

The **30/15** HIT interval

*A brief practical guide
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With the exception of the cited literature, the following content is to be considered anecdotal. You should never blindly adopt this or any other training strategy without first considering your individual fitness and health. In no way does the content of this document constitute medical advice, nor does it replace such advice. Regarding concerns related to your health you should always consult professional medical personnel.

The 30/15 high intensity interval

The 30/15 high-intensity interval session is described in several papers by Rønnestad and colleagues (1-3).

The authors report a 12% improvement in threshold power and 40-min time trial power and a 8.7% increase in VO₂ max following ten weeks of two weekly 30/15 sessions in well-trained competitive cyclists (1)t.

This pdf provides my pragmatic experiences with the 30/15 interval session.

The workout

The workout in questions consists of alternating work periods of 30 seconds at high intensity and recovery periods of 15 seconds where low-intensity work is performed. In the original paper by Rønnestad et al, the riders completed continuous work/recovery cycles for 9.5 minutes (13 cycles) before a 3 minute break.

This was then repeated for a total of three 9.5 minute efforts (in total, 39 cycles).

The interval intensity

The subjects in this study were instructed to perform the high-intensity cycles at their «maximal sustainable work intensity». That means they were to aim for achieving the highest possible average power output.

Power output during the recovery periods were 50% of that achieved during the high-intensity work.

If you own a power meter, at this point you will probably wonder «what does this correlate to in percentage of FTP?»

In my experience, this will vary significantly depending on the individual rider and his/her capacity at higher power outputs.

I know some coaches who utilize VO2 max testing prescribe this workout at power values correlating to power at 100% of VO2 max. However, unless you have recently performed a VO2 max test, this will not be of much help.

My experience is that most riders will hit the «spot» for this workout somewhere between 120 and 140% of FTP.

However, I would recommend giving the workout a go without worrying about your FTP. Simply aim for an intensity you think you will just be able to sustain for the total duration of the session. If you are close to dying towards the end, but able to get through the last cycles (without big power drops), you hit the spot.

A well executed session will usually collect you a good chunk of time at heart rates at and above 90% of your maximum heart rate.

How to perform the workout: well-trained riders

If you are a well-trained cyclist (typically 400-600 h/year and above) with a decent training base you should be able to adopt the following session protocol:

15-20 min warm-up

30 sec high intensity
15 sec low intensity **x13**

High intensity cycles at approx. 120-140% of FTP, but this varies from rider to rider so allow your legs to set the pace.

3 min recovery

30 sec high intensity
15 sec low intensity **x13**

3 min recovery

30 sec high intensity
15 sec low intensity **x13**

High intensity cycles at approx. 120-140% of FTP, but this varies from rider to rider so allow your legs to set the pace.

3 min recovery

5-15 min low intensity cool down

How to perform the workout: moderately trained riders

If you are a reasonably trained cyclist (typically <400 h/year) with a decent training base you should be able to adopt the following session protocol:

15-20 min warm-up

30 sec high intensity
15 sec low intensity **x10**

High intensity cycles at approx. 120-140% of FTP, but this varies from rider to rider so allow your legs to set the pace.

3 min recovery

30 sec high intensity
15 sec low intensity **x10**

3 min recovery

30 sec high intensity
15 sec low intensity **x10**

High intensity cycles at approx. 120-140% of FTP, but this varies from rider to rider so allow your legs to set the pace.

3 min recovery

5-15 min low intensity cool down

Tip - if your fitness level is relatively modest, you may want to ease into this workout with 30/15 cycles including 8 repetitions, and then complete 3 sets of those 8 repetitions (total of 24 repetitions for the session as a whole). And then gradually increase the number of reps towards 10 every second session.

A quick note on alternative short interval formats

Short high-intensity intervals like the 30/15 format is by no means new. They have been used by cyclists and studied for decades.

However, the study of Rønnestad is the first to compare the method to report such significant results against a documented and effective control session (4x5 min), in well-trained cyclists and over a relatively long intervention period (10 weeks).

For your consideration, numerous variations of short intervals exist, such as:

- 15/15 sec
- 30/30 sec
- 40/20 sec
- 45/15 sec
- 60/60 sec
- 60/30 sec

Interestingly, Rønnestad and colleagues argue that the 2:1 work to recovery ratio seems to allow more time spent above 90% of VO₂ max (1).

This might be in favour of formats such as 30/15, 40/20, 45/15 and 60/30.

As of today, there is no available research to suggest which of the above methods are more efficient.

However, you can get a fair idea yourself by trying out the different formats. By reviewing your time in heart rate zones and average power you should get a decent indication of which induce the greater training stimuli.

Best of luck with your training!

- Martin

PS! If you want more training plans and resources to help you become a faster cyclist...

...it may just be that my [TRIBE membership could help you out](#)

References

1. Rønnestad BR et al. Short intervals induce superior training adaptations compared with long intervals in cyclists – An effort-matched approach. *Scandinavian Journal of Medicine & Science in Sports*, 2015;25:143-151
2. Rønnestad BR et al. Superior performance improvements in elite cyclists following short-interval vs effort-matched long-interval training. *Scandinavian Journal of Medicine & Science in Sports*, 2020;30(5):849-857
3. Rønnestad BR et al. Superior physiological adaptations after a microcycle of short intervals versus long intervals in cyclists. *International Journal of Sports Physiology and Performance*, 2021;16(10):1432-1438