

# 5 THINGS TO CONSIDER

## 1) SWELLING FEET

During a normal group ride, do you loosen the straps on your cycling shoes because your “feet are swelling?” It’s OK if you admit to this since this happens to most cyclists. I have read many articles on this topic and they all mention “feet swelling” but don’t get into the details as to the how’s and why’s. Talking with many cyclists on this topic, they really don’t give this a second thought since they think feet swelling is a normal part of cycling. To fix this problem, all they do is to reach down and loosen the [BOA’s](#). BOA® is the latest in [“shoestrings” whereby turning a ratcheting knob will increase the tension of the shoe instead of tying a shoestring or using a hook-and-loop \(Velcro®\) fastener.](#)

I had always thought I was doing something wrong since I always have to **tighten** my shoes. In fact, on a normal 2.5-hour ride, I tighten my cycling shoes no less than 3 times. The fact that so many cyclists have to loosen their shoes is due to a bad bike / cleat / shoe fit.

### Why you should have to tighten your shoes.

Prior to starting a ride, cyclists will sit, have a coffee, gossip a little, all the while gravity is pulling their blood into their feet. A low-volume tight fitting cycling shoe might also lead to even more swelling. Then, when starting the ride, the leg muscles start engaging where they need blood to carry oxygen to help fuel their movements. Even though the cyclist is sitting on their saddle with their legs moving, gravity is still at work pulling blood into their feet.

### So, how do you get this ‘pooled’ blood out of the feet?

Enter the calf. Everyone has a set of calf muscles, actually 7 muscles in each calf but the two that are best known are the **gastrocnemius** and **soleus**. The gastrocnemius is the most visible muscle and gives your calf most of its shape. You can see a hard-working gastrocnemius in the picture to the right.

The purpose(s) of the calf muscles are 4-fold, (a) plantarflex your ankle, (b) help curl your toes, (c) help bend your knees and, the main purpose for this article (d) pump blood from the foot and lower leg back up and into the circulatory system. So, a calf that is working effectively will pump this ‘pooled’ blood from the foot back up to the heart. There is actually a term for this [called the calf muscle pump](#). If your feet are swelling, then your calves are not working effectively and it’s time to address this problem.

### The Fix

As stated before, a bike / cleat / shoe fit is needed to place your feet in the right relation to the pedals so that you will be able to engage the calf correctly. You will know when you are in the correct position since (a) you will be tightening your shoes instead of loosening them and (b) see #2 below.



1. Now that's one engaged calf muscle!

## 2) CALF CRAMPS

Have you ever been awakened in the middle of the night by a painful cramp in the calf? That sudden level 10 pain shooting through your lower leg lasting for 1-3 minutes. Nothing you do makes it go away. Ever thought why?

During a bike fit interview, I always ask “do you get painful calf-cramps at night?” **About 25% of my clients say yes.** Turning their shoes over I can tell why. **The cause is the mis-placement of the cleat.** I spend about an hour of a 2.5-hour bike fit on adjusting the cleats...making sure they are in the absolute perfect position. It is of utmost importance for the cleats to be in the right position because the foot is the only part of your body that is mechanically locked to the bicycle. All other touch-points (glutes on the saddle and hands on the handlebars) can move, therefore, placement of the cleat is a **CRITICAL** component of a bike fit, one part of the fit that needs to be perfect. To ensure that this is perfect, I have created double-check and even triple check processes.

### The Fix

The fix for this is to position the cleat to remove stress from the Calf & Achilles and place it onto the quadriceps. See #1 above also. Almost every cyclist I have fit have their cleats positioned so that the only job the calf is doing is supporting the foot from collapsing. With this bad cleat position, the calves are not pumping much blood back up the leg, not helping to drive the cyclist forward, and are being overworked and overstressed by spending their whole time supporting the foot from collapsing during each pedal stroke... the cause of nightly calf cramps we just spoke about.

## 3) HOODS vs DROPS

Another important question that recently came up is “**why do most crit racers race on the hoods and not in the drops?**” We all know the importance of racing in the drops. Three of the most important factors are (a) **safety**, because you can't hook bars while in the drops, (b) **more solid handling and control** when bumped, and (c) **better aerodynamics**.



### 2. Post Bike-Fit: How are your calves?

**At 226w (20 min) FTP and 118 lbs., she puts a lot of power through her legs and into the pedals. The cleats must be right!**

*Hello fellow Simple Green members, I'd like to share my recent bike fit experience with Rick Schultz (Bike Fitness Coaching). After decades of thinking I was properly fit to my bike, I decided to get fitted by a certified USA Cycling coach. **Rick has a great set up for bike fitting. He is methodical and explains the process every step of the way. I was surprised of how far off I was from the optimal set up I thought I had. The best part has been the results. Not only do I feel more comfortable on the bike, my sustained power has increased and no more calf cramping during intense riding sessions or in the middle of the night.** Thank You Rick!*

**\*4 MONTH FOLLOWUP BELOW;**

The two main reasons so many racers race on the hoods is because (a) lack of hamstring flexibility and (b) that is where they were fit to. To get more flexible, start a stretching routine and/or attend yoga classes. For the bike fit portion, I highly recommend that you discuss this with your bike fitter. Ask your bike fitter to fit you so that you are comfortable in the drops. From this point forward, you should always ride, train and race in the drops.

Let's look at an example. Please reference the two Giant TCR bicycles to the right. The person who owns the bicycle pictured on the top has obviously been fitted to the hoods. Referencing the bicycle pictured on the bottom, I added a red horizontal line delineating where the hoods are in the top photo. I then "raised" the stem and added a longer stem so that when the cyclist grabs the drops, their hands are in the exact same X, Y as when originally on the hoods.

So, obviously this frame is too small for this cyclist. This frame appears to be a Giant M/L; therefore, I would recommend an XL for this cyclist. But sadly, by the time someone usually comes in for a bike fit, they have already purchased the wrong size frame (and experiencing knee and back pain). This is why I like to work with bike shops who send me clients to do a bike sizing first. This way, the client is on the right-size frame to begin with and is the most important step in the process.

#### 4) KNEE PAIN

I can't stress the importance of taking care of your knees. This can only be accomplished by a bike fit to determine correct crank arm length. Examples, I am seeing more and more cyclists who are experiencing knee pain, begging for relief. I am seeing clients that have Osteoarthritis in their knees that want relief so that they can continue to bicycle. I have had clients tell me that they have gone to several other fitters and if I can't help them, they are going to give up cycling. I have had clients with a previous injury that have little to no ACL left that want to continue to bicycle.



Recently, every one of my clients have suffered with knee pain and finally have gotten to the threshold point that they can't take the pain any more. In fact, I am currently working with a 23-year-old ex-domestic pro that has tremendous knee pain. Don't wait until you get to this point. Do yourself a favor and go get a bike fit so that the fitter can help you get rid of your knee pain. In most every case, I have been able to mitigate or completely rid my clients of their knee pain. For those few that still need more relief, I work with several physical therapists who can take the ball and run with it. Regardless, the clients are much happier since they are still able to enjoy the sport they love.

**\*FOUR MONTHS LATER:**

*"You changed my life dude." Did a Century a few weeks ago for the first time in over 10 years! This was due to the previous bad bike fit (from another shop) that I didn't realize I had. Always in pain after 50 miles – so much so that I couldn't continue. I totaled 250 miles last week (100 miles on Sat and an 80 on Sunday). I felt like I could ride forever. Hadn't felt that great in 10 years! Previously my body (mostly my back) would lock up on most rides. Used to be an absolute mystery, no more!! You fixed all of my issues!*

**5) PAIN vs SUFFERING**

The reason I bring this up is that a lot of cyclists get these confused. It's no fault of theirs since articles I have researched interchange these as well. I searched for "pain vs suffering in cycling."

Even Merriam-Webster defines 'PAIN' as 'LOCALIZED SUFFERING ASSOCIATED WITH BODILY DISORDER' and 'SUFFERING' as 'PAIN'.

As a coach and personal trainer, here's my take on this.

**SUFFERING:** You are pushing on the pedals so hard that your legs are starting to cramp, you are breathing so hard that your lungs feel like they are coming through your chest. You are doing hill repeats and your heart rate is at a sustained maximum. That's suffering. In fact, the US Navy SEALs have a saying, "When your MIND says STOP, your BODY still has 40% left." Think about that next time you want to back off.

**PAIN:** You never want to experience pain. For example, pain is where it hurts to pedal even at a low power output. For cyclists, pain is usually experienced in the knees and pain can be greatly reduced or negated by a crankarm length analysis. Pain will usually continue even when off the bike. If you experience pain, get off the bike and get it checked out by your doctor, physical therapist, and bike fitter.

**SUMMARY**

Above are 5 miscellaneous points that are very useful in helping you be a better, safer and healthier cyclist.

*[Bike Fitness Coaching](#) is your one-stop shop for professional bike fitting and coaching. Guru, Trek and BikeFit static and dynamic fit certified, USAC level 2 certified coach with [Peaks Coaching Group](#). Please visit us at the [websites listed above](#).*

