

# Pre-Acclimatise



Thousands of people each year ascend to altitude, whether it be for a mountaineering expedition or just a leisurely ski vacation. Individuals spend a great deal of time and money on such trips.

Mountaineers must spend weeks at base camp acclimatizing to the harsh hypobaric and hypoxic conditions they will face in their trek to the summit. Even with this investment of time, and regardless of one's physical condition, the risk of Acute Mountain Sickness (AMS) or other factors preventing a successful ascent or ruining a vacation is always present.

A person's reaction to high altitude is heavily dependent on genetics. Certain people are predisposed to acquiring AMS more severely than others. However, studies show that 80% of people ascending to altitudes of 13000ft/4000m or higher will suffer the debilitating symptoms of AMS (headache, nausea, insomnia) to some extent. This risk cannot be completely eliminated, but it can be predicted, controlled and significantly reduced in a cost effective and timely manner.

By exercising in hypoxia before leaving for an expedition, mountaineers can pre-acclimatise and prepare themselves for exposure to extreme altitudes. Similarly, tourists and vacationers that live at sea level can insure an enjoyable vacation by pre-acclimatizing. Through the physiological adaptations users can expect the following benefits as a result of such a pre-acclimatisation program.

## PHYSIOLOGICAL BENEFITS:

- Reduced symptoms of Acute Mountain Sickness
- Improved power and endurance
- Diminished fatigue
- Decreased recovery time after aerobic and anaerobic efforts

## ADDITIONAL BENEFITS:

- Money saved by minimising time spent acclimatizing on site
- Increased probability of a successful summit attempt

