

KNOW HOW

Base building

Want to ride hard and fast in spring? Then train long and slow this autumn, says Nik Cook

FITNESS As Lance Armstrong once said: "Building my endurance base by putting in the miles was one of the first things I learned in my career; that set the basis for my continued development in the sport."

So, like it or not, a high volume of low intensity training throughout the autumn and winter is essential if you're serious about performing well in spring and summer. Neglecting it for higher intensity work is like building a great looking house but not bothering with foundations.

Base notes

Building a base of endurance is achieved by completing long rides (90 minutes or greater) at continuous low intensity (zones one and two) over a period of 8-12 weeks. During these rides, your heart rate will typically be 65-75% of its maximum and your power around 69-75% of your functional threshold power (FTP). This means you'll be breathing easy and able to maintain a conversation. For racers, a rough guide is that you should be aiming to build up to a ride that, in terms of time, is 10-15 per cent longer than your longest event next season. For most sportive riders, a target of five to six hours is optimal.

Don't expect your maximal aerobic capacity (your VO_2 max) to improve, though. Aerobic capacity is increased by higher intensity work once the base has been laid down. What building an endurance base will do, however, is make you a more efficient and economical rider. Too many aspiring sportive riders place emphasis on trying to ride faster, but this is often irrelevant and the key goal of training

should be developing the ability to ride for long periods without slowing down. Thankfully, base training will deliver this in spades.

In the zone

Don't judge a ride by your average beats per minute (bpm) or watts, though. Time in the prescribed zone is the statistic you should be following. It's possible to complete a ride with an average bang in the middle of your zone, but to have spent hardly any time in it. After all, if you stood with one foot in a bucket of boiling water and the other in a bucket of ice, it could be argued that on average you'd be comfortable! Instead, you should be constantly monitoring your status and keeping your effort as consistent as possible.

It's hard to go easy

And just because the pace is easy, don't think that winter base training is a soft option. The discipline needed to stay below the training zone ceiling – especially on climbs, in the driving rain or when being goaded on by your mates – is immense. Plan routes without 'out of the saddle, lung busting climbs'. Long, seated climbs are excellent for building strength, but you might have to drop your gearing during winter. You won't have the option to push to keep warm either, so make sure you wrap up well, paying particular attention to your extremities.

Going out for group rides is fine, but you'll have to resist the temptation to get sucked into sprints or battles up climbs. If the pace gets too high, let your mates go on and remember that medals aren't given in training. **PLUS**



Base training can be frustrating, but there are easier ways to hold back your pace than this!

BASE BENEFITS

WHAT BUILDING AN ENDURANCE BASE DOES FOR YOU...

Builds capillary density

Capillaries are the end link of your cardiovascular system, delivering oxygen and fuel to your working muscles, and carrying waste carbon dioxide and metabolites away. Build up how many you have and you'll find the whole system works more efficiently.

Develops your ability to burn fat This isn't about losing weight, but rather about training the body to use its fat reserves and eking out your more limited glycogen stores for longer.

Stimulates slow twitch muscle fibres This causes the fibres to become more efficient and therefore less prone to fatigue.

Increases number of mitochondria Mitochondria are the powerhouses of your cells. The more you have, the better you'll ride.

Improves pumping efficiency of the heart and respiratory system

After base training, every beat of your heart will pump more blood to your working muscles, delivering more oxygen.

Develops strength in muscles, joints and connective tissue This helps to prepare your body for the greater stresses and strains of the higher intensity training that's to come.

Enhances pedalling efficiency Hours of smooth and easy spinning will hard wire the link between your brain and muscles.

Makes you mentally strong Long durations at low intensity are mentally tough. If you can stick with the program then the relative freedom and high stimulation of a race or sportive will make them seem like a breeze.

PUT THIS IN YOUR POCKET

Packing 754kJ and 33.8g of carbs, this 50g 'missile' hits the mark. It's low on sugar and tasty too, but the texture will take some getting used to. shotz1.com



NEW FUEL

Beet It

FOR MOST OF us beetroot only comes pickled, but James White's organic Beet It beetroot juice hopes the newly proven success of the root vegetable's endurance-enhancing prowess will change this.

Research at the University of Exeter showed that the nitrate-rich juice improved endurance by roughly 16

per cent by reducing the oxygen cost of exercise. Consisting of 90 per cent organic beetroot juice, the other 10 per cent of Beet It is apple juice. Each 25cl bottle will give you around 23g of carbohydrate and 2.25g of protein. Too much will also give you red wee. www.jameswhite.co.uk

