

# コエンザイム Q10 摂取が 合宿期における大学剣道選手の溶血に及ぼす影響

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## Abstract

The purpose of this study was to determine serum haptoglobin concentration and hematocyte components, and to examine the effect of coenzyme Q10 (CoQ10) supplementation on hemolysis of collegiate kendo athletes during training camp.

The subjects were eighteen healthy males belonging to a college Kendo club. They were divided into two groups: CoQ10 ingestion group (CoQ10 group, n=10) and placebo ingestion group (placebo group, n=8). All Subjects took 300 mg of CoQ10 per day or placebo from 14 days before the training camp to end of training camp for a total of 20 days. All subjects practiced Kendo 5.5 hours a day for 6 days at a training camp. Blood samples were taken two weeks before, first day, third day, fifth day, and 1 week after the training camp.

In CoQ10 and placebo groups, serum haptoglobin, hemoglobin concentration, and hematocrit value were significantly lower during the training camp than before. Erythrocyte count was lower during the training camp than before in both groups. However, there is no difference between CoQ10 group and placebo group.

Therefore, it is thought that the CoQ10 ingestion was not able to reduce the hemolysis caused by practicing the kendo at a training camp.

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