Effects of vitamins A, E and C supplementations on oxidant/antioxidant balance in exercise

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The authors studied the effects of the vitamin A, E and C supplementations on the aerobic exercise capacity and on the oxidants (LPX) and antioxidants (hydrogen donor capacity: DH^+) during exercise in rats. The animals were trained daily for exercise by swimming. Vitamin supplementations caused higher increases of the aerobic exercise capacity, as compared with the control groups, and they also caused changes in serum LPX levels and DH^+ levels. The vitamin E and A supplementations had favourable effects on the oxidant/ antioxidant balance: decreases of LPX levels and increases of DH^+ levels. The action of vitamin C was similar to that of a pro-oxidant.

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