5 TIPS FOR RUNNERS

To Avoid Injuries and Improve Performance

Smith

Physical Therapy +
Running Academy



5 Tips for Runners to

Avoid Injuries

We have helped hundreds of runners learn how to run faster and run longer. But our greatest passion is helping runners PREVENT running-related injuries. Yes – there are traumatic things that can happen while running: you twist an ankle or you fall and injure your knee. But … every year 77-85% of recreational runners are injured and most of these injuries can be prevented with some changes to your training plan.

This eBook is to help open your eyes to those changes. The more you know about how to prevent an injury, the more you can plan for certain activities in your training program. A lot of runners tell us they do not have time for anything other than running; but my question to you is: DO YOU HAVE TIME TO GET HURT?



So stop blindly following some prescribed mileage plan you found online, written by some old guy who encourages a gradual 10% or whatever run/walk plan he is telling you. He does not know you or your body. He cannot know your injury history or muscular imbalances you have festering that can cause a problem if they are not addressed. You can run the distances he recommends, but you need to add 5 other aspects to reduce your risk of a MISUSE injury. You will dramatically reduce your risk of injury by incorporating the things listed down below into your routine.

To quickly explain the difference of a misuse injury versus an overuse injury: an *overuse* injury is where some structure in your body is used one too many times and an misuse problem is due to abnormal stress to the tissues. The problem with the term overuse is that it suggests that there is some exact number of times your body can do something before those tissues suddenly

Do you have time to get hurt?






cannot be used anymore. If this were true, every tissue in every body would be subject to a pre-determined limit.

We much prefer the term *misuse* to refer to when tissues have had enough stress. When the muscle, tendon, ligament, bone is asked to do something it was not designed to do, when it is being used or stressed the wrong way – this is when pain begins and can lead to an injury.

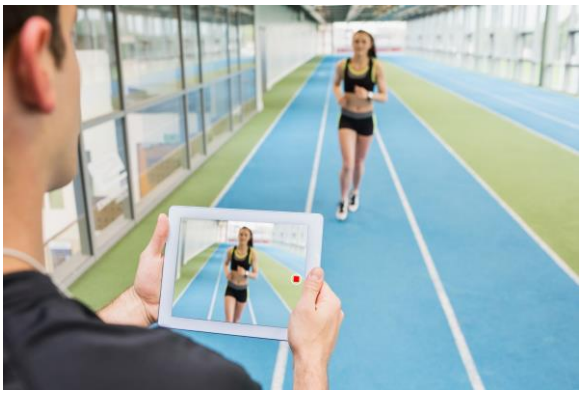
We here at Smith Running Academy believe the top 5 things all runners need to know to prevent injuries are the following:

- ✓ Technique Matters
- ✓ You Must Strength Train
- ✓ Love on Your Muscles
- ✓ Project Your Joints
- ✓ Agility Work Isn't Just for Soccer Players

Technique Matters

A few years ago, I decided to take golf lessons. My husband is an avid and excellent golfer so I wanted to surprise him and start playing with him. I found a great coach and she taught me so much more about life than just golf. I had a terrible slice to the right every time I swung the golf club. During one of my lessons, I suggested maybe I needed a new golf club to help fix my swing. She looked me straight in the eye and said, “It’s not your golf club, stupid.” It hit me that to fix my swing, I did not need new or different equipment; I needed to learn the technique of swinging the golf club.

Understanding the biomechanics of any sport is something that is taught at a young age. My son has learned what position his arm has to be to throw the ball properly; my daughter learned how to move her hips to help when she is hitting a volleyball. But when did you learn technique for running? I will bet you a McDonald’s Shamrock Shake that most of you reading this book have never been taught running technique.



You may have heard a high school coach say something like:

- Stride it out
- Drive your knee
- Push off the ground

But hearing these cues and trying to mimic those is probably what lead to an injury (hence why you downloaded this book. But I am grateful to your coach that told you these things because without him/her, I wouldn’t get to meet you!).

To learn more about why running technique is so important, click here for a great video full of more tips/education. The top 3 tips I can give you about running technique are:

1) Keep your stride short
2) Maintain a cadence of at least 180 steps per minute
3) Practice technique drills 2-3 times per week (these can be done during your run or as part of your warm-up)

Over the next few weeks, you will be receiving more information on these 3 tips to help you learn more and execute them properly.

Click **here** if you want to find a certified running technique specialist in your area. If you can’t find one, there are many of us that do virtual teaching so you can learn from the comfort of your own home.

You MUST Strength Train



I don't want to nag you with this one but RUNNING IS NOT STRENGTHENING! (I always feel like people are yelling when they put things in caps so this is one of those of those things that I need you to really understand.)

So I'll yell it again – RUNNING IS NOT STRENGTHENING!

Strength training is essential to preventing injuries because your muscles need to be strong enough to carry your body weight. When you run, your body has to accept 2-3 times your body weight so train your muscles to withstand this force.

Now don't freak out that you need to join a gym or go and buy a bunch of equipment. You can use your body weight and get a great workout in your basement or hotel room.
Here are the top 3 exercises you can without equipment:

- Chair/Bench Squats (double leg, single leg)
- Hip Dips (face down, single leg, one arm)
- Hamstring Curls (standing, face down)

You can also find great strengthening exercises on the **Smith Physical Therapy and Running Academy YouTube Page**. And remember to do exercises on one leg because as runners we are always on one leg only!

Along our journey together, I will be sure to send you more of our favorite strengthening exercises. I will also include the ***WHY*** of each exercise: the more you know, the smarter you will become at your workouts.

Single Leg Bench Squat



Face Down Hip Dips



Face Down Hamstring Curls

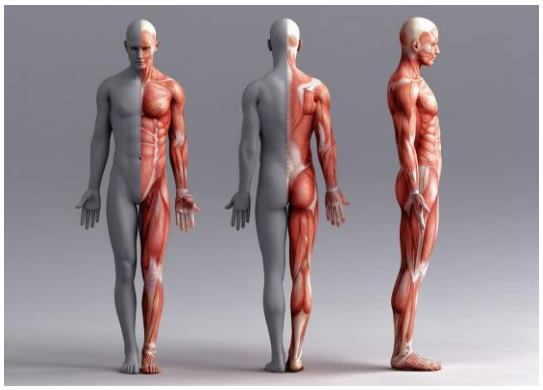


Love on Your Muscles

I totally geek out when it comes to soft tissue work. Yes - it's because I'm a physical therapist but I also love that feeling of freeing up restrictions in my tendons, muscles and ligaments. Tissue are meant to glide freely!

You can use one or a combo of the following tools to help keep your soft tissue gliding smoothly:

- Lacrosse ball ($2 at Play It Again Sports)
- Foam roller (at your local running store or link to Amazon)
- Massage Device (The Stick, Muscle Glide Tiger Tail, etc)



There is always the question of can working on an irritated tissue cause more inflammation? The answer is YES!

To help you understand when to stop, look at the length of the pain you have when working on a particularly irritated muscle or tendon. If you roll out your buttock muscles (that piriformis can be a bugger!!), it might be super painful while you are doing it. But if that tenderness subsides when you are done or you even feel better a few minutes later, then it is safe to work on that area.

However, if you work an area like your Achilles (raise your hand if you've ever had Achilles tendinitis ✋) and you are in so much pain while doing it and the pain does not stop when you are done or it's worse, then **do not** work that area. If you experience other symptoms like tingling, numbness or shooting pain during or after, those are other signs to avoid working this particular area.

A better option if this happens is to work all the structures above and below the affected area. Focus on your low back, bottom of your feet, back of your hamstring and calf in the example of possible irritation to the buttock muscles. For the Achilles, I recommend working on the side of your calf, bottom of the foot, quad, hamstring, buttock and low back for an Achilles that is too sensitive.

We also get questions about products such as CBD oils/lotions/creams, Biofreeze, Young Living . . . if those make you feel better, use them. To date, there is no evidence that any of these products cause any sort of damage to soft tissue structures. When I can sweet talk my hubby into massaging my feet after a long run, it is definitely easier for him to use a lotion.

The other question we get is ice versus heat - we will send out more info to you on that over the next few weeks!

The moral of the story is to love on the structures because they work so hard for you.

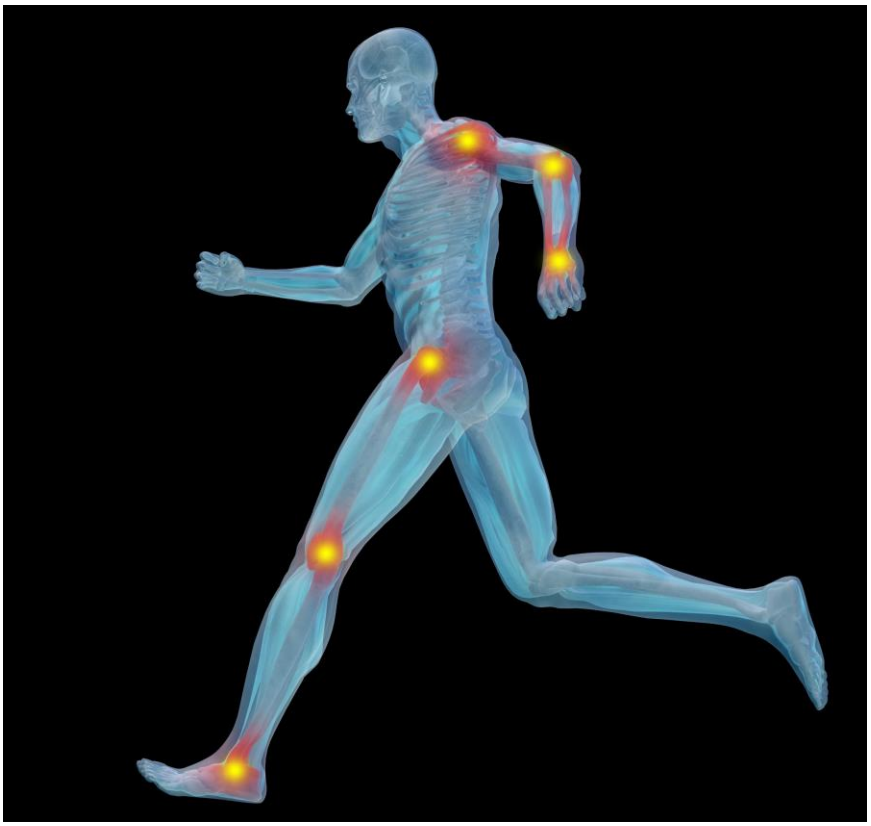
Protect Your Joints

I love my joints! Well ... sometimes after a lot of squats my joints talk back to me but that gives me more motivation to take care of them.

My mentor, **Dr. Nicholas Romanov**, frequently references an old Chinese proverb to understand why joint mobility is so important to the longevity of running: You are only as old as your joints.

In other words, your joint pain will stop you from running long before anything else. And if your joints don't move properly, neither will the muscles that attach to that joint! Joint mobility work needs to focus on range of motion, not tissue tension. So if you are doing a side lunge mobility activity, you may be tempted to stop when you feel the "stretch" of the inner thigh muscles or hip adductors. But to focus on improving the inner part of your hip joint, gently move past that stretch to get more range. Then move slowly back to the starting point. No need to hold that position - that is for stretching AFTER you run. For now, move in and out of each position, trying to achieve a little more range each time. We will send you more info on mobility work versus stretching and some routines that can help with your warm up and cool down.

But in the meantime, click **here** to watch a series of mobility videos to address all your joints!



Agility Isn't Just for Soccer Stars



To understand why agility is important to runners, it might be easiest to start with the definition of agility.

Agility is defined as the ability to quickly change directions. So if you are a trail runner or a runner that trains on the road think about the times that you have had to move out of the way of a cracked sidewalk, tree root, or hole in the ground.

Your body's ability to jump over or move around something quickly needs to be trained. This is a function of your brain and body working together to perceive what is around you and calculate the amount of time it will take to respond. Since this functions on a neurological level, we need to train for it because this is a skill. (Hint: always work on your balance - whether you are 5, 25, 55, or 95! Can you stand on one leg with your eyes closed and feel steady?? Balance training can be entertaining and challenging too so we will be sure to send you some balance exercises specifically for runners).

Agility training is a different way to workout, making this aspect something fun and out of the mundane task of running. This is especially true if you have children - the guilt I feel leaving my kids to grab my mileage is often alleviated when I can complete my agility workout with them.



Below are our 3 favorite agility workouts:

- Agility Ladder
- Jump Rope
- Hurdles

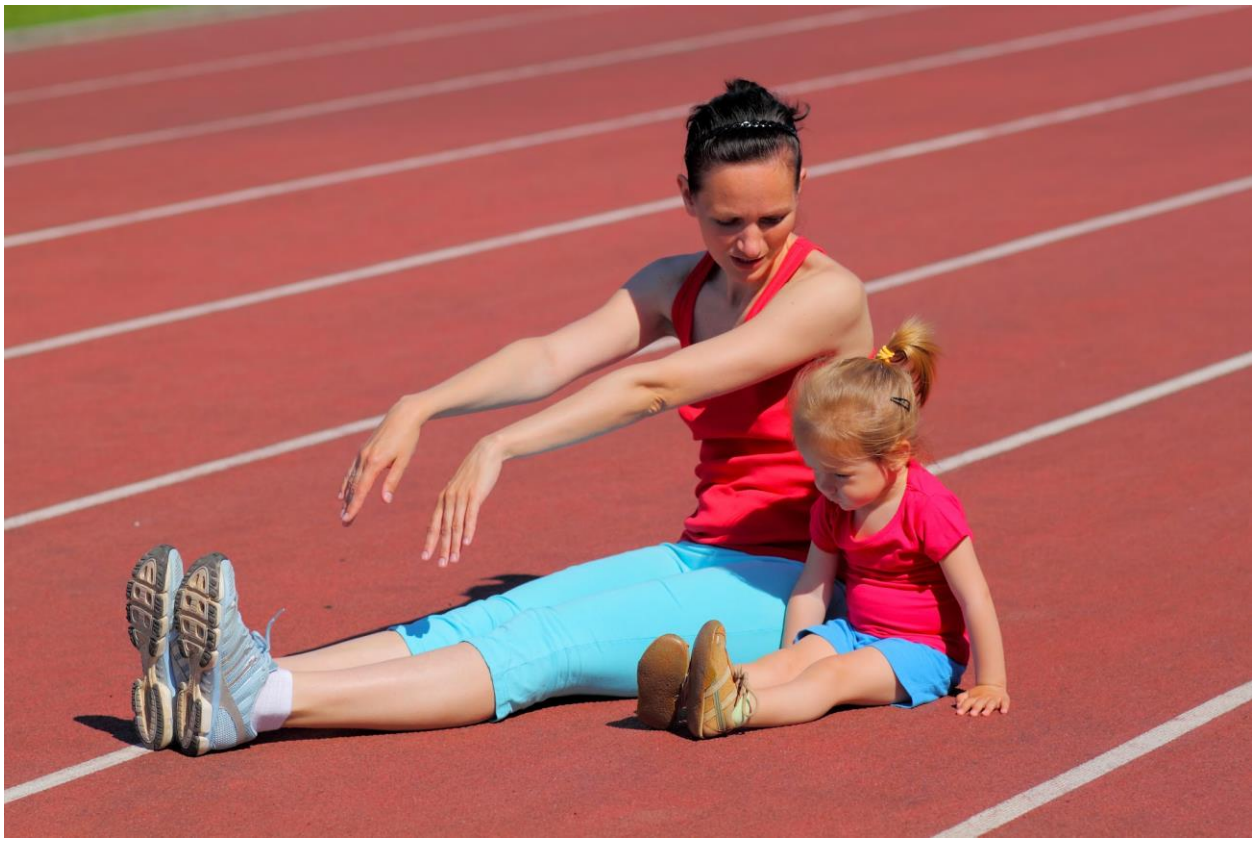
Don't have an agility ladder? Grab some sidewalk chalk and draw one.
Don't have hurdles? No problem - use a pool noodle or sticks. Jump ropes can be found at the Dollar Store or TJ Maxx for cheap (or use a rope).

Practice all 3 of these for speed (time trials with your kiddos?!), on one leg (score points for style?), and in all directions (forward, sideways, backwards). We will make sure you get plenty of other options for agility workouts in your inbox. Please remember, you can opt out of our emails at any time. Or if there is something specific you would like to see or learn, don't hesitate to email me at denise.smith@smithptrun.com.



Putting it All Together

These 5 tips will help you run faster, run longer and more importantly avoid an injury. Whether you are experienced runner or a newbie, these tips will help any level of skill or distance.



Keep an eye on your inbox for more tips and training ideas. One of the items will be a calendar that will help you figure out how many times a week to incorporate all of the aspects listed above. It can seem very daunting but a lot of these things, as you will see over the next few weeks and months, can be incorporated in your run or during times of your day that won't interrupt other routines. Or if you were already doing some of these things, our goal is to help you be more efficient and productive in the time that you have. We know you have a lot of things in your life so let us help you be smarter in your training!

About the Author



Denise Smith is a certified running technique specialist and a licensed physical therapist. She graduated from Marquette University in 2002 with a Master's Degree in Physical Therapy, was a consultant for the Russian Olympic/National Triathlon Team, and travels the country as part of the Pose Method education team with a lecture series on improving performance and reducing injuries for runners.

Denise believes that when a runner improves their form by addressing biomechanics, they can run faster, run longer, and run without pain. She is a recreational runner and triathlete who loves spending time with her two active children and husband. As a busy mom, Denise understands the importance of using your time wisely and opened Smith Physical Therapy + Running Academy in 2015 to help her patients get better faster and to help athletes run smarter.

Thank you for your time!

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