## The effect of Coenzyme $Q_{10}$ administration on effort capacity of athletes (Note I)

## Rareş D. Ciocoi-Pop<sup>1</sup>, Simona Tache<sup>2</sup>, Cosmina Bondor<sup>2</sup>

<sup>1</sup>Faculty of Physical Education and Sport, "Babeş-Bolyai" University Cluj-Napoca <sup>2</sup>"Iuliu Hațieganu" University of Medicine and Pharmacy, Cluj-Napoca

## **Abstract**

Background.  $CoQ_{10}$  is a vitamin-like compound with a role in the mithochondrial transport chain and also is an antioxidant.

*Aims.* We followed the influence of  $CoQ_{10}$  supplement on the aerobic and anaerobic exercise capacity in athletes.

*Methods*. The research compared two groups of soccer players (n=10) 19 to 20 years old. Group I was the control group and athletes from group II were supplemented with 30 mg of  $CoQ_{10}$  daily. The indicators for the research were the aerobic capacity and anaerobic exercise capacities.

Results. The maximum  $O_2$  intake increased in both groups;  $CoQ_{10}$  supplement has no significant effects over the maximal consumption of  $O_2$ . The maximum aerobic power increased in both groups, and was significantly higher after supplementation. The maximum anaerobic power increased in both groups but the supplementation did not have significant effects.

 $\it Conclusions.$   $\it CoQ_{10}$  supplementation increases maximum aerobic power in young trained soccer players.

**Key words:** CoQ<sub>10</sub> supplementation, exercise capacity, athletes.