



How to Have a Safe and Enjoyable Trip to the Summit

Protect Your Heart

If you have a heart condition, do not ascend the mountain without checking with your physician. Your heart's arterial vessels dilate with prolonged exposure to the high altitude. This increases the flow of blood to the cardiac muscle, so you should carefully monitor your physical activity and pulse rate, and remember to pace yourself. Even light exertion at a high altitude may increase your pulse rate to more than 100. This will put more demand on your heart. Altitude medicine can help this problem, but if you have cardiac artery disease, too much exertion could lead to a cardiac incident.

Effect on Respiration

Your respiratory rate will also increase. This may cause hyperventilation, which results in light-headedness and a general body-tingling sensation.

Protect Yourself from Ultraviolet Radiation

At high altitudes, there is less of an atmosphere to filter out the harmful ultraviolet rays that cause sunburn. You may receive first-degree and even second-degree burns after only 15 minutes of unprotected exposure. Given time – five minutes per day for about one week – your skin can make enough ultraviolet-absorbing pigment to protect itself. As a precaution, wear

sunscreen during the daytime, and watch out for white patches on your nose and ears. Practice the buddy system – watch out for others. To protect your eyes from ultraviolet rays, wear dark glasses during the daytime.

Other Effects on Your Eyes

You may experience eye pain, decreased tolerance to light, and decreased night vision.

Don't Smoke

If you smoke, abstain from smoking for at least 48 hours before your ascent to allow the amount of carbon monoxide in your blood to decrease. The blood supply to your lungs will then increase, as will your breathing capacity, unless your lungs have been damaged by tobacco.

Drink Plenty of Water

Drink plenty of water prior to your ascent both to provide your kidneys with enough fluid to work properly and to avoid dehydration from pulmonary water losses. Your kidneys will dump their excess water and sodium to concentrate your blood, hastening your adaptation to low oxygen levels.

Avoid Gas-Producing Foods

Foods such as beans, onions, and cabbage may cause intestinal gas to expand, resulting

in flatulence, bowel distention, and even pain at high altitudes.

Headaches and Impaired Mental Abilities

At high altitudes, your blood vessels dilate to increase the flow of oxygen-carrying blood to the brain. This may cause a pounding headache. Medication prescribed by a physician may partially compensate for this, but you should still be alert for other effects of decreased oxygen: impaired decision making, memory, and mathematical ability.

Do Not Scuba Dive before Ascent

Breathing at sea-level pressures allows nitrogen gas in your bloodstream to dissipate readily by exhalation; this process is greatly reduced at high altitudes, so you should not scuba dive for 24 hours prior to ascending the mountain. If you scuba dive below 50 feet within 12 hours of ascent, you risk formation of nitrogen bubbles in your joints and brain, a dangerous condition known as “the bends.” You should not ascend the mountain for at least 48 hours after you have dived below 100 feet.