

Strength Training is the **VACCINE** to Running Injuries

Runners are often very good at running. However, when the topic of strength training comes up, many runners tend to respond with, "Wait, I'm supposed to do something other than run?" But supplementing running with strength training exercises will not only help you prevent injury, but it will also make you a stronger, faster, and a more efficient runner.

At the most basic level, injury prevention means that you are preventing injuries from happening in the first place. Even though it's a simple concept, a multifaceted approach is the most effective. So for example, incorporating strength training, allowing proper time for recovery, and using tools like a foam rollers or regular massage can all be beneficial.

One of the major reasons that runners get injured is because their bodies are unprepared to handle the physical demands of the activity. Tissue overload then occurs, which is often due to just starting out in the sport, or suddenly increasing your training mileage or intensity (like hill repeats). There may have been insufficient time for your tissue to recover and adapt, resulting in injury. Since many runners lead sedentary lives outside of running (ie. sitting at an office, sitting whilst commuting, sitting whilst socialising or relaxing at home), our muscles and joints aren't always ready for us to jump into an aggressive training plan. Bear in mind that over the age of 30, everyone starts losing muscle mass slowly but steadily for the rest of their life, a consideration on the importance of strength training to maintain or build muscle mass.

When it comes to building an injury-resistant body, remember this analogy: "Don't let your engine outpace your chassis". What that means is that you can't let your aerobic fitness (endurance built up by running) outpace your structural fitness (bones, tendons, ligaments and muscles). If you do, you're setting yourself up for injury.

Weight training may seem counterintuitive to runners. The more muscle

you have, the heavier you are, thus the more weight you have to carry around when running. While that's true, it doesn't mean you should swear off weight training altogether. Adding it to your routine, even once or twice per week, can actually be very beneficial to your training – it can help prevent injuries and help to build up speed.

In fact, runners need weight training even more than you may realise. Strength work accomplishes three big goals for runners:

- ① Prevent injuries by strengthening muscles and connective tissues, to better handle the loads while running.
- ② Run faster by improving neuromuscular (nerve-muscle) coordination and power.
- ③ Improve running economy by encouraging coordination and stride efficiency. Improving your upper-body strength can also boost your running efficiency. With a stronger core, you'll be able to maintain a stable upper body, minimising side-to-side movement – and better hold your form at the end of a run when you begin to tire. And by developing strength in your arms, you'll improve your arm drive so you can inject more power into your stride, especially uphill.

That all sounds ideal, but it doesn't make the weight room any less scary. To ease your fears, try changing your view on why you're weight training and what it can do for you. As a runner, you're training for strength, not to bulk up with massive muscle gains. And because of the amount of miles you're putting in weekly, the chances that you'll achieve a large increase in muscle mass is pretty low.

Think about strength training one to two times a week, focusing on compound movement patterns, such as a lunge or squat, and shoring up the areas that could lead to increased injury if they are weak, like the pelvis and hips. Having

a physical therapist assess you for any existing muscle imbalances which could predispose you to injury is also very helpful.

Runners get enough of a cardiovascular workout, so focusing on training with a relatively heavy weight for a moderate number of repetitions with full recovery between sets would be ideal. And don't forget that your own body serves as weight. So if picking up a barbell or dumbbells is a big stretch for you, ditching the weights and adding in bodyweight exercises can still help build strength.

Ask the professional who gave you this leaflet for more specific advice. If you are not familiar with strength training it is advised that you discuss and plan this with a professional, before starting. Also, remember that each runner is unique and will have specific strengths and weaknesses, so a personalised training plan is always the best approach.