



COACHING FOR PERFORMANCE

A CLEAR EXPLANATION OF LTV (LACTATE THRESHOLD VALUE) AND FTP (FUNCTIONAL THRESHOLD POWER):

LACTATE THRESHOLD (LT OR LTV)

Definition: The exercise intensity at which lactate starts to accumulate rapidly in the blood.

Why it matters:

Below LT → body clears lactate efficiently → sustainable effort.

Above LT → lactate builds up → fatigue sets in quickly.

Measured as:

Heart rate (HR) or power (watts) at LT.

Often called LT2 (second lactate threshold) for endurance sports.

Performance role:

A higher LT means you can sustain harder efforts without blowing up.

Critical for long-distance events.

FUNCTIONAL THRESHOLD POWER (FTP)

Definition: The highest power you can sustain for ~60 minutes without fatiguing.

Why it matters:

FTP is a practical proxy for LT2 because it's easier to measure in the field.

Measured as:

Power in watts (cycling) or pace (running).

Estimated via tests (e.g., 20-min test × 0.95).

Performance role:

Determines training zones and race pacing.

Higher FTP = better endurance at race pace.

Relationship

FTP ≈ LT2 (they're not identical, but very close).

Both indicate how much of your aerobic capacity you can use sustainably.

VO₂ max sets the ceiling; FTP/LT determines how close you can operate to that ceiling for long periods.

Do you want me to create a visual chart comparing VO₂ max, LT, and FTP, or write a LinkedIn post explaining these concepts in simple terms for endurance athletes and coaches?

FEEDBACK

I'm always learning—from my own experience, from others, and through books, blogs, videos, and more. That means there may be errors or omissions in what I share, or I might have misunderstood something. Science and best practices also evolve over time.



I welcome comments, contributions, corrections, and clarifications—especially those that help me improve as an athlete or provide useful insights for anyone reading. The goal is to keep information accurate and helpful so people can make the best decisions for their training and goals.

If you have suggestions, questions, challenges, or corrections, please feel free to reach out. Your input is always appreciated.

ABOUT THE AUTHOR

Tim Rogers is a former Commonwealth Games Triathlete, Ironman and 4 X GB Gold Medallist at Coastal Rowing. He is also a Level 2 Coach. Also MBA Management Consultant | AMPG Change Practitioner | ICF Trained Coach | Mediation Practitioner | First Aid for Mental Health | Certificate in Applied Therapeutic Skills