

## The Coaches Training Tips

### Knee Problems?

I have talked to several cyclists recently who have experienced knee pains of one sort or another. This shouldn't be a surprise as knee pain is the most common reason for cyclists to seek medical attention<sup>1</sup>. There are a many reasons for this problem and if you are experiencing persistent problems you should consult your doctor. However, there are things you can do to look after your knees.

The first is to make sure that your bike setup is correct, particularly saddle height, saddle setback and cleat position. A saddle that is set too low or too far forward can cause pain in the back, inside and outside of the knee. A high saddle or one that is too far back can result in pain in the front or outside of the knee. Cleats that have too much or too little float, are improperly aligned or are worn can also result in sore knees<sup>2</sup>.

A combination of low cadences and big gears are a recipe for knee problems. High cadences not only improve blood flow and reduce stress on muscles<sup>3</sup>, they also reduce stress on knees. Generally, aim for a cadence of 80-110 RPM when seated and at least 70 RPM when climbing out of the saddle.

Changes in training workload, distance, intensity or things like a new crank length can impose new strains and stresses on your knees that can get your knees and you complaining. Make changes slowly and give you body time to adapt.

Finally, make sure you have a proper warm up of at least 15 minutes before those big efforts. Stretch after training – don't forget the iliotibial band (ITB) – and keep your knees warm. If the temperature drops below 18 degrees use leg warmers<sup>4</sup>.

In the next newsletter I will be passing on a few tips for riding team time trials.

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<sup>1</sup> G Brown, "Injury prevention and management" in *High Performance Cycling*, A Jeukendrup (ed.), Human Kinetics, Champaign, 2002, p.231.

<sup>2</sup> Baker, *A Bike Fit*, Argo Publishing, Washington, 2004, p.77.

<sup>3</sup> Lucia, C Earnest, J Hoyos & J Chicharro, "Optimizing the crank cycle and pedaling cadence" in *High- Tech Cycling*, 2' edn., E Burke (ed.) Human Kinetics, Champaign, 2003, pp. 93-118.

<sup>4</sup> Pruitt, *Andy Pruitt 's Medical Guide*, RBR Publishing, Chapel Hill, 2002, p. 29.