



# Proper Bicycle Fit

## DECREASE ACHES AND PAINS with proper adjustments to your bicycle!

Many cycling-related injuries are preventable with proper bicycle fit and alignment, appropriate equipment and rider positioning.

### Seat Height:

Rider sits on the saddle with level hip/pelvis positioning. Place the heel on the pedal when down in the 6 o'clock position. Cyclist knee should be fully straight in this position. This will allow slight knee bend (30 degrees) when the cyclist resumes proper foot placement on the pedal (ball of foot).



### Knee to Pedal positioning:

Rider sits on the saddle with level hip/pelvis positioning. Pedals located in the 3 o'clock and 9 o'clock positions. The axle of the most forward pedal should be directly below the front of the knee. Thus avoiding added stress to the front of the knee with pedaling.



### Handlebar positioning:

The appropriate position of the handlebar is determined from the distance of the forward tip of the saddle to the center of the handlebar, measured from the elbow to the tip of the middle finger. It is common to have the handlebars lower than the seat.

For road cyclists especially, this puts them at a more aerodynamic advantage. Cycling gloves and changing hand positions frequently can decrease pain/tingling in the hands when riding.

### Clip-in pedals:

Make sure the ball of the foot is over the pedal axle. Clip placement too far in or out can result in altered foot position resulting not only in foot pain, but knee and hip pain as well. Clip-in or cage pedals allow recruitment from both the hamstrings and quadriceps, therefore, improving the mechanical advantage of the cyclist.

After adjustments for proper fit have been made it is normal for the cyclist to develop minor aches and pains (for a few rides) as the body adjusts to the new riding posture!

Cyclists tend to have imbalances in both muscle strength and length. It is very important to stretch, especially the calf and hamstring muscles. Cyclists have very strong leg and low back muscles. Core stabilization and quadricep strengthening would benefit the rider and assist in decreasing low back pain and/or knee pain. Consult with one of our therapists for more information or visit us at [www.facebook.com/ibjirehabilitation](http://www.facebook.com/ibjirehabilitation) to get your questions answered!