

Getting efficient ☺

This is an inspired blog this week after watching some cyclists during a recent amateur race pushing big gears!

It's easy to feel in order to be quicker on the bike it's about pedalling really hard in a big gear, now there is a time and a place for that but for most cycle events you do the focus should be about "getting the most bang for your buck" or been as efficient as possible for the effort you're putting in.

Get efficient, go quicker, go further, lower injury risk and enjoy those rides more ☺

What improves your efficiency?

Get your cadence up to around 90-95 rpm (cadence can be calculated by counting the number of times one knee rises during a 30-second interval. Double this number and that's your RPM – revolutions per minute)
Nb: We also appreciate that trying to cycle at too high a cadence for you and your speed can actually be more in-efficient ... ie: if you're cycling at 8mph but cadence is 95rpm that's likely to be less efficient than pedalling at 80 rpm... but for most on a sportive, a TT or triathlon where they are putting "effort" in then improving cadence would help them go quicker.

Smoothen that pedal stroke, when you were a kid out on the bmx (grifter/chopper/etc!) you probably weren't clipped in so a pedal stroke was just pushing down on the pedal. You need to break this mentality and thin about a pedal stroke like a windmill. That means we pedal "around vs down" Now you can get this analysed or pop to your local gym with a wattbike will all help, but a pedal stroke is a combination of muscles working at different times during the pedal stroke.

Get balance, it's really common to see one dominant leg coming through but we aim for a 50:50 distribution of power. Bad bike position, lack of flexibility, injury, low cadence, poor pedal stroke technique can all contribute to this.

Top tips to help improve the above ☺

- **Kit, commit to the shoes!** If you haven't already get some cycle shoes and pedals... if you're not clipped in yet then do that first then come back here for a read ☺
Without this you won't be able to work on an efficient upstroke on your pedal and it's only going to promote bad pedal technique. Lots of entry level options for this, including commuter or mtb shoes that look like trainers and are really easy to get in and out of.



- **Kit, future computers** Next time you're upgrading your bike computer get one with a cadence sensor... they're pretty cheap and allow you to see how the pedalling is going.
- **Set up, watch out for frogs!** (it's what we refer to riders who are too low in the seat, meaning 9/10 times their knees go out to the side rather than up or down) This isn't great biomechanically and more likely to lead to injuries, plus it's not an efficient use of your muscle groups. Get a bike shop to check you out or ask someone that knows 😊
- **Drills:**

Spin-Ups

Find a moderate sized climb with a gradual descent. Once you're at the top, shift into a gear that puts you around 70 rpms. On the way down, don't shift gears, gradually letting your cadence rise until you get to the bottom. Shoot to be well above 100 rpms by the time you reach the bottom. Repeat 4 to 5 times.

Tip: Make sure you are applying even pressure for the full rotation of the pedal stroke, avoiding dead spots where power isn't being produced. If you hear a "clunk" in your pedal stroke this can come from where you've got a dead spot or slack area meaning you've got work to do on your technique (think windmill!)

One leg drill (on a static trainer, not for outdoors!!!)

With one foot clipped into your pedal and the other leg free (either resting on the frame of your trainer or on a box next to the bike), shift to an easy gear and pedal for 20 to 30 seconds (or until fatigue). Repeat with the opposite leg. Start with five repetitions with each leg, increasing the duration of the drill as it becomes easier.

Tip: You will find your dead spots in your pedal stroke really quickly. Repeating the drill will help you iron those out 😊 As per previous aim for a smooth constant pedal motion. If you really struggle, do it with both legs clipped in but only pedal with one and allow the other to be a dead weight and just switch over.

Cadence Intervals

From your normal cadence and shift to an easier gear 2 to 3 above what you would normally ride at. Ride for five minutes at this new cadence (which should be between 90 and 120 rpms) and return to your normal cadence. Try this several times during your ride during long flat sections.

Tip: If you're using a speedometer or power meter, try to maintain your speed or power when you shift to the higher cadence. If you start to bounce around on the seat then you're pedalling above your cadence ability to move up a gear!