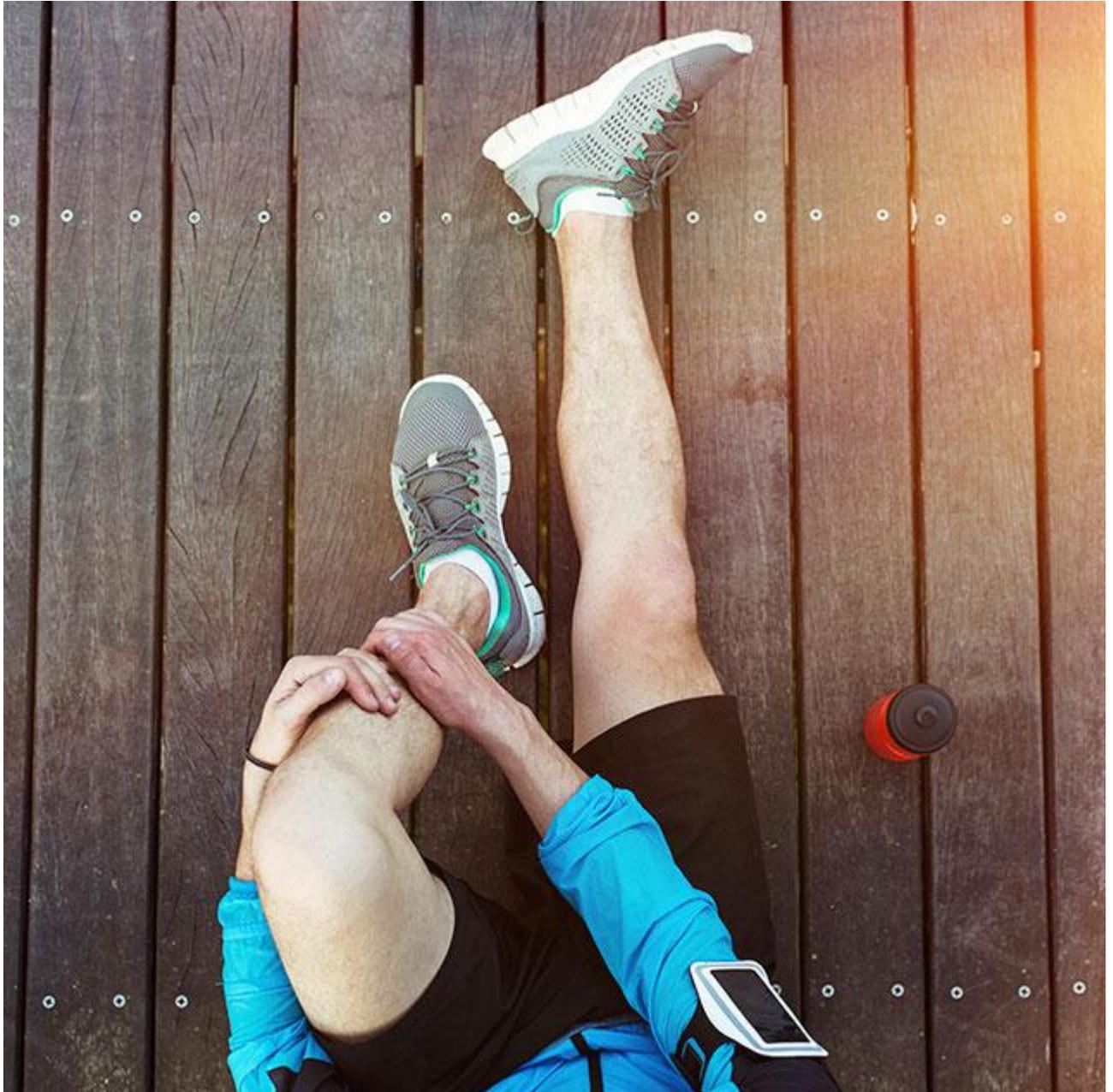


Running Technique to Help Avoid Knee Injury



Many runners suffer from knee pain and injury. Of course there are many reasons for knee pain and many different types of injury. Some injuries are caused by bad technique so it's a good idea to improve your technique as much as possible. Many running coaches believe that heel-striking is a cause of injury. In fact it's not so much landing on the heel, but landing on a straight leg in front of the body. This means you are colliding with the force of the oncoming road which is high impact and also has a braking effect on your forward motion.

So what are the main things we can do to be more efficient and make our running less high impact?

- **Keep your knees soft and bent** during the landing and support phases of your stride. Many runners over stride and straighten their leg in front of them as they land. This is very high impact and can cause pain and injuries.
- **Foot position.** Many runners have their feet turned out to the side as they run. It's best to have the feet pointing in the direction of travel. Otherwise if the foot is splayed out to the side as you run it creates a twisting effect on the ankle and inside of the knee. Often you will feel a pain on the inside of the knee. To get the feet landing straight ahead in the direction of travel rotate the entire leg until your foot is facing forward. This will strengthen the adductor muscles which are needed to help point your feet forwards. It's best to bring the feet into the correct position gradually to get the best results. Think of weeks rather than days. You may feel a few twinges as you transition. If these don't fade away quickly in a few days then back off a bit until things settle down.
- **Having the right cadence.** Many runners' cadence (leg turnover) is too slow. Ideally it's thought the best cadence is around 180 for both legs. If you are a taller bigger runner it can go down nearer to 170, but for average to smaller runners try to get up around 180. If you have a slow cadence it's easier to over-stride and heel strike. So keep your leg turnover faster by taking shorter steps at slower speeds and gradually lengthening the stride behind you as go faster all the while keeping the cadence the same.
- **Have more of a circular leg action.** Many runners have a pendulum leg action as they run. Their legs are quite straight and swing backwards and forwards like the pendulum on a grandfather clock. Instead keep your knees soft and slightly bent. If your knees are bent it allows your feet to move in a more circular way. Imagine you are pedalling along on a bike. The faster you go, the bigger the circle becomes.
- **Don't heel strike.** Try to land whole foot (mid-foot strike) and under the knee. Have a whole body lean from the ankles (don't bend at the waist) and if you want to go faster lean more and open out your stride behind you.

If you can work on all the above and put it all together you will be able to run in a more energy-efficient way. If you do it all correctly it will also make your running less high-impact, which can only be good news for your knees.