Abstract

Introduction: The use of nutritional supplements is prevalent among physical exercise practitioners and some adverse effects have been reported, however not sufficiently substantial, because they originate from isolated cases. Objectives: Investigate nutritional supplements consumption prevalence and adverse effects of the use of such products. Methods: An epidemiological, representative and transversal study, with 180 physical exercise practitioners in gyms, who answered questionnaires about sports supplementation, associated factors and self-perceived adverse effects. In a subsample of 86 individuals, blood pressure was measured and blood was collected for the evaluation of lipid profile markers, hepatic and renal function. Results: The supplementation prevalence level was 58.3%, whereas the physicians and nutritionists indicated only 21.9%. The reported adverse effects were observed only by supplement users (acne, insomnia, aggressiveness, headaches and tachycardia). Systolic blood pressure was higher in the supplemented group when compared to the control group (p = 0.04), as in the subgroup of thermogenic users (p < 0.0001) and among those who had consumed any type of supplementation for over 2 years (p = 0.005). Serum creatinine levels were higher only in the subgroup of carbohydrates when compared to the control group (p = 0.03). Diastolic blood pressure, lipid profile and hepatic function did not present differences between groups. Conclusions: The use of nutritional supplements without specialized orientation was elevated among physical exercise practitioners, being associated to adverse effects both by the users themselves and by clinical diagnosis.

Keywords

Dietary supplements, Adverse effects, Exercise.