

# Harnessing the Power of Tempo/Lactate Threshold Runs

As a coach, I've always held a deep appreciation for the nuanced art of training. Among the myriad strategies in our arsenal, tempo/lactate threshold runs stand out as pivotal tools for unlocking new levels of performance. Here I take a little look at what's behind these runs and the remarkable physiological adaptations that accompany them, propelling runners towards excellence.

## Understanding the Foundation: Tempo/Lactate Threshold Runs

Tempo runs revolve around running at a comfortably hard pace just below the lactate threshold. This sweet spot challenges runners to sustain a challenging effort without tipping into the realm of anaerobic metabolism, fostering the development of both physical and mental resilience.

The lactate threshold is the point at which lactate production exceeds the body's capacity to clear it, leading to a noticeable increase in blood lactate levels. Tempo runs focus on training just below this threshold, teaching the body to efficiently manage lactate and delay the onset of fatigue during longer efforts.

## Physiological Marvels of Tempo/Lactate Threshold Runs

**Improved Lactate Clearance** Regular tempo runs enhance the body's ability to clear lactate from the bloodstream. This adaptation is crucial for delaying fatigue during sustained efforts, allowing runners to maintain a faster pace for longer durations.

**Increased Aerobic Capacity** Tempo runs push the boundaries of aerobic capacity. By challenging the body to operate at a pace close to the lactate threshold, runners stimulate cardiovascular adaptations, such as an increase in stroke volume and cardiac output, optimising the delivery of oxygen to working muscles.

**Enhanced Running Economy** Efficiency is the name of the game, and tempo runs contribute significantly to improving running economy. Runners become more adept at utilising oxygen, conserving energy, and maintaining an efficient rhythm even at higher intensities.

**Mental Toughness and Focus** Beyond the physiological benefits, tempo/lactate threshold runs are a mental battleground. Sustaining a challenging pace requires focus, discipline, and mental toughness. As a coach, I've witnessed runners emerge from these sessions not just physically stronger but mentally fortified for the demands of competition.

## Coaching Wisdom for Tempo/Lactate Threshold Training

**Gradual Progression** Introduce tempo runs gradually into training schedules. Begin with shorter durations at threshold pace and progressively increase the intensity and duration as you adapt.

**Individualised Pacing** Tempos are not one-size-fits-all. You are encouraged to find your specific threshold pace, where the effort is challenging but sustainable. This personalised approach ensures optimal physiological adaptations for each athlete.

**Strategic Integration** Integrate tempo/lactate threshold runs strategically within your training cycles. Align these sessions with race-specific goals and incorporate them at key points for peak performance when it matters most.

**Recovery Emphasis** Acknowledge the taxing nature of these runs and prioritise recovery. Adequate rest, proper nutrition, and complementary workouts are essential for maximising the benefits of tempo/lactate threshold training.

### Final Thoughts

As a coach, witnessing the metamorphosis of runners through tempo/ lactate threshold training is a testament to the profound impact of a well-crafted plan. These runs aren't just about logging miles though. They are a deliberate orchestration of physiological adaptations and mental fortitude. So, guide yourself through the labyrinth of threshold runs, and watch as you emerge stronger, faster, and ready to conquer the challenges that lie ahead. The journey to excellence is paved with strategic training, and tempo/lactate threshold runs are keystones to unlocking unparalleled performance.