



MEDIUM ALTITUDE (1,000 – 2,500 METRES)

Background:

In contrast to UV radiation, which increases with altitude and is associated with vitamin D synthesis, fine dust pollution reduces as the altitude increases. Furthermore, shorter flowering phases and more extreme weather conditions lead to a change in vegetation at higher altitudes, which in turn significantly reduces allergen concentrations compared to lower-lying natural habitats.

The “thinner” air or lower air viscosity facilitates breathing, while stays at medium altitudes induce relaxation and lower stress levels.

A one-week stay at 1,700 metres above sea level leads to significant improvements in sugar metabolism and cardiovascular parameters such as pulse and blood pressure.

Climate therapy at medium to high altitudes is also well-known as a successful alternative medical treatment for respiratory and allergic illnesses such as bronchial asthma, atopic dermatitis, psoriasis and eczema.

Studies of medical evidence:

- Resource: mountain hiking for one week. Indication: prevention of cardiovascular diseases (Theiss et al., 2008): evidence level III
- Indication: allergic bronchial asthma (Massimo et al., 2014): evidence level IIa
- Resource: mountain hiking for one week. Indication: cardiopulmonary and metabolic effects of physical activity for older people (Burtscher et al., 2001): evidence level Ib
- Resource: mountain hiking. Indication: metabolic syndrome (Neumayr et al., 2014): evidence level Ib
- Indication: airway inflammation, allergy and asthma (Rijssenbeek-nouwens & Bel, 2011): evidence level Ib
- Indication: “allergy and inflammation” (Engst & Vocks, 2000): evidence level Ib

Conclusion:

There is considerable scientific evidence that describes the benefits and positive health effects of medium-altitude stays. The limiting factor, however, is the fact that very few studies solely address a stay at medium altitude. In most studies, a stay at medium altitude is combined with an additional intervention such as physical activity. In addition, the participants involved in the studies are mostly not in good health but rather have a specific indication, making it difficult to draw general conclusions about particular health benefits.

Health tourism potential:

Development of packages for one to two-week stays in close cooperation with hosts and mountain guides with:

- Mountain hikes
- Plenty of exercise in the fresh air
- Wellness-offers

