

ERGOGENIC EFFECT OF CAFFEINE IN RESISTANCE EXERCISES

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Caffeine (1,3,7-trimethylxanthene) is a derivative of xanther, chemically related to other xanines, which are differentiated by the potency of its pharmacological actions, and has been used prior to physical exercises, considered a nutritional ergogenic because it is present in various products consumed daily, such as guarana, mate, chocolate, coffee, some soft drinks and teas, although it does not present any nutritional value. The intention of this study was to conduct a literary review on the effects of caffeine supplementation as an ergogenic resource in resistances exercise. It refers to a review between selected articles from Pubmed and Scielo, aiming to seek the mechanisms of action of caffeine in performance in athletes. Articles published between 2010 and 2022 were used, being in Portuguese and English. The following expressions were used for the search: caffeine; physical activity; ergogenic resource. Administration of caffeine may be oral, intramuscular, intraperitoneal, subcutaneous injections and the rectal route. Oral is the most common form, and can be for food, tea and energy drinks. Its effect is proven in a dose of 3 to 6mg/kg and its absorption happens quickly by the gastrointestinal tract, being metabolized in the liver. Caffeine is a substance widely consumed in the world, being proven that it has an ergogenic effect in physical exercises, acting as a great potentiator. However, its exaggeration can lead to serious problems such as: anxiety, agitation, tremors, irritability, headaches, insomnia, sensory disorders, cardiovascular and gastrointestinal problems. Finally, the controlled and controlled use of caffeine provides good effects to those who use it. It is worth observing the dosage used, activity in question, the nutritional status of the person, influencing the result presented. Although all mechanisms are not yet fully clarified, the guidance of a professional is of great importance, as a nutritionist.

Keywords: caffeine; physical activity; ergogenic resource.

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