

Lactate Threshold Training vs. Interval Training

Factors to Consider:

1) Age/Experience of the Runner

Lactate Threshold workouts are typically Tempo Runs (defined as runs longer than race distance at 15-20 seconds slower than current 5k pace). Historically, young runners struggle with the longer efforts and might be more capable of handling Interval workouts that include periods of rest. This must be considered when implementing Lactate Threshold workouts.

2) Length of Season (Macrocycle)

If there is adequate time to go through a reasonable progression through phases of training, then a Lactate Threshold phase of training has an equal value to an Interval phase. The strength that can be gained through a 6-week phase of training emphasizing Lactate Threshold development can be invaluable when trying to maintain fitness throughout a long season. Further, the body can adapt to Interval training better due to a pace progression from Aerobic Base training, to Lactate Threshold training, and finally to Interval training.

3) Length of Target Race

While Lactate Threshold training can be valuable from 800m events to Marathons, its value varies from distance to distance. When considering how much Interval training and how much Lactate Threshold training to do, the race distance is a consideration. One may want to do a greater percentage of Interval training for 1500m + 800m, than for races 3000m and up.

4) Athlete's Ability to Recover

a. from workout to workout

b. with the training session

I've found that young runners have difficulty recovering from quality Lactate Threshold workouts. They tend to be tougher and can wear them out. They also can turn into deterioration sessions, which is practicing failing. Interval training, by definition allows for periods of rest. How long one rests between efforts also effects the anaerobic benefits of the workout.

5) Psychological Factors

a. how the young athlete handles challenges

b. work on weaknesses in early season; strengths in late season

The above mentioned possibility of rehearsing failing in workouts (Tempo runs for example) might have a lingering effect upon the athlete's confidence. Coaches need to work on both the runners' strengths and weaknesses during the training process. I've found that you can challenge their weaknesses during the earlier phases of training better than if you do so later in the process. One doesn't want to have athletes struggle in training if races are at hand. Once the competitive season begins a coach should feed the runner more training that goes toward their strengths. How this fits in the Lactate vs. Interval puzzle will, again, vary from athlete to athlete.

6) Weather Conditions

At Florida State we can successfully do extended Lactate Threshold workouts in our Track-preparation macrocycle because of two factors. First, the weather is incredible so the wear-down effect is lessened. And second, we have more weeks to dedicate towards LT training than we do in Cross Country preparation. Similarly, we have to be careful as to how long and hard we can go in LT workouts during early cross country season where humidity is a factor.

7) Training Venues

When you're doing extended Lactate Threshold workouts the running surface becomes an important factor. If you're blessed to have soft-surface training venues of several miles then you'll be able to do more LT work.