Kong Department of Health recommends a minimum of 30 minutes of moderately intensive physical activity a day.

For people with an existing heart or related health issue, a wearable device may correctly identify an urgent problem, allowing them to take preventive measures before they get to the hospital, Fung says.

In the event of a severe heart attack, that means saving lives.

It is fortuitous then, that one company is already ahead of the pack when it comes to heart health.

Last November, US-based AliveCor announced it had won a Food and Drug Administration clearance for KardiaBand, a strap accessory for the Apple Watch that allows a wearer to record their ECG.

The results are collected by an app that displays the results.

The AliveCor website says the accessory is available to Apple Watch users in Hong Kong.

Future perfect

Wearable technology is moving into new areas, such as sending reminders to people to take their medication or limiting exposure to the sun’s rays.

Such technology is going to become more prevalent.

Hong Kong consumers are keen purchasers of wearables. Statista.com says annual sales revenue for wearables now amounts to US\$42 million. And it's not only consumers with health problems who need a prompt to get moving.



Hong Kong-based personal trainer Utah Lee says she uses an Apple Watch for its “activity” function. “It reminds us to be active, to pay attention to our bodies and to encourage family and friends to be active,” Lee says.

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And when it comes to heart health, Lee says exercise is, of course, hugely important. Walking more is “awesome for the heart and lungs as well as for the whole body, but I would suggest power walking or even running to challenge the heart a little bit more”.

Dr Fung says wearable technology is great if you want to track your heart rate or sleep patterns, but consumers should be aware they cannot always rely on the data or what it represents.

To stay heart healthy, he suggests we move every day, get a regular check-up and, if a wearable is important to you, invest in one that meets your needs. Choose wisely.