

Live high, train low altitude exposure enhances anaerobic energy capacity.

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Protocol:

- 8-10 hours per night at simulated altitudes of 2,650-3,000 m for 12 nights.
- Training performed close to sea-level
- Control group lived and trained close to Sea-Level

Results: Effect on Anaerobic Capacity.

- Live High -Train Low group...Significant increase
- Sea-level group...No change

Note: no change in VO₂ max would be expected from just 12 days of altitude exposure because the time period at altitude is too short.

Abstract:

Well-trained endurance athletes (13 male triathletes; 11 female road cyclists) served as subjects. A control group (C) and a live-high/train-low group (HiLo) of mixed gender were formed. Ss were measured for VO₂max and maximal accumulated oxygen deficit. The C group lived and trained at 610 m. The HiLo group lived 8-10 hours per night in normobaric hypoxia at simulated altitudes of 2,650-3,000 m for 12 nights.

VO₂max did not change in either group during training alone or training plus exposure. While the C group did not change in the anaerobic measure, the HiLo group did.