



Rolling Out Your Training Plan

Making Adjustments in the Real World

Integrating Bikelab sessions into your riding week. Each Bikelab plan includes 12 weeks of training and three key sessions to be performed each (or most) week. These have all been created using your physiological blueprint, mapped from your test results. When performed consistently over time, these sessions will trigger adaptations that best match your profile, address weaknesses and make you a better bike rider.

Sounds good right? The most important message here is that for results to flow you will need to be consistent but **NOT** perfect.



Consistency, not perfection, is the key to making long term gains

Think of it this way; "you are much better off (in terms of results) completing 75% of your sessions over 6 months than you are completing 100% over 6 weeks". Relative consistency over an extended period trumps almost anything else. So, any strategies you can employ to help keep your mind (and body) on the job are going to be very important for long term success as a cyclist.

Although the plans may look a little prescriptive (and can in fact be implemented that way), when applied in conjunction with the broader advice (Bikelab Newsletters, user guides, Facebook posts & "further information" provided with each plan), there is enough flexibility to help tailor the plans and sessions to meet almost any challenge, barrier or setback.



Climbing intervals are extremely effective but the gradient must be carefully selected

Which type of terrain / course will work best? It is certainly true that some training sessions will work best on certain terrain. Whilst this is not a blanket rule, it is important to keep note of the most suitable terrain for each type of training session in your plan.

Many sessions already include advice on which terrain to use and even show more than one option. Where it is applicable to use an indoor trainer, it will usually be indicated within the session detail.

Generally speaking, it is not advisable to use climbs of over 10% gradient for interval climbing efforts that are longer than 3 minutes. Steeper gradients are usually OK for shorter climbing efforts that tend to have a greater anaerobic load.

Flat terrain is almost always best for aerobic interval sets. This allows more consistent power production and lends itself to the higher cadences preferable for this type of session.

The other thing to keep in mind when selecting courses for your outdoor sessions is traffic flow. Traffic lights, stop signs, right hand turns (left turns in most northern hemisphere countries) and heavy vehicle flow, can all create interruptions that make hitting power and HR targets consistently very difficult. Considering traffic is, of course, also a very important safety issue, as athletes who are intensely focussed on session detail (not to mention the fatigue) may become distracted quite easily.

Missed Sessions. Let's face it, nobody is perfect. As such I understand that all cyclists miss training sessions. This may be a "one-off" or a longer period where training consistency just cannot be maintained. So here is a guide to help you when the unavoidable happens:

- Never try to play catch up, a missed session is gone, so forget about it and pick up the training plan with the next session in the sequence.
- If your "missed period" is less than two weeks, you will be able to simply resume where you left off. Just means your plan will now run two weeks longer.
- In the case where you miss 3-6 weeks. When you do resume training, ride nice and easy for one week then go back and *repeat* the last two weeks of your plan. Then resume training as normal.
- For instances where you cannot ride for 6 weeks plus, simply re-test and create a new plan from scratch. This is also an instance where you may want to consider the "general conditioning" rider category, at least for the first 6 weeks of your "comeback plan", before switching categories.

Maintaining contact with riding buddies. Cycling is essentially a social activity and for most who ride, maintaining contact with friends and regular ride groups is very important, in fact it is quite often a key motivator for riding (and even taking up cycling) in the first place. So, I understand that from time to time, you will need to have the freedom to swap out a Bikelab session for something more social or less structured. We do think, of course, that having a few friends ripping out Bikelab intervals with you, is also quite good fun. But if you want / need to make changes that help keep you in the social loop, try to make the changes keeping these points in mind:

1. Don't add a high intensity group ride to your already packed weekly schedule. Simply "trade it" for one of your Bikelab interval sessions.
2. If you are keen to do a local club race, do the same as above and trade it for one of your Bikelab interval sessions.
3. Should you be keen to add regular group rides or weekly racing, do it on a "fortnightly rotation" rather than swap out Bikelab sessions each week.
4. When you do trade off a Bikelab session for a bunchie or a club race (or anything else), don't always trade the "same session". Be sure to complete as many of your key sessions as you can.
5. If you find that you are missing too many key Bikelab sessions (and maybe need a little more structure), you may wish to try alternating your riding weeks as "*Bikelab Week*" / "*Freestyle Week*". In this case, you would complete every second week of your Bikelab plan and trade off the other weeks for your racing and group rides. the benefits are that you do not miss the session progressions and still see plenty of your friends.

Illness and Enforced Breaks. Sometimes life takes a turn and circumstances change significantly. Often this will impact on time-availability and opportunities to ride a bike. Should these circumstances occur for you, don't worry. Worry will not change anything and you will be pleasantly surprised at two things: a) how quickly you regain your fitness once you return to riding and b) how much good an enforced break can do in terms of rest and rejuvenation. So, accept your situation and once you are truly ready to return to riding (NEVER rush this), simply follow the advice above in the section on ***missed sessions***.

Just having an off-day. We have all been here. No matter what we do and how hard we try to alter our mindsets or bombard our brains with positive self-talk, it is just not happening. This is the dreaded "off day" or as the French call it; "Le Sans Jour" (the day of nothing). Comfort yourself with the fact that this is only a big problem if it occurs during every session over a couple of weeks. It is usually a short-term issue and quite often a one-off. When the "Sans Jour" happens, you really have two choices; quit the session and go back to bed or modify the set.

Modifying means adjusting your targets (power and/or HR) and/or adjusting your work-to-rest ratios and/or reducing the number of intervals in your sessions. Here are a few things that may assist in getting the session done:

- Drop each of your power (or heart rate) targets by 10%. You may be surprised by just how much this helps. And you will still get more out of the session than you may think.
- Increase your recovery time between each interval effort. This may just need to be an extra 30sec but can be as much as 2 minutes.
- Reduce the number of interval efforts by 1-2 and get a good 75% of the session done.
- Instead of trying to hit your power or heart rate targets from the beginning of each interval, you can try either; a "build approach", simply starting below the target and building to hit the target (just briefly) by the end of the effort. OR, a "split approach", where you just attempt to hold the target for alternate "parts" of each effort, say 30sec on / 30sec off, or 1min on / 1min off. Each of these will change the focus point and help deal with any mental fatigue that may be at the heart of your struggle.

Reading the signs of building fatigue. As an endurance athlete, the hardest part about dealing with fatigue is often recognising that you are, in fact, fatigued. I am not talking about transient tiredness that affects all endurance athletes from time to time, but deep, entrenched fatigue that is difficult to escape. Sometimes this sort of fatigue can result in things like:

- High resting HR
- Difficulty in getting the heart rate to previous high points when training or racing.
- Difficulty sleeping, irritability
- Muscle aches, mood swings and occasionally, depression.

These are all indicators of a significant physical / emotional illness and any athlete experiencing such symptoms should consult a medical professional.

From a training / performance perspective, the following signs can be very effective indicators of fatigue (over-training) and the need for a break / rest.

1. Week on week difficulty in hitting previously attainable training targets
2. Consistently low training heart rates
3. Significantly lower (poor) test results during re-tests (fitness regression)
4. Reduced race or training performance despite consistent (and often very hard) training.
5. Poor (or high) recovery heart rates, between interval efforts during training sessions.

Because Bikelab Inc is a numbers-based training system, these signs can be picked up fairly quickly and when they are, it is quite important for the athlete to act. Please note, that rest is the **ONLY** cure for fatigue and over-training.

Endurance Rides. These are close to the most important rides of the week and wherever possible, should be completed on the road, rather than on a trainer. Although Bikelab Inc will produce endurance sessions with some prescriptive targets, it is important to be able to adjust these rides as required. Remember that essentially, I just want you on the bike for an extended period of time, so don't over-complicate things and if you are on a group endurance ride, just go with the flow.

There are a few things to keep in the back of your mind:

- Generally, the only big mistake you can make on an endurance ride is to go too hard for too long. Now I don't mean on a single ride (this will happen from time to time) but it is more about avoiding this mistake being made week-in / week-out. You **NEED** some lower intensity endurance rides, ALL cyclists do.
- Going hard on short hills (less than 1 minute) is fine, provided there are not more than a dozen of them.
- Sitting in (or above) Zone Four for longer than 15 minutes at a time during endurance rides should only be the domain of a serious bike racer or very experienced cyclist. Keep these efforts for your interval days OR only do this very occasionally.
- No matter what anyone tells you, time in the saddle IS important and is **NOT** junk miles. Just ask any serious or experienced bike rider.



If there is one key word in the world of endurance training, it is **consistency**

A word (or few) on Power. Power has become part of the cycling vocabulary and many riders kitted up with power meters know a little about how many watts they can produce. Clearly that is not entirely how power meters were intended to be used.

From a training perspective, knowing a little bit about how to use data and the various terms associated with using a power meter is critical, unless you are happy with spending a couple of \$k for nothing more than another (vaguely impressive) gadget. Truth is, a power meter is a very effective tool that can be employed to make your cycling more enjoyable, interesting and effective, once you know what you are doing.

Here are a few terms and what each means:

- **Average power:** the average power in watts being produced by the rider. This is usually expressed as an average over time (**3sec, 10sec, 20sec, 30sec** etc) but may be expressed as average power for an entire ride or part of a ride (**lap**)
- **Power:** the actual power being produced at that moment
- **Normalised Power** (or weighted average power on Strava) – expressed as an average over time / segment of a ride: This is an “estimate” of the power that could have been maintained for the defined period / segment if the power had been constant for that time. This is probably more easily explained as a “smoothing algorithm”.
- **Balance:** expressed as a % that shows how much power was produced from the left / right legs whilst riding.
- **Torque Effectiveness (TE):** basically, a measure of how much your drive force on one leg is **not** impeded by the other leg. The higher the number (100% is theoretically the maximum but rarely seen), the better or more efficient your pedal stroke. 100% means zero wasted energy & theoretically 0% would mean that one leg was working against the other at all stages of the pedal stroke. It is most useful to think of this number as an efficiency rating. A very good rating is anything above 85%, whereas below 60% indicates that some work needs to be done. It is also important to note that TE is almost always higher at lower cadences and whilst climbing.
- **Pedal Smoothness (PS):** this is a metric that shows how evenly your force is applied during the pedal stroke of each leg. It measures the peak force of each stroke (for both legs if you have a dual-sided power meter) and compares it to the average. In other words, what % of your peak is your average force. Excellent ratings are in the mid to high 30s, anything lower than 20% means there is work to be done. Like TE, PS is almost always higher for low cadences and whilst climbing.

It is very important to set up a lap screen on your device, so that you may monitor your outputs during key training moments (by pressing the lap button). This lap screen should show (as a minimum); Lap average power, lap time, lap distance, Cadence & Heart Rate.

Lap average power is one of my favourite “metrics” as it can be used for not only interval training but to assist with pacing and dosing of effort during climbs, time trials or anywhere smart pacing is critical for maximising performance.