

## TRAININGZONE

**Avoid Injury** 

## **PROTECT YOURSELF FROM BACK PAIN**

BACK PAIN PLAGUES MOST TRIATHLETES AT SOME POINT, INTERFERING WITH TRAINING, HERE'S HOW YOU CAN KEEP IT AT BAY



PHYSIOTHERAPIST

Of all the injuries triathletes suffer, the back is the second most commonly injured body part, after the knee, and one of the most common reasons for missed training and competition time.

A study of 92 triathletes found that in one year, 32% suffered from lower back pain. Generally this didn't last for too long (less than seven days) although 19% of those suffered with back pain for more than three months.

Triathletes' back pain is usually related to the bike, and if you have suffered from lower back pain there are several sources you can look at.

Check you leg length: if you have different leg lengths (either because of actual differences in the bone length, or because of severe pronation of the foot or a rotated pelvis) this will result in a sheering force as the shorter leg 'pulls' the hip down on that side at the bottom of the pedal stroke. Get someone to watch you from behind and check that your hips stay level, with no rocking motion as you pedal.

## **Bike fit**

Check your bike fit: usually the fault is that the stem is too short, which then forces you into a hunched-over position. This causes the ligaments and muscles to be overstretched around the back of the spine,

and could even lead to a disc bulge pressing on the nerves. If the pain is in the upper back or around the neck and shoulders, it is likely the stem is too long, and putting you in an overstretched position. The other thing to check about the stem is its height - if it's too low, you'll stress the lower back. Have someone look at your position on the bike from the side; with your foot at the bottom of the pedal stroke there should be a 90-degree angle at your hip and at the shoulders.

A study looking at how the seat angle affected the angle of the lower back found an increased bend in the lower back increased the risk of back pain. By simply adjusting the seat angle to put the back back in a neutral angle, 70% of the cyclists were relieved of their back pain. So check your seat angle – as a rule of thumb the saddle should be level with the ground. If you have it angled either up or down, it usually



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