

## Fitting Body & Bike

By Dario Fredrick

You ride a bike, perhaps for transportation or for sport, for work or just for fun. In each case, the simple integration of body and machine provides a wonderful opportunity for human-powered transport. Given the human body's impressive adaptability, how well this interaction works is up to you. For example, you can train your body's physiology to produce more power and speed, increase your endurance capacity or the ability to pedal day after day. Yet regardless of how well-trained the body might be, the contact points to the bicycle (saddle, pedals and bars) define the body's biomechanical range and how well this integration between body and bike functions.



The three-contact-points concept may seem simple, but when we look at the multitude of positioning variations and the sum of these as they affect biomechanics, bike fitting quickly becomes more complex. Of course, you could simply adjust your saddle height to the point that “feels” right, and as long as you can reach and hold the bars without major discomfort, that might seem good enough. But if you are looking to optimize the way the body integrates with the bike, your economy of energy expenditure, bike handling and stability, while minimizing risk of injury or accommodating current or past physical challenges, then a more precision, detailed approach to your bike fit may be the answer.

As a bike fitting professional of many years, I have seen the benefits of proper fitting in all types and levels of cyclists. Everyone should have a good fit to the bike, regardless of experience or ability. You don't need to be uncomfortable or in pain to be a fitting candidate, only have the desire to improve the body-bike integration. If you are wondering whether you should consider it, here are a few questions to ask yourself: Do you experience discomfort or pain in your body on the bike? Are your knees, hips, low back, neck, shoulders, feet and hands completely happy when riding? Do you feel entirely stable on the bike, especially when cornering or descending? Do you avoid the drops on your road bike handlebars and/or do you spend most of your time on the tops rather than the brake lever hoods? Do you find yourself moving around on the saddle a lot throughout a ride or as terrain changes? Do you ride climbs primarily standing out of the saddle? Do you change your saddle position often to try finding a comfortable spot? If you answered yes to any of these, your fit can likely be improved.

Finding the right bike fitting option is the next step. Fitting has become a very popular service these days as more and more cyclists have realized the benefits. However, bike fittings are not all the same. The most important thing to look for in a fitting expert is experience.



Does the fitter have sufficient and varied experience to accommodate your unique situation? What are his or her background and qualifications? Does the fitter come highly recommended from a variety of cyclists?

Each cyclist is unique, even though we all share similar aspects in cycling. A good fit is specific to the person, one that adjusts the bike and shoes to the cyclist, taking into account the cyclist's body history, goals, and feedback. After all, a proper fitting adjusts the bike to the rider, not the rider to the bike. Fitting "systems" that use fixed parameters such as formulas, video or lasers to determine one's fit lack the ability to take your uniqueness into account. A computer or formula doesn't know that your knee hurts or why, or that your hands go numb after 20 minutes, or that you broke your arm when you were a kid. Technology and formulas are simply tools, and the effectiveness of a tool is only as useful as its application and the experience of the user. *How* the fitter uses his tools and experience is what matters most. A good bike fitter has a range of fitting options to employ and can explain clearly and in detail the whys behind fitting elements and philosophy.

The benefits of a proper bike fitting cannot be underestimated. From seasoned professionals dealing with the rigors of 100+ racing days each year to commuters looking to arrive at the office without a sore neck, all cyclists can reap the rewards of optimizing the integration of body and bicycle.

### **About the author**



Dario Fredrick is an exercise physiologist, professional bike fitter, yoga instructor, coach and cyclist. He is director of the Whole Athlete Performance Center in San Anselmo, CA. You can reach Dario via [www.wholeathlete.com](http://www.wholeathlete.com) to schedule your own precision bike fitting.