
Conclusion

Hypobaric hypoxia has an influential role in inducing several physiological consequences that were well documented previously. Presently, it was documented that hypoxia directly or indirectly hampered the haematological and physiological parameters along with increase the uremic toxic. Lowered of antimicrobial defence and an increase in toxins induce nephrotoxicity. The physiological consequences are mostly found above moderate level (12000 ft.) and extreme at high altitude (18000 ft.). Overall changes in physiological parameters have an influential role in changes of gut microbial ecology and its functional activities. The damaged of epithelial barrier and the weakening of physiochemical barrier facilitate the infiltration of luminal endotoxin into systemic and accelerate the AMS. The degree of association and cross talk of indigenous microflora with the host resulted in pathogenesis of GI mucosa. Ingestion of probiotics along with hypoxic stress reduce the stress by inducing antioxidant defence, nephrotoxicity and established the beneficial functions of the gut microbial community.

Hence, probiotics therapy in HA during acclimatization may approach to reduce the physiological burden. Probiotics are designed to provide added functionalities and able to compensate gut microbiota, which results in making an impact directly or indirectly through “cross-talk” between gut microbiota of the host.