

You can get a great run on every type of terrain—even the treadmill.

By ALYSSA SHAFFER

to the park path. Others wouldn't dare set foot on the pavement. But no matter where you run or roam, you can improve your fitness level (and reduce your risk of injury) by paying attention to the surface beneath your feet.

In an ideal world, you'd vary your surfaces; maybe you'd frequent the track but sometimes hit the road or treadmill. "The more surfaces you run on, the more you'll improve your balance, strength, speed and economy," says Eric Rohr, a biomechanical engineer and senior manager of the Brooks Running Human Performance Lab in Seattle. "There are a lot of gains that can come from changing where you run."

Surprisingly, experts say, research doesn't support the

common notion that you're less likely to get injured running mostly on a softer surface, such as dirt or grass, than on a harder option like the road. "There's no study that can point

"There's no study that can point to surfaces as having a direct correlation to injury rates, but that may well be because there are so many factors involved that it's hard to isolate a cause," says Lisa Callahan, MD, co-director of the Women's Sports Medicine Center at the Hospital for Special Surgery in New York City. "What I tell my patients is that if they've had an injury to their knees or ankles, it makes sense to stick to softer surfaces when possible."

So if you're tied to one terrain on account of locale limitations (e.g., it's hard to find trails in your urban area) or injuries, that's OK; each has its

benefits. Ahead: the lowdown on five top training grounds for runners, plus workouts for each option from Kelly Flynn, a running coach in Boston. The goal is to keep you feeling strong and healthy stride after stride—no matter where you log your miles.

THE SURFACE

road

1 to 5 (most impact) **Best for:** Longer runs and race prep. Most popular races take place on asphalt, which means a lot of your training should, too. "If you always train on the treadmill and then go out and try to run a long race on the road, your body isn't going to be used to the pounding, and you'll risk overuse injuries such as iliotibial band (ITB) syndrome or runner's knee." warns Lewis Maharam, MD, former medical director of the New York City Marathon.

Impact factor: 5 on a scale of

Injury-proof it: While asphalt is generally flat, roads tend to slope down at the edges,

BEST SHAPE | Surface Talk

which can throw off your stride and increase impact on one side of your body. Switch up your route (go out and back on the same side of the road, say) so you're not always running in an identical pattern, advises Reed Ferber, PhD. director of the Running Injury Clinic at the University of Calgary in Canada. Running on pavement can also exacerbate existing injuries like shin splints, so pick a shoe designed to absorb impact and adequately cushion your feet.

Try a tempo run:

Building in intensity in the middle of the workout, this run trains the body to maintain a comfortable yet challenging speed over a set distance. It also increases your lactate threshold, which delays fatigue.

- \rightarrow Warm up for one mile (5 on a scale of 1 to 10).
- → Tempo pace: Gradually up speed to a challenging level (7 to 8) for two to three miles.
- → Cool down for one mile (3).

THE SURFACE

Impact factor: 3 on a scale of 1 to 5 (low to moderate impact) Best for: Working a variety of muscles and improving balance, thanks to constant changes in terrain. Plus, most dirt trails and roads have a mix of both hard and soft surfaces, so you get a better overall workout while alleviating some of the impact you sustain on the road. And, of course, tackling trails is a nice way to immerse yourself in nature, away from cars and the general hectic pace of life. Injury-proof it: While you can tune out daily stressors, you still need to tune in to where you're going, since rocks and branches can cause unexpected slips. Trails can also be problematic if you have a history of ankle sprains, which tend to recur if they haven't fully healed.

Try an easy run:

"Basically, this means going at a relaxed, comfy pace. That way you get a great run on a soft surface and can pay attention to the terrain," says Flynn. These runs also offer your body recovery time while continuing to build your fitness base. Be sure to keep your speed down—you should be able to run and hold a conversation.

THE ONE SURFACE EVERY RUNNER SHOULD TRY

It's water! Deep-water pool running has zero impact but lots of resistance, so you work your muscles while boosting your heart rate and fitness level. Plus, it can help you get stronger and faster, says Jennifer Conroyd, a water-running coach and creator of Fluid Running in Oak Brook, Ill. Don't wait for summer: Gear up with an aquatic belt like the Aquajogger Classic (\$40; swimoutlet.com) and dive in.

THE SURFACE

grass

Impact factor: 2 on a scale of 1 to 5 (low impact) Best for: A break from asphalt; most grass is cushy and free of the rocks and roots vou'll find on the trail. And since it produces up to 17 percent less pressure on feet, this surface is great for transitioning back to longer runs postinjury. As with trails, the soft, uneven surface forces you to engage smaller stabilizing muscles, making your legs work harder, notes Andrew Kastor, coaching director of the Asics LA Marathon and head track coach of Mammoth Track Club in Mammoth Lakes, Calif. It also

Injury-proof it: No specific shoe is needed, but it's a great surface from which to segue into minimal (less cushioned) kicks. Just keep eyes peeled for lumpy patches or divots, which can wreak havoc on ankles.

recruits your core muscles.

Try old-school sprints:

Use the yard markers on a football field for this workout.

- → Warm up by jogging the field's perimeter.
- → Sprint to the 50-yard line and back.
- → Then sprint to the 40-yard line and back.
- → Continue sprinting to the 30-, 20- and 10-yard lines. Rest for one minute; repeat intervals three times. Rest between sets.

THE SURFACE

track

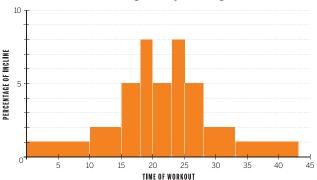
Impact factor: 2 on a scale of 1 to 5 (low impact)

Best for: Shorter distances and speed work. Most tracks are made from a synthetic material that's somewhat springy, so it's more jointfriendly than the road but gives enough stability for you to stay speedy.

Injury-proof it: Constant running around a track can cause external rotation of the

AMP UP YOUR TREADMILL WORKOUT

This 43-minute hill drill will rev your ticker and strengthen your legs, too.



thigh bone because the body is trying to achieve maximum efficiency when turning left. "This places more stress on the left leg, creating imbalances due to tightened external rotator muscles and weakened internal rotator muscles in your hips," says Kastor. Tip: Run clockwise on the track when no one is around to help combat this.

Try 400-meter repeats:

Change the number of repeats or distance for variety—for example, do 800 meters (two laps) three times, 1,200 meters (three laps) two times, etc.

- → Warm up by running one mile (four laps) at an easy pace.
- → Run one lap (400 meters) fast (8 or 9 on a scale of 1 to 10), then jog one: repeat five times. → Cool down by running easily for two to four laps.

SHOES FOR **EVERY RUN**

1. Saucony Peregrine 4 (\$110; saucony

.com) The nubby outsole grips trails for better stability.

2. New Balance 1400v2 (\$100: newbalance .com) This

superlight racing flat is perfect for a speedy track day.

3. Brooks Transcend (\$160; brooksrunning .com) Pressure zones distribute impact evenly over the foot for cushy

4. Nike Free Flyknit (\$160; nike.com) The

knitted upper gives stretch and support: try these on grass or a treadmill.

SCAN HERE TO SHOP! LEARN HOW ON PAGE 8.

THE SURFACE

treadmill

Impact factor: 2.5 on a scale of 1 to 5 (low impact) Best for: Running during

inclement weather. Treadmills are also good for those with knee issues, since there's less joint impact, says Ferber.

Injury-proof it: A die-hard road runner? Don't suddenly switch to just the treadmill, warns Dr. Maharam. On the machine, most of us generally run with feet parallel to the belt. he explains. Outdoors, we tend to turn toes out slightly. "This change creates a different angle of pull on your legs, and if you do too much at once, it can lead to injury," he adds. Start by running one-third of your usual total mileage on the treadmill; gradually add 10 percent more each week. Be sure to keep the treadmill on at least a 1 percent incline to account for outdoor wind resistance and terrain changes.

Try a hill workout:

Challenge yourself with legstrengthening hills at the push of a button, advises Flynn, by increasing inclines throughout your run. (See Amp Up Your Treadmill Workout, above.) ■



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