Altitude Training

Live High Train High

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What is Altitude

• The higher you go the thinner the air
• Thinner air means less air resistance
• Therefore, sprinters & jumpers perform better at altitude BUT
• Thinner air means less oxygen for the endurance athlete and consequently Slower performances
What this means

• The body adapts to less oxygen
• Increases the red blood cells
• Red blood cells are produced in response to a greater release of the hormone erythropoietin (EPO) by the kidneys
• These red blood cells carry oxygen from your lungs to your muscles
• The more red blood cells you have the more oxygen your blood can carry
When you get back to sea level?

• Extra red blood cells will supercharge your muscles with oxygen and push you along faster. Well that’s the idea!!!

• Increased endurance and speed
• Improved recovery
• Less fatigue
Possible side effects at altitude

• Higher heart rate
• Decreased appetite
• Insomnia
• Dizziness
• Headache
• Nausea
• Fatigue
• Nose bleeds
• Mostly occur at high altitudes of 2200mtrs or above
Precautions

• Iron is one of the building blocks of red blood cells. So you must make sure you have sufficient iron levels when you first come to altitude
• It is also good to be in generally good health and to take vitamin C while at altitude
• Wk 1. shorter and low intensity sessions to adapt
• Wk 2. sessions can be made longer with gradual introduction to intensity
• Wk 3. is closer to sea level type of training for the robust athlete

(the more altitude training you have the more you get better at adapting next time round)
Most common mistakes

- Intensities too high
- Recovery times too short
Recovery

- Very important!!
- Recovery is slower at altitude
- Nutrition, hydration and rest are even more important than usual to enhance the process
Where to go

- Thredbo – 1365m
- Falls Creek – 1600m
- Boulder, Colorado – 1655m
- St Moritz, Switzerland – 1800m
- Flagstaff, Arizona – 2100m
References


