

The following list contains the sessions you will use in the Aerobic Base Training for a Fit and Fast 2020.

The list will grow as new sessions are revealed on a regular basis. They are colour coded, with cyan being the easiest, blue being endurance, orange around FTP, and red being very intense.

Recovery (R)

Recovery rides are ridden at an intensity of Zone Recovery. The route should be as flat as your environment allows (if you live in a hilly area the ride should be completed on rollers / indoor trainer), however, if an occasional hill is met, then these should be ridden as conservatively as possible.

Cadence is moderate ($\sim 75 - 90 \text{ revs}\cdot\text{min}^{-1}$) with gearing typically low (e.g., 42 x 19 – 17).

The aim of recovery rides is to speed recovery after consecutive days training, or hard sessions. Typical duration of this session is usually $\frac{1}{2}$ to 2 hours.

Steady Ride (SR)/Long Ride (LR)

Long rides are ridden at an intensity of Zone 1. Hills should be kept to a minimum and steep grades avoided (avoid gradients $> \sim 4 - 5\%$) wherever possible. When going uphill you may stand or sit, whilst keeping intensity fairly low, up to Zone 4. Avoid hills that take > 10 minutes to complete.

Cadence is moderately high ($\sim 85 - 100 \text{ revs}\cdot\text{min}^{-1}$) with gearing fairly low (e.g., 42 x 17 – 15).

The aim of long rides is to increase base endurance, and maintain aerobic fitness. This session is also an excellent way of learning to eat whilst training. Typical duration of this session is usually $1\frac{1}{2}$ to 7 hours.

Endurance Training (ET)

Endurance training rides are ridden at an intensity of Zone 2. Terrain can be either flat, or include moderate hills (grades to 6%; up to ~ 5 minutes in duration). Intensity on climbs is up to Zone 6 and may specifically be specified in your training. When going uphill you should endeavour to remain seated.

Cadence is moderately high ($\sim 85 - 100 \text{ revs}\cdot\text{min}^{-1}$) with gearing fairly low (e.g., 42 x 17 – 14) on the flat, and keep cadence moderately high ($70 - 90 \text{ revs}\cdot\text{min}^{-1}$) when going uphill.

The aim of endurance training rides is to increase base endurance, improve aerobic fitness, and forms the core of an endurance cyclists training. This session is also an excellent way of learning to eat whilst training. Typical duration of this session is usually 1 to $4\frac{1}{2}$ hours.

Race Pace Intervals (RPI)

Race pace intervals are ridden at your perceived idea of 'race pace' (e.g., Zone 5 or 10 / 25 mile TT effort). During your ride accelerate quickly (but not sprinting) to the required effort, and then hold the effort for 30 seconds. Ride easy at Zone Recovery for 5 minutes to recover, and repeat as specified. These intervals should be performed on flat roads.

Cadence is high (95 - 120 revs·min⁻¹) during the intervals.

During certain sessions (e.g., LR, ET) it is beneficial to include race pace intervals. In a group situation, you should drop off the back of the group, and 'catch' back up again during the interval.

Threshold Tolerance Intervals (TTI)

Threshold tolerance intervals are ridden at an intensity of Zone 4. Terrain can be either flat roads, rolling roads, or generally on an indoor trainer, using your race specific (TT) bike. Accelerate quickly to the zone and hold the target intensity for the specified duration. Each interval begins as you accelerate, not when your HR reaches Zone 4. Recover for 5 minutes, at Zone Recovery.

Cadence is moderate (~ 85 – 95 revs·min⁻¹) with gearing fairly high (e.g., 53 x 18 – 15) on the flat, or cadence high (up to ~95 revs·min⁻¹) when going uphill.

The aim of threshold tolerance intervals is to increase maximal aerobic power, $VO_{2\text{max}}$, raises threshold (relative, and absolute), and are very beneficial.

Flat Sprints (FS)

Flat sprints are completed within a longer ride (e.g., LR, ET). On flat roads, and from your regular riding speed (the speed associated with Zone 2), using your race specific bike, accelerate rapidly to maximum sprint effort and hold the effort for 15 seconds. As you start the sprint get out of your saddle, and remain standing for the first ~ 5 seconds, whereupon you should return to your saddle for the remainder of the sprint. Use a moderate gear (e.g., 53 x 17), and aim to reach maximum pedal cadence as quickly as possible. Try to remain as smooth as possible. Recover for 8 minutes at Zone Recovery, building to Zone 2, and repeat as specified.

The aim of flat sprints is to increase peak power.

Maximal Aerobic Power Test (MAP Test)

Prepare for this test as if it was a race, being mentally and physically prepared and rested. You should eat about 2 hours before hand.

You should warm up for 10 – to – 15 mins prior to starting the test. You should record power and heart rate.

The test starts very easy around 75 W and gradually gets harder, increasing at 25 W per minute for non-elite males and 15 W per minute for all females. These steps are often reduced in size (e.g. 5 W every 12-secs). The test finishes when you either come to an abrupt stop, or when you can no longer

keep increasing the power as required. The average power output of the best 60-secs is your MAP. You should reach maximum heart rate (HRmax) within a few seconds of this effort. These data are then used to set your training zones, and are an excellent way to predict performance. FTP (60-mins best power) is often around 75% of MAP.

After the test, you are likely to feel exhausted. You should avoid alcohol for 24 hours (as you will get drunk much faster). Eat well with some carbohydrates to replace lost energy and do not do anything that requires fine motor skills/operate machinery.

20-min Power Test (20-min TT Test)

Prepare for this test as you would for the MAP test. Once you have warmed up you should ride as hard as you can, aiming to record your highest average power output over the 20-mins. It's basically a 10-mile (16-km) or so TT. You'll need to record power and heart rate.