

COMPARATIVE ANALYSIS OF THE USE OF MODERATE-ALTITUDE TRAINING BY TOP RUSSIAN AND CHINESE ATHLETES

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Abstract

Introduction. The aim of our work was to study the effect of natural hypoxia applied by elite athletes in the course of common training. Data analysed in this paper were collected during joint Russian-Chinese research on the training of elite athletes, who were members of the Russian national team (8 male biathletes, B-team) and 2016 Chinese Olympic team (12 female rowers, R-team). **Material and methods.** The study was held in the preparatory period, which lasted 4-5 months. The preparatory period in each team was divided into two stages. In the R-team, in the first stage, a training camp was organised at sea level (SL) (200 m, 57 days), and in the second stage, an altitude camp (AC) was held at 2,280 m (40 days). In the B-team, in the first stage, two training camps were held: the first one at 1,100 m (AC, June-July, 19 days) and the second one, a sea level camp (SLC), at 140 m (July-August, 31 days). Thus, the second control test was preceded by 31-day-long training at SL. In the second stage (September-October), three training camps were held: the first one at 1,100 m (AC, 19 days), the second one at 150 m (SLC, 13 days), and the third one at 1,100-2,800 m (AC, 11 days). Both teams underwent three control tests: prior to the first training stage, at the end of the first training stage, and 6-8 days after the end of the second training stage. All control tests were performed at SL. **Results.** Monitoring of elite athletes' training in the preparatory period showed positive changes in physical preparedness in both groups. However, we found that those positive changes might not be related to an additional effect of natural hypoxia. **Conclusion.** Our study has shown that rational and well-balanced planning according to training goals is the key factor in improving general and specific athletic preparedness.

Key words: hypoxic training, elite athletes, endurance sports