

that gets people moving so much harder than on a normal training day. Thirdly, because you will race a sprint distance – and race it hard – this sprint will put your Olympic-distance race in perspective. After racing short, you will be able to pull back a bit on the speed in the Olympic-distance race. The combination of the endurance training you have been doing, paired with the speed you have used in your sprint race or races equals speed endurance – and that is what is needed for a great Olympic-distance triathlon – speed and endurance. But in following this schedule of races, remember that these sprint races are hard training – not goal races. Often these sprint races will be put into your schedule without any taper, so although you will still go hard, you will not be lining up for an 'A' race. The truth is, you may even be a little tired when you line up. Don't worry about

your overall place or finishing time – just go hard! Some triathletes cannot seem to use races as training because they become too obsessed with winning, doing a personal best time, or winning their age-group. Do not fall into this way of thinking. Use the race as a tool to make your goal race as good as it can be. I hope you decide to do a sprint or two before you tackle your first Olympic-distance race. Just keep it all in perspective and keep your eyes on your big goal – your first Olympic-distance race.

Ask our experts

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Race advice

GRIND A BIG GEAR OR SPIN?

Garth Fox

Triathlete and cyclist



Q In cycling, I've heard that some pros prefer to mash it out in a big gear rather than spinning their legs. Is spinning not more efficient?
Rick Diesel via Twitter

WHEN WE look at the best cyclists, we invariably find that the cadence used is in the range of 85-95rpm. We can therefore assume that this range is optimal because if it were not, the best cyclists would not be in that range. However, if we use oxygen consumption for a given power output as a means of measuring cycling economy, then research tells us that the most economical cadences are in the 50-60rpm range. So what is going on? Well it depends on what we want to be economical with, oxygen or fuel. At sub-maximal cycling intensities oxygen is not a limiting factor – there is plenty in the air after all. But glycogen stored in the muscles and liver, which we can use as fuel to power muscle contractions is limited. Because low cadences mean we need to push harder on the pedals, this requires greater force production, which in turn necessitates the recruitment of greater numbers of fast-twitch muscle fibres. The problem arises from the fact that these muscle fibres are much less fuel efficient than slow-twitch muscle fibres which means they fatigue very quickly. So yes, spinning is more fuel-efficient and that is important to triathletes. However, due to individual differences in for example, muscle fibre type and proportions, some may be relatively more efficient at the higher or the lower end of the range.



Training advice

INCREASE STEADILY

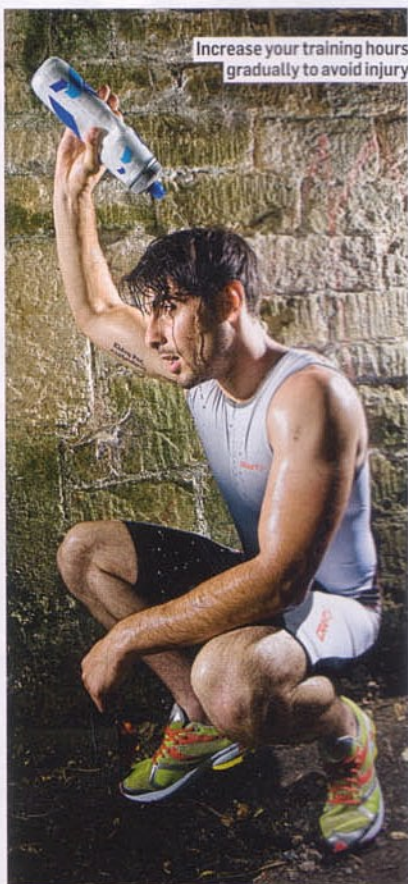
Garth Fox

Triathlete and cyclist



Q Over what length of time should you increase your training workload? For example, if I already do three hours per week, how do I get to 10?
Matthew Hunt via Twitter

THE ANNUAL training volume you are able to handle is a key determinant of race performance. If you find yourself with more time to train, it is essential to increase your training load gradually, as sharp hikes rapidly lead to overtraining and injury, which is especially true of running due to the inherent eccentric muscle damage. A very general rule of thumb is to increase annual training volume by between five and 10 per cent but this assumes that every athlete absorbs training loads at the same rate, which they certainly do not. The important thing is to pay close attention to what your body is telling you on a daily basis and back off whenever you feel you need to. I would also suggest that your training priority is always quality over sheer volume. Also in the



early stages of increase, be patient and do not be tempted to add both volume and intensity simultaneously as this will be too much for the body to handle in the short term.