



Prevent Cycling Injuries and Improve Performance!

A properly fit bike will reduce your likelihood of overuse injuries from repeated pedaling while increasing your comfort and cycling efficiency. Assuming your body has no significant imbalances, here are a few basic tips on ensuring your road bike is fit to you:

1. Cleat Position: position the cleat so that the ball of your foot (widest part of foot) is over the pedal spindle with equal pressure on the outside and inside. To determine the amount of cleat rotation required, sit on a high table with your feet dangling and observe their position (facing forward, turned in or out). Adjust your cleats to mimic this position.

2. Saddle Height: Your saddle should be positioned so there is approximately 30 degrees of knee flexion (bend) at the bottom of your pedal stroke. One quick way to achieve this is by placing your heel on the pedal and slowly pedal backwards. A good seat height is when your heel stays in contact with the pedal when your knee is in full extension (straight) and your pelvis does not rock.

3. Saddle Fore-Aft: To avoid excessive pressure on your knees, adjust the saddle forward or back so that when your forward pedal's crank is parallel to the ground, a plumbline dropped from the bottom of your kneecap will fall through the pedal axle. Ensure that your seat is level or the nose is tilted down slightly.

4. Handle Bar Position: The position of the handlebar is very dependant on the cyclist's flexibility and experience. A good starting position for comfort is for your handlebar to be 5-8cm below the top of the saddle. To determine the reach, position your bar so your shoulders are at a 90 degree angle when your hands are on the hoods with your elbows slightly bent. The handlebar position can be lowered and extended as you become more flexible and comfortable in a more aerodynamic position.



Although having a proper bike fit can reduce injuries, it is important to be aware that minor adjustments will affect your posture and which muscles are being used. To allow your body to accommodate to your new set-up, start off with low-intensity shorter rides and build up to longer, more intense rides as you feel comfortable.

Zenya Kasubuchi, Sport Physiotherapist
Plaza of Nations