Zone 2: The Aerobic Foundation

How Easy Training Builds Endurance

Build Your Mitochondria

Zone 2 training stimulates mitochondrial biogenesis, the growth of new mitochondria inside your muscle cells. Mitochondria use oxygen to produce ATP, the molecule your muscles use for energy. More mitochondria mean your muscles can produce more ATP from fat and lactate at the same effort.

The Athlete Benefit:

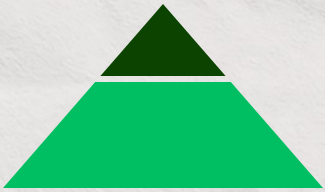
Your muscles rely less on their limited glycogen stores, so glycogen lasts longer. You can hold your pace for hours and are less likely to slow down late in the race.

Build Your Capillary Network

Low-intensity volume drives capillary angiogenesis, the growth of new capillaries around your muscle fibres. A denser capillary network delivers more oxygen to working muscle and clears carbon dioxide and hydrogen ions more effectively.

The Athlete Benefit:

Better oxygen delivery and waste removal help you recover between hard sessions and handle more training week after week.



Zones X, 3, Y, 4 and 5 (about 20% of volume)

Hard Efforts | Stronger Mitochondrial Stimulus

Zones 1 and 2 (about 80% of volume)

Aerobic Base | Fat and Lactate Oxidation

Zone 2 is 81 to 90% of threshold heart rate, 76 to 87% of threshold run pace, 84 to 91% of threshold swim pace, 70 to 83% of FTP on the bike and 76 to 88% of running power.

The Talk Test: If you cannot speak in full sentences, you have moved above Zone 2. Easy sessions should rate 2 to 3 on the RPE scale.

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Ready to Revive

Seiler S. (2010). Int J Sports Physiol Perform, 5(3), 276-291.