

Racing at Altitude

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When it comes to altitude training, it is likely that you have heard the expression “live high, train low”. As you ascend to the top of a mountain, you will likely notice a change in air pressure and perhaps rapid breathing. At altitude, the amount of oxygen in the air is reduced. In order to provide the body with adequate oxygen-rich air, the kidneys may compensate by secreting a hormone called EPO (erythropoietin) which allows the body to create more red blood cells. The more red blood cells, the easier it is to supply oxygen-rich blood to the body, especially during exercise.

Although living (and training) at 6,000 or 7,000 feet for at least 3-4 weeks will have an affect on boosting your red blood cell production, there are many downfalls to high intensity training/racing at a high altitude. However, do not be scared if you are traveling to a race that is at higher altitude than where you live and train. Pay attention to the following to ensure a safe and exciting racing experience:

- 1) If possible, arrive to the race venue a few days before race day. As you focus on those last few “taper” workouts before the big day, pay attention to your effort at varying intensities. A heart rate monitor is a great tool for adjusting intensity according to a rise (or fall) in heart rate.
- 2) Be smart when you race. If you find yourself breathing heavier than normal, just slow down to conserve energy. Likely, the change in altitude will require more work at a given effort so don't feel frustrated if you find yourself performing slower on race day. Because racing is all about pacing yourself from start to finish, recognize that you may need to adjust your normal “race pace” efforts when racing at altitude.
- 3) Pay attention to your liquid calories. Because of the dry and thin air, dehydration is a likely side effect of racing at altitude. While it is advised not to overhydrate on fluids, it is recommended to drink adequate water on the days leading up to the race and to properly fuel with an electrolyte-rich, maltodextrin-based sport drink during the race.