Regular moist snuff dipping does not affect endurance exercise performance.

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Results & Discussion

Resting heart rate (HR) was significantly lower in SCG after SC. Body mass in SCG increased by 1.4 ± 1.7 kg and blood pressure (BP) were reduced, but without significant differences between groups. Total cholesterol increased from 4.12 ± 0.54 (95% CI 3.89–4.35) to 4.46 ± 0.70 (95% CI 4.16–4.75) mM/L in SCG, due to increased LDL, and this change was significantly different from CO. Resting values of HDL, C-reactive protein, and free fatty acids (FFA) remained unchanged in both groups.

During an incremental (from 50 to 80% of VO₂max) and a prolonged (60 min at 50% of VO₂max) cycling test HR and BP were reduced in SCG, while oxygen uptake (VO₂), respiratory exchange ratio, blood lactate (bLa) and blood glucose concentration, and rate of perceived exertion were unchanged. All measurements were unchanged in CO.

Conclusions

In conclusion, endurance exercise performance (VO₂max and maximal endurance time) does not seem to be affected by prolonged snuff use, while effects on cardiovascular risk factors are contradictory.