Live High, Train Low

Live High-Train Low is an approach that uses long exposures to hypoxia (reduced oxygen in the environment) to cause a very specific response: increase red blood cell volume, with the hope that we increase hemoglobin mass.

Hemoglobin is the protein in red blood cells that binds to and transports oxygen. When red blood cells pass through your lungs, oxygen has the opportunity to bind to hemoglobin. From the lungs, this oxygenated blood makes its way to the areas where it's most needed. During exercise, that would be to your muscles, and more specifically your mitochondria. Aerobic metabolism (which is of the highest importance for endurance athletes, and what the mitochondria is responsible for) requires oxygen, so increasing the amount of oxygen available is a straightforward way to improve your aerobic capacity

Enter Live High-Train Low.

When an environment has less oxygen available, your body responds to this by increasing the production of red blood cells. Your kidneys release "EPO" (erythropoietin) to achieve this goal. Indeed, injecting EPO into your body is considered an illegal performance enhancer, similar to the way steroids act on your muscles but for your blood. But unlike steroids that require external introduction to improve blood concentrations, EPO will be released by your own body in the presence of hypoxia. EPO is without a doubt an ergogenic aid, or performance enhancer; hypoxic exposure is the only legal method in sport for what is essentially blood doping. It goes without saying that this is a substantial competitive advantage to have access to these training tools.

Altitude Athletic offers sleeping canopies and generators for this exact purpose. With protocols embedded in any rental, improved performance is not only at your doorstep, but right at home.

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