

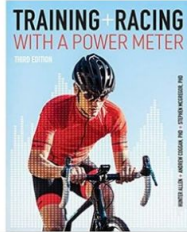
Coach Bergenroth

Training Philosophy, Implementation, and
Physiological Adaptations



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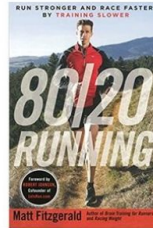
Sources and Further Reading



amazon.com

Training and Racing with a Power Meter: Allen, Hunter, Coggan PhD, Andrew R., McGreggor ...

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80/20 Running: Run Stronger and Race Faster By Training Slower: Fitzgerald, Matt, Johns...

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youtube.com

How "normal people" can train like the worlds best endurance athletes | Stephen Seiler | TEDxArendal

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Perceived Effort For Setting Intensities and “Flat” Days

Key

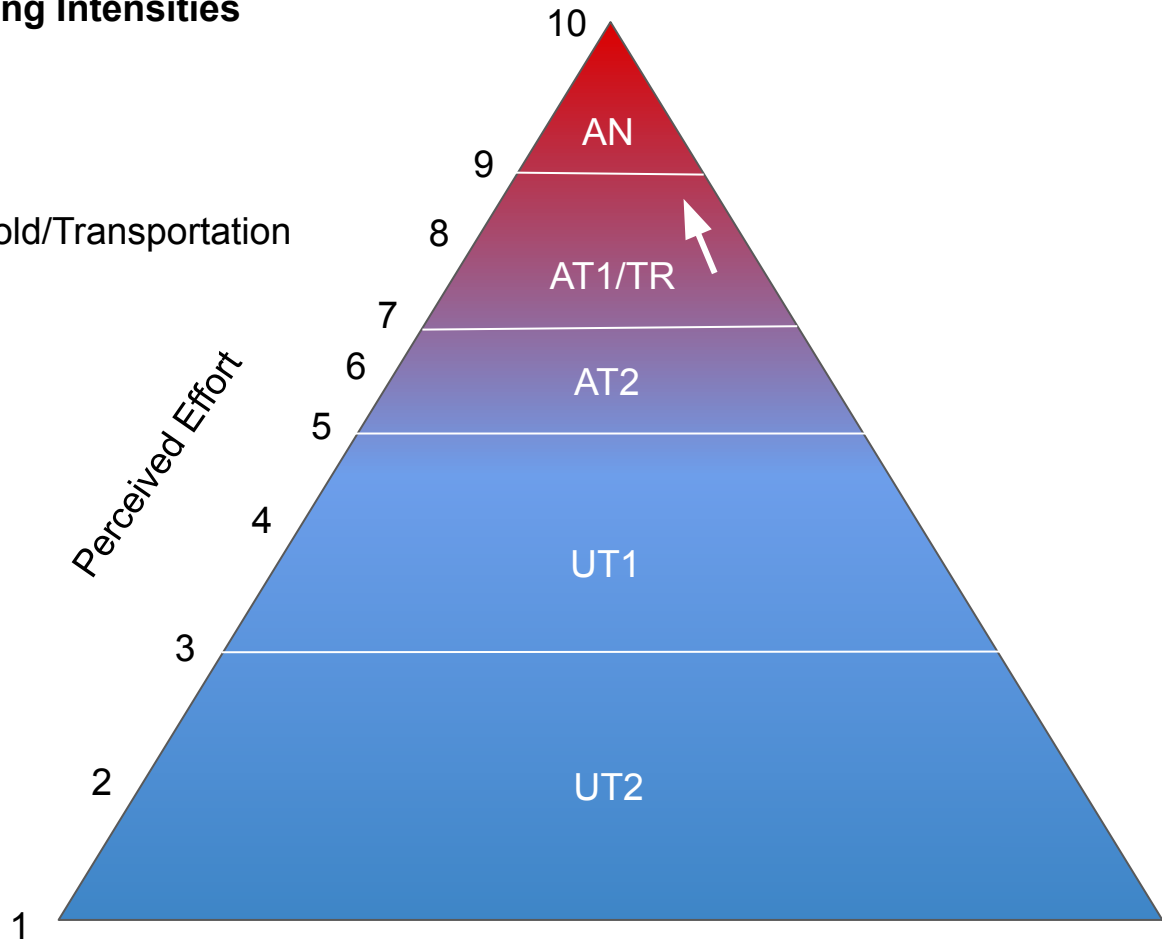
AN: Anaerobic

AT1/TR: Anaerobic Threshold/Transportation

AT2: Anaerobic Threshold

UT1: Utilization One

UT2: Utilization Two



Training Volume Ratios

Key

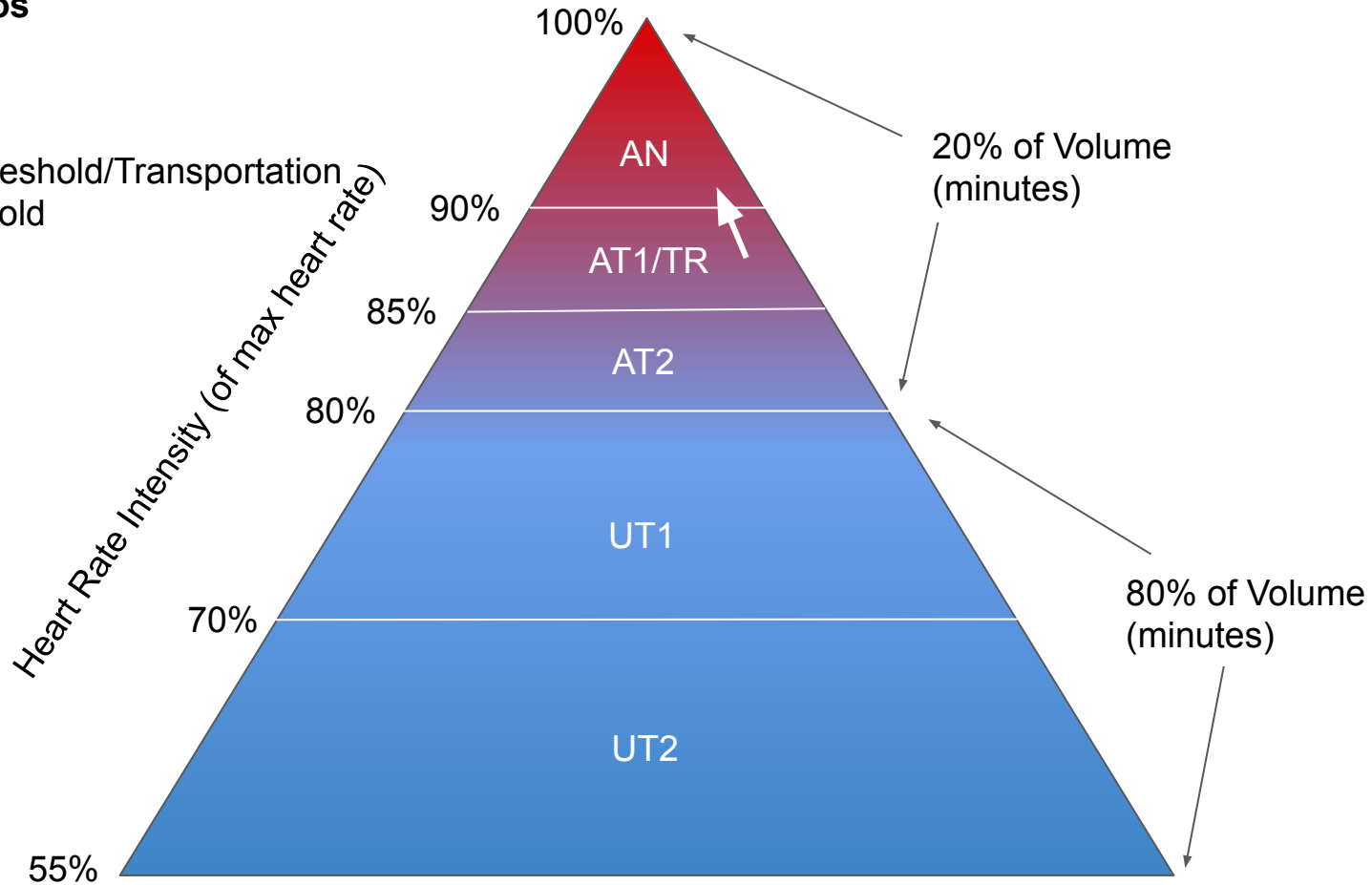
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Setting Training Intensity

Key

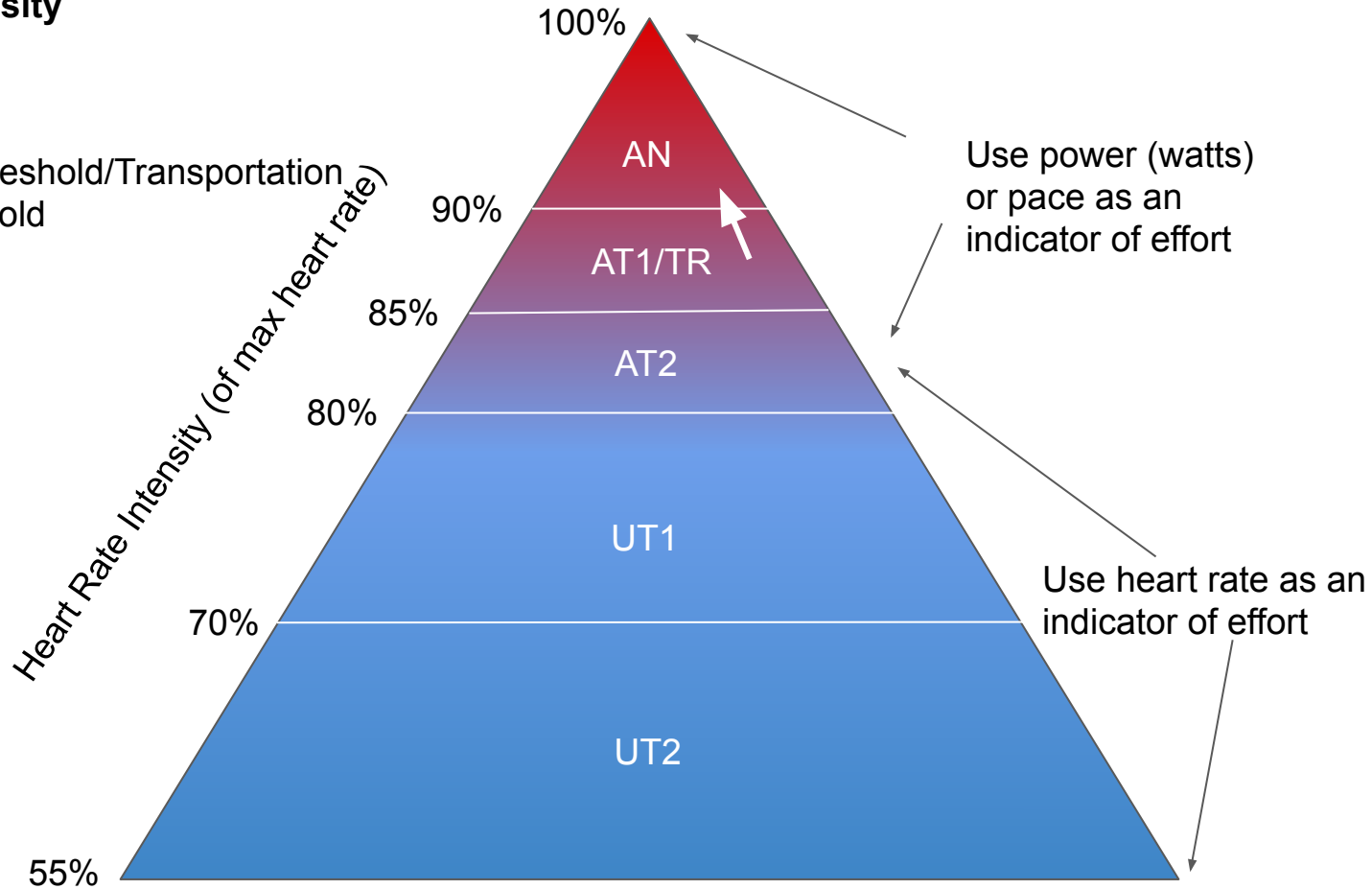
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Utilization 2 (UT2) - 55% to 70% of Max Heart Rate

- Increased muscle glycogen storage.
- Increased lactate threshold.
- Interconversion between fast type muscle fibers (Type IIx to Type IIa).
- Increased mitochondrial enzymes.



Utilization 1 (UT1) - 70% to 80% of Max Heart Rate

- Increased muscle glycogen storage.
- Increased lactate threshold.
- Interconversion between fast type muscle fibers (Type IIx to Type IIa).
- Increased mitochondrial enzymes.



Anaerobic Threshold (AT or AT2) - 80% to 85% of Max Heart Rate

- Increased mitochondrial enzymes.
- Increased lactate threshold.
- Interconversion between fast type muscle fibers (Type IIx to Type IIa).
- Increased muscle glycogen storage.
- Some muscle capillarization.
- Increased VO_2 Max.
- Increased blood plasma.



Transportation or Anaerobic Threshold 1 (TR/AN1) - 85% to 90% of Max Heart Rate

- Increase in VO_2 Max.
- Hypertrophy of slow-twitch muscle fibers.
- Increased cardiac stroke volume.
- Increased muscle capillarization.



Anaerobic (AN) - 90% to 100% of Max Heart Rate

- Hypertrophy of fast-twitch muscle fibers.
- Increased neuromuscular power.
- Increased lactate tolerance (increased anaerobic capacity).

