

Avoiding and dealing with injuries

Basic introduction to building fitness:

When you train (e.g. go for a run or lift a weight) you sustain micro damage in your body such as tiny tears in the muscle and bones. As you recover, your body rebuilds itself stronger, better able to deal with a similar event.

If you don't work 'hard enough' your body doesn't have to rebuild itself stronger and so you don't get fitter.

If you do too much, too soon, or don't leave enough time to recover between training, you break your body faster than it can recover, and you get injured or ill. This can be quite sudden (e.g. a weakened muscle is more vulnerable and you pull it) or gradual (e.g. micro trauma to your knee slowly builds up so that a niggle doesn't recover and tips into injury).

Running is a high impact sport with a high risk of injury. The easiest way to prevent running injuries is to not run! But if you want to enjoy all the benefits of running, then make sure you're sensible about it. Getting the right balance where you're doing enough, but not too much, is the key to effective training.

How to avoid injuries

1. Consistency and gradual build

Your body likes consistency, it does not like big changes in volume, intensity, distance, surface etc.

- ➔ Have a **plan**, know where you need to get to, and plan how you're going to get there by building up your runs a little bit more each week. Allow for a few weeks lost due to illness, injury, other plans etc
- ➔ **Consistency** - If you're busy one week see if you can still get out for a short run, even if you can't do the full one, something is better than nothing. And don't try and make up for it by doing double next week.
- ➔ If **changing a variable** such as shoes, running surface, type of running, form etc then introduce by building up little and often to gradually introduce the change.
- ➔ Remember often it feels fine at the time, that's not a good gauge, it's the cumulative load of all the micro traumas that one day will be too much and 'break the camels' back.

2. Recovery

Your body doesn't get fitter from training, it gets fitter from recovery from training. If you're doing too much, or not allowing enough time for effective recovery, you risk injury. The key ingredients to recovery:

- ➔ **sleep** (your body rebuilds whilst you're asleep)
- ➔ **nutrition** (especially protein, carbs, micronutrients)
- ➔ **rest** (allow one rest day a week, a rest week where you reduce training every 3-4 weeks, and if you're prone to injury or building up volume, a rest day between running).

See <https://www.feelfitwithlucy.co.uk/post/maximum-vs-marginal-gains-recovery> and <https://www.feelfitwithlucy.co.uk/post/maximum-vs-marginal-gains-diet>

3. S&C

A lot of injuries occur because our body isn't moving as it was designed to. For example because we spend so much time sitting we end up with tight hips and can't extend our leg behind our bodies which compromises our stride when running. Tight hips contribute to our glutes 'turning off' and we can't engage them when we run. Not only do we lose one of the most powerful, fatigue resistant muscle groups in our body, but we also fail to recruit the muscles responsible for stabilising our knees and hips, risking our knee collapsing in or our hip dropping as the foot hits the ground when running. Or other muscles step in and try and help, but they weren't designed for the job, leading to imbalances elsewhere.

- ➔ Our first priority should be **mobility** – ensuring we have adequate range of motion at our joints before running. e.g. hips, ankles, adductors, upper body rotation. Aim for 5 mins before running each time, plus longer developmental session 1-2 / week. More here - <https://www.feelfitwithlucy.co.uk/post/why-mobility-work-could-make-all-the-difference>.
- ➔ Then **stability** – ensuring that when we load our body, the right muscles engage to ensure stability at the joint e.g. glute max (back glute), glute med (side glute), calves, inner core. Aim for at least 60 secs single leg glute bridge, 60 sec plank, side plank, 25-30 single leg calf raises x3 /week.
- ➔ Once we've got enough stability and mobility, we can add in **strength** and power – adding load to strengthen the muscles. And) **plyometrics** (e.g. hopping) – to develop (good) stiffness in the lower leg.

4. Speed

- ➔ You're probably doing too much training too fast. The bulk of your running should be easy running (you can breathe through your nose). Build a base of easy running before you introduce speed.
- ➔ Some speed is good, especially as we get older, to keep the lower leg healthy.
- ➔ But don't over do it (c 5-10% of training). Speed has a much higher risk of injury, especially as you fatigue and form goes. You will get faster from consistent training, rather than overdoing it and then taking time off with injury or to recover.

5. Issues specific to females

Menstrual cycle has a big effect on training and recovery. Track cycle to get to know your body. E.g. FITRWoman app. After main impacts of period pass, can do harder training and recover better. But period before period and immediately after changing hormones have inflammatory effect (injuries may flare up more) and experience higher rates of muscle break down.

- ➔ Moderate exercise is anti-inflammatory
- ➔ Avoid inflammatory foods such as processed foods, refined sugar, focus on anti-inflammatory foods rich in anti-oxidants e.g. oily fish, eggs, nuts, fruit and veg, berries. Increased iron to counter blood loss.
- ➔ Increase protein intake
- ➔ If don't have menstrual cycle (and not pregnant) could be sign of Relative Energy Deficiency - risk to bones

Menopause can lead to loss muscle mass and weaker bones (as well as multitude of other issues!)

- ➔ (before, during and after) Need to maintain strength work and include (progressive, low level) plyo plus calcium (especially before sweating)
- ➔ Continued focus on pelvic health

What to do if you experience a niggle or injury

Learn to listen to your body and to differentiate between a one-off niggle and something constant, keep notes so you can spot patterns. If it's more than a one-off then:

- Do act, something that is constantly niggling is unlikely to get better as you increase training
- Check you haven't changed a variable such as shoes that could be the root cause
- Try resting for a few days and then cautiously return (short run-walk)
- Stretching and rolling can help but focus on the surrounding area rather than the area of pain itself. And don't overdo it, or you might do more harm than good (if you had a small tear in a muscle then stretching it could just exacerbate that tear)

But rolling, stretching and rest are only dealing with the symptoms. If the niggle is still there then you need to address the root cause. If it hasn't got better yet then it probably won't if you don't change something.

- Either by adding targeted S&C or changes to run technique if you know what the issue is

- Or seeing a physio (if you want to go via GP referral then bear in mind it will take longer, so don't wait until it really hurts and you can't run). Often you'll only need a few appointments if you catch the problem early enough.
- This is usually far more effective than asking Google / friends who've had a similar sounding niggle what to do, even if your friend had a similar *sounding* issue, it may be a completely different cause, a diagnosis of *your* root cause is key. But do ask friends for recommendations of who to see locally.
- When seeing a physio ask them what you should and shouldn't do, get them to be specific about how to adjust your training, write down or film the exercises and ask what's an acceptable level of pain. And don't just expect them to wave a magic wand (usually a massage or some needles), if the issue is stemming from some sort of imbalance and you'll need to work on this (consistently) to address it.

Do the rehab

- Don't just stop when it feels better, if there was an imbalance you need to work on it long term, and if there was a tear the more you do now, the more you can reduce issues in the future.
- And if it feels like it's not working check you're doing the exercises right, be patient (you're potentially trying to address years of something being imbalanced) and if they said go back and see them in x weeks, do it!

And then adjust your training going forwards.

- If you're advised to take time off running then find other ways to stay active and to work on the issue.
- If you've had time off then don't just jump back in where you were or where you 'should' have been on your plan. Yes, you might have to take a step backwards (on distance, speed etc) but it will save you time in the long run.

My introduction to foam rolling video <https://youtu.be/drLJCfUWglo>

My introduction to stretching video <https://youtu.be/TNYoGB5aE3o>

Just like a physio I can't wave a magic wand to prevent injuries. But I can work with you on a training plan to ensure you build your training consistently and appropriately, with enough recovery, to try and minimise your chance of injury. And work with you to adapt your training if you do need to take time off for injury.

>> **Find out more about my running and triathlon training plans -**

<https://www.feelfitwithlucy.co.uk/triathlon-coaching-training-plans>

or weekly online strength and conditioning sessions

<https://www.feelfitwithlucy.co.uk/clubfeelfit>