

SUMMIT

Naturopathic News

ALTITUDE SICKNESS

Welcome to the high country! You came here to enjoy yourself, relax and get away, not contend with a pounding headache, shortness of breath, restless nights, or nausea. High altitude is defined as altitude over 5,000ft, and most of the mountain towns in Summit County range from 8,000 to 10,000ft. Most people are affected at elevations greater than 8,000 ft., with nearly 100% feeling some shortness of breath, and decrease in exercise tolerance. The oxygen at this elevation is 40% less dense than at sea level, and has 50-80% less humidity.

ALTITUDE SICKNESS

Acute mountain sickness (AMS) is the most common form of altitude sickness, and will affect 20-30% of visitors from low elevations. Symptoms of AMS include *headache, along with one or more of the following: loss of appetite, nausea or vomiting; fatigue or weakness; dizziness or light-headedness; difficulty sleeping; confusion; staggering gait.* Most people will have their symptoms clear spontaneously within 2-3 days, but before that much of a mountain vacation is wasted feeling miserable, they should know that we have effective, natural remedies available at the Mountain-River Naturopathic Clinic.

If the symptoms of acute mountain sickness persist for more than 2-3 days, the person may need to return to lower elevations. Life-threatening forms of high elevation related illness are less common, but include H.A.C.E. (High Altitude Cerebral Edema) and H.A.P.E. (High Altitude Pulmonary Edema). HACE occurs when the brain swells and stops functioning properly. Symptoms include loss of coordination and severe confusion, and it can be fatal within hours. HAPE occurs when fluid builds in the lungs, with symptoms leading up to it being extreme fatigue, and other respiratory symptoms such as a dry, incessant cough and chest tightness. A much less serious complication of altitude is H.A.F.E. (High Altitude Flatulence Expulsion), which is due to expansion of air that is trapped in the digestive tract.

NATURAL REMEDIES FOR AMS

For treating the symptoms of acute mountain sickness, the Mountain-River Naturopathic Clinic carries a special formulation of herbs and nutrients from an ND from the Gunnison area. It comes as a sweet lemon/lime powder that is mixed into filtered water called "Acli-Mate", and we have found it to be highly effective at helping people who are suffering from AMS to get better quickly. The blend includes herbs *Ginkgo biloba* and *Rhodiola*, both of which have proven effective in preventing and treating altitude related sickness in small independent studies (1,2,3), and in hundreds of years of use. Both herbs seem to improve circulation, especially through cerebral vessels, and cellular energy function through improved uptake and utilization of oxygen (especially in the brain and nervous system), reducing toxic brain edema (4, 5). Ginkgo has also been shown to inhibit platelet clumping and stickiness, keeping red blood cells evenly dispersed, which improves delivery of oxygen to tissues (6), while rhodiola appears to help the body deal with stress.

Nutrients in "Acli-Mate" include vitamin C, and many of the B-vitamins: thiamin (B-1), riboflavin (B-2), niacin (B-3), pantothen (B-5) and cobolamin (B-12). The B-vitamins are usually found in combination in foods, and have similar coenzyme functions: working as catalysts for many biochemical reactions, including the utilization

of oxygen and carbohydrate for energy production by the mitochondria of the cells, and the normal functioning of the nervous system. Vitamin C acts as a major antioxidant, protecting nutrients like the B-vitamins, and helping the body deal with stress.

Prescription Alternatives, Summit County's compounding and natural pharmacy, carries DMG (dimethylglycine), a supplement that improves oxygen utilization and cellular respiration, decreases lactic acid buildup, and enhances carbohydrate and lipid metabolism. Many visitors have found DMG to be helpful in alleviating headaches and other symptoms of AMS, and several decades of use by doctors and clinicians without adverse or negative side effects, have shown it to be a safe supplement.

For nausea and vomiting, ginger root has been used traditionally and clinically for centuries, with great effectiveness. Natural markets in summit country (Natural Grocers/Vitamin Cottage – Dillon; Alpine Market – Frisco; Amazing Grace – Breckenridge) carry candied and dried ginger that can be eaten as snacks, as well as ginger tea, which can have the added effects of warming the body and improving circulation while hydrating the system. The Mountain-River Naturopathic Clinic also carries several herbal combinations for sleeplessness, which don't have the side effects of most pharmaceutical sleep aids.

DRYNESS: CHAPPED LIPS AND NOSEBLEEDS

There is 50-80% less humidity in the air here (over 8,000ft) than at sea level. Moisturize your lips (and smear some in your nostrils) with lip balms or salves that contain vitamin E, sunscreen, and the herb calendula.

SUN PROTECTION

Even when it is cloudy, the risk of sunburn is extreme at this elevation. Avoid sunburn and injury to your eyes by wearing applying sunscreen, SPF 15-30, before going outdoors, and every 2 hours during activity out there.

Don't **C.R.A.S.H.**, by making sure you do the following:

- Carbohydrate consumption increased.
- Reduce alcohol and caffeine.
- Activity in moderation.
- Salt intake decreased.
- Have more WATER (2 liters each day. Add another glass for every drink with caffeine or alcohol).

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