

I receive a lot of questions, but recently, I've been asked the following question a lot... *"How do I become a Bike Fitter?"*

**BACKGROUND**

Most of my clients are already experiencing pain when they call me up to schedule an appointment.

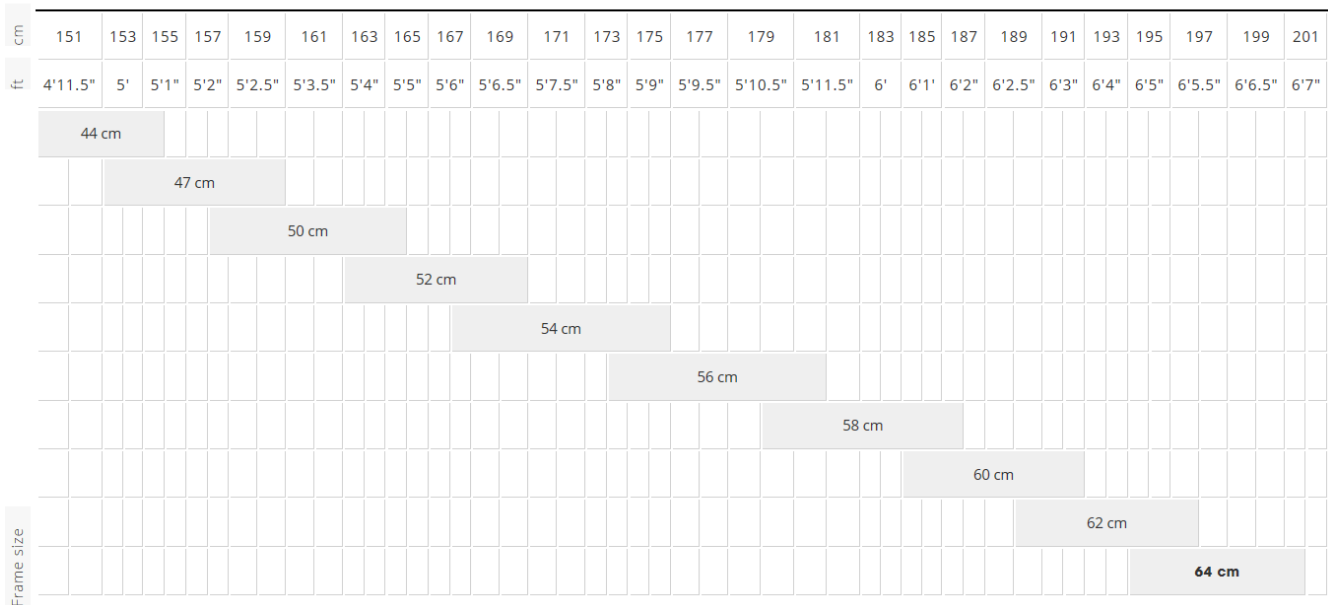
**Statistics:** Roughly half are in pain because they are on the wrong size bike. The other half come in because again, they are in pain, but from a recent bad bike fit. I hear the following all the time ... *"I'm in more pain now than I was before I got my last bike fit."*

The 4 most common issues I see are (a) cleats completely set up wrong, (b) saddle height too high or too low, (c) crank arms too long, (d) stem too long.

**DEFINITIONS**

Why I'm mentioning the following is that in order to have a successful bike fitting experience, the person needs to have (a) the right size bike and (b) the right bike for what type of riding they want to do. Most cyclists know about bike fitting but very few think about bike sizing which is the most important step in the overall bike fitting process. So, before going to your local bike shop (LBS), I highly recommend that that you do some research on (a) what type of bike you are looking for and (b) look through manufacturers websites, choose several makes and models...kind of like buying a car. You know what they say, "a bicycle can be a person's third biggest investment following a house and a car." While on the manufacturer's websites, look at their sizing charts. These charts will give you a good indication as to what size frame you will need. The charts below show the bike sizing for TREK's road bikes as well as Giant's road bikes. Other charts available will show Mountain Bikes, Triathlon Bikes, Hybrid Bikes and Kids bikes. Some manufacturers will list an actual frame size, others will show sizing in S, M, L, XL.

Rider height



ROAD	1.52m 5'0"	1.57m 5'2"	1.62m 5'4"	1.67m 5'6"	1.72m 5'8"	1.77m 5'10"	1.83m 6'0"	1.88m 6'2"	1.93m 6'4"	1.98m 6'6"	2.03m 6'8"
TCR ADV SL   TCR ADV   DEFY ADV   DEFY ADV SL DEFY COMPOSITE   DEFY   TCX ADV SL   TCR SLR PROPEL ADV   PROPEL ADV SL   TCX ADV   TCX SLR REVOLT   ANYROAD				S		M	M-L		L		XL
TRINITY ADV SL TRINITY COMPOSITE			S			M			L		
CROSS CITY ROAM XR ROAM				S		M			L		XL

So, take some time and use the Internet to research different bikes that meet your cycling needs and budget.

At this point, you will know what bike(s) interest you and what size frame the manufacturer recommends.

Now, onto the LBS. This is where the more information you have, the better chance you will have in getting the best value bike to meet your goals. After your discussion with the salesperson, you should have several bikes shown to you. Note: These bikes should ALL be in the right frame for you.

From here, the salesperson should make a few adjustments to ensure that the saddle and handlebars are set correctly. More often than not, they will install a pair of platform pedals since most customers will just bring tennis shoes. But, it's OK to bring your own pedals and shoes.

For the test ride, you will want both the saddle fore/aft and saddle height adjusted as well as the handlebars. For a pre-test ride **QUICK-FIT**;

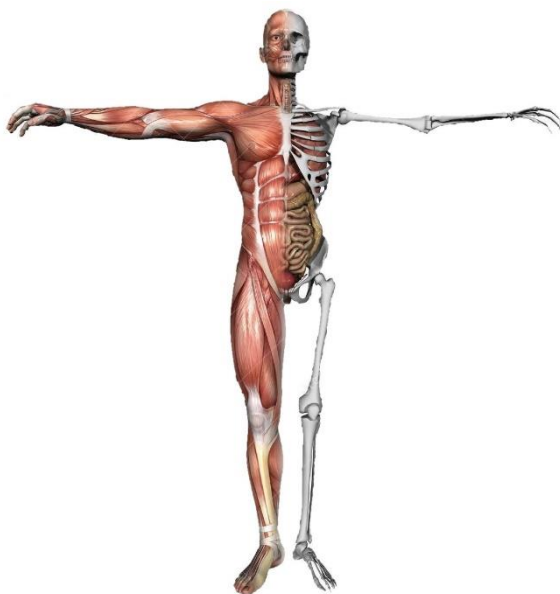
- Saddle Height** – Place the right pedal at the 6'oclock position and place your right heel on the pedal. Your right leg should be fully extended but not locked out, while sitting upright and not leaning to the right.
- Saddle Fore-Aft** – You can eyeball this or bring along a plumb bob. With the crank arms parallel to the ground, place the right crankarm straight forward. Drape the plumb bob over the front of your knee, the string should intersect the front of the crankarm.
- Handlebar height** – You will want to ride the bike around the parking lot a couple of times to determine if the handlebar height is too low, too high or just right.



## WHERE TO START

The best bike fitters understand human anatomy. Why? **Human Anatomy** deals directly with understanding the different parts of the human body to determine their position, relations, structures and functions. **Kinesiology** takes this further to study the principles of mechanics and anatomy in relation to **human movement**.

My daughter is an elite bike racer and has a Bachelor's degree in Kinesiology. She is 6 months away from getting her Doctorate in Physical Therapy. This is the ultimate educational background to be the world's best bike fitter. But, for those of us that don't have time to dedicate 8 years of our lives to college, what's the next best thing? This was me asking that question several years ago. I looked at taking anatomy and kinesiology in college, but I would have to start with the beginning classes. Since I have a Bachelor's degree in computer science and math, I could skip the general education classes but still, the way college classes are structured (1-2 classes in your major per semester), I would need to put in 4 years for a kinesiology degree.



**BIKE SIZING:** where the bike shop sales person helps select a bike that is not too small, not too large, but just right. Here are the basic formulas that should help get you in the correct range for the correct frame size.

BIKE SIZING CALCULATOR	
<b>ROAD BIKE:</b>	<b>FRAME SIZE = INSEAM (CM) * 0.65</b>
<b>MOUNTAIN BIKE:</b>	<b>FRAME SIZE = ROAD BIKE – (10cm to 12cm)</b>
<b>TIME TRIAL BIKE:</b>	<b>FRAME SIZE = ROAD BIKE – 1 Full Frame Size</b>

**BIKE FIT:** once you have the right bike and right sized bike, it's time for a full-blown bike fit which covers all touchpoints including cleats adjusted, saddle fore-aft, saddle height, saddle tilt, knee alignment and cockpit setup. A premier bike fitter will also recommend (if needed) best fit shoes, cleat wedges/shims, insoles. correct width saddle, correct crank arm length, and can adjust most components including setting up ROTOR elliptical Q-Rings correctly. A premier bike fitter is part bike sizer, part bike fitter, part mechanic and part consultant. A pro-level bike fitter also has relationships with Physical Therapists and knows when to refer a client for some PT before continuing with a bike fit. A pro-level bike fit will allow you to be more comfortable on the bike while at the same time produce more power.

Searching for the next best thing, I decided to become a Certified Personal Trainer. There are numerous organizations that provide coursework, testing and certifications. Some of the big names include NASM, NSCA, ISSA, ACSM and ACE. In my opinion, these structured self-study courses really do provide a great background in anatomy and kinesiology. For those that want to gain the deepest understanding, go through these courses with a fine-tooth-comb, the certification should take you 4-6 months of study.

Next, I recommend the following bike fitting courses starting with BIKEFIT.COM. They are great at giving you the best basic instruction for those new to bike fitting. I highly recommend their courses.

## **START**

UPDATED 6/2020.

So many of the new-generation bike fit courses specialize on “How to run our machine.” Extraordinarily little information on basic bike fitting concepts and how-to’s are taught. So sad is the state of bike fitting education that I, along with the help of my daughter, recently came up with my own bike fitting course. We teach the ‘back to the basics’ so that you can understand not only the how-to’s but more importantly the what and why.

For more information, please contact us or see <https://bikefitnesscoaching.com/education>