

Selenium and exercise

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Abstract

Selenium is a trace element essential to human health. Selenium's major function is to protect the cell from the oxidative stress, because selenium is a constituent of antioxidative enzymes (SeGSH-Pxs), playing a role in the SH-groups metabolism, acting independently or together with vitamin E and having a role in the metabolism of vitamin B12 and Cu²⁺.

The requirement of selenium for life and its beneficial role for human health have been known for several decades. A deficiency of selenium causes dysfunctions in the skeletal muscle. Exercise induces the reactive oxygen species formation in muscle and consequently oxidative stress. This paper focuses mostly on the influence of selenium supplementation in physical exercise and oxidative stress.

Key words: selenium, exercise, supplementation, oxidative stress.