John Bell's opinion:

DIRT is really good to run on - ie the 4km track around Ascot Island.

Bitumen is a whole lot better than concrete.

We run and walk too much on man-made surfaces.

Rough ground helps condition the position sense organs in our ligaments and tendons.

Aspects of this article (Sponsored by The Athlete's Foot) are worth reading.

What's the best surface to run on?

SAND running works your ankles and calves, but slows you down.

One of running's biggest selling points is that it can be done pretty much anywhere. It's an incredibly time-effective, versatile form of exercise. All you need is a pair of decent shoes and some appropriate kit and you're set.

Well, almost.

You don't always get to choose where you're going to run. So this very selling point – that you can do it anywhere – can become a hazard if you're not aware of the effects on your body of running on different surfaces. Each surface can require technique adjustments, and some surfaces are simply better than others.

Runners get a lot of spring-back on bitumen, which has enormous impact on ankles, knees, hips and spines.

Get fitted to get fit

Tied to that is the issue of running shoes. Factors to consider before buying include not just the surface you typically run on, but your biomechanical profile and ability level, says Michael Lynch, a Sydney-based national masters track champion and personal trainer with a masters degree in exercise and sport science.

"The average person is looking for comfort in a shoe. That means one that is slightly heavier, has more padding and is well supported, and that helps keep your ankles, knees and hips aligned correctly," he says.

"A good start to finding the right shoe is to match it to the shape and curve of your foot. Most people tend to buy a shoe on the basis on how it looks, and there's nothing wrong with that, but at least try and buy one that matches the shape of your foot as well."

* Sponsor plug! Lynch says high quality shoe retailers such as The Athlete's Foot, which has developed its own technology called Fitzi, will consider your foot shape and how you roll your foot when you run (over-pronation or under-pronation). It all helps to make a better-informed shoe choice.

Spring time

Given our calves are designed like a spring and as a store of energy, how we use that spring makes a big difference to our speed.

There are three types of running styles – heel striker, mid-foot striker and fore-foot striker. Good technique is usually associated with mid to forefoot striking, or creating a whole-foot approach to landing, because it is the most efficient way of generating speed.

"As the foot hits the ground it tenses, and as it leaves the ground it releases and propels you into the next step," Lynch says. "The faster you are running, the more you will use that spring. You will transfer to the big toe much quicker than a slower runner."

Surface tension

No matter the type of runner you are, your body makes adjustments, sometimes unconsciously, for different surfaces it encounters. Here are a few of the pros and cons of surfaces you're likely to encounter.

Sand

"The softer the surface, the slower the speed – generally speaking – that you'll run," says Lynch. "Sand is an unstable base and doesn't give you any push-back. Your spring is being dissipated because the sand is shifting under your foot. You don't get anything in return for your effort, which is what makes it so challenging."

Lynch says sand running is good for you because it works your ankles and calves. Your proprioceptors, the sensory receptors that respond to position and movement, are working extra hard to keep you stable, which has strengthening benefits for the hips and core.

"The downside is that beaches tend to have a cambered surface that rolls down towards the water," Lynch says. "This puts a lot of lateral pressure on the knees and ankles. Unless you are used to it, excess sand running can have its downsides and you need to watch for signs such as discomfort and act accordingly."

Road

Bitumen and concrete surfaces are the opposite to sand, says Lynch. Concrete is super hard and you get a lot of spring-back with each step because it doesn't move. The flipside is that that sends enormous impact through your ankles, knees, hips and spine.

"Because of this you wouldn't want to do a whole lot of running – no matter how good you were – on concrete," Lynch says.

Grass

"If I was just starting a running programme or I hadn't been doing a lot of running lately, I'd choose grass as my preferred surface," Lynch says. "Early in the season track runners start on grass, or if they've had an injury they go back to grass, to lessen the impact of the shock forces through the body when they run."

Grass can get slippery when wet, and when it's too long or thick can feel a bit like running in sand, which can create instability. Generally, however, it's in a pleasant environment away from traffic and other trip hazards.

Trails

Between yielding grass/sand and rock-hard bitumen/concrete, there are dirt trails and tracks. "The downside is that trails usually have twists and turns and can be uneven, but in terms of the surface they are more forgiving than running on the road," Lynch says.

Plus, there's nothing like a trail run to really relieve stress and free your mind.

Gravel

"This is not a comfortable surface to run on," Lynch says. "You often feel it through the shoe, and it will destroy the shoe a lot quicker."

Even more than sand, it shifts and slides underfoot and requires a lot of effort to remain stable while running.

Treadmill

A treadmill deck offers reasonable shock absorption, Lynch says. It's an easier surface to run on and you don't have anything getting in the way of your running, such as gutters, debris or other people. But it requires a slightly different running action, because you don't have wind resistance to contend with

"One school of thought suggests that to match the same effort to an outdoor run, you should increase the treadmill resistance slightly," he says. "For example, to run a five-minute kilometre on a treadmill you'd raise the speed to 12.7km/h instead of 12km/h to match the wind effect." Another way to even out the wind difference is to put a slight gradient on the treadmill.

There are also differences in the way your foot interacts with the surface. "On a treadmill the road is getting pulled out from underneath you and that is not the same as you hitting the road and pushing off a stationary surface. It's a slight difference in technique, but I wouldn't get hung up about it. The treadmill gives you some great training options; it's good for interval work and it takes away the distractions."

Sponsored by <u>The Athlete's Foot</u>, source of this article by Pip Coates (Feb 2016)is:

www.executivestyle.com.au/whats-the-best-surface-to-run-on-gn3znp#ixzz47C4ur520