

Find your best condition at mountain altitude! The stimulating alpine climate gives you new strength!

Dear guest!

You have booked your stay in a "Wanderhotel" (hiking hotel) and will be spending your holiday in the Alps in the next days. Hereafter we would like to inform you about the peculiar advantages offered by the alpine altitude from a medical-scientific point of view and give you some tips for a perfect and regenerating holiday in the mountains.

Our body is adapted to the conditions in which we live. With every change of climate, no matter if from the mainland to the sea or to the mountains, we experience some changes. Perhaps you experienced yourself how you felt tired at first in your new holiday destination and how you needed more sleep. Afterwards, however, you felt more rested and balanced.

If we go to a higher altitude of up to 2,500 metres - the "medium altitude" - the body must also change its organic function. At this altitude, the so-called stimulating climate prevails. The air becomes "thinner" and the oxygen content is correspondingly reduced.

The human body reacts to this slight lack of oxygen with vegetative and hormonal changes in two phases:

The 1st phase is the adaptation phase, when the body needs to use more energy. You can notice and measure it, for example, while breathing activity and heartbeat increase. In this phase, our performances are somehow limited.

The adaptation phase is followed by phase 2: the <u>acclimatisation phase</u>. The stimulated cardiovascular system, breathing activity and metabolism calm down. The body works more efficiently and no longer uses up reserves, it works more economically.

A decisive adaptation effect is the stimulation of <u>blood renewal</u>. The hormone erythropoietin (EPO) regulates the formation of new red blood cells. At medium altitude, the increased formation of these red blood cells is stimulated. Old blood cells are eliminated. New, young red blood cells take the place of the old ones. The new cells are better in delivering oxygen to the tissues. You feel better and more refreshed. You can experience these effects in the mountains only.

(Source: ihs Institut Humpeler & Schobersberger)