ABSTRACT

Title: Optimal conditions of caffeine use and its effect on sports performance

Objectives: Based on current scientific knowledge, summarize the effect of caffeine on

various aspects of sports performance, and also to determine the optimal conditions for the

use of this substance to maximize the ergogenic effect.

Methods: Systematic literary research

Results: The ideal dose of caffeine to improve athletic performance is in the range of 3–6

mg/kg, and most preferably in the form of tablets 60 minutes before exercise. This substance

has been shown to improve aerobic endurance performance, sprint speed and cognitive

function such as accuracy and attention in athletes. Caffeine in trained individuals may also

improve anaerobic endurance, maximum and endurance strength, simple reaction time and

other cognitive functions, but further studies are needed.

Keywords: sport, supplementation, aspects of performance, conditions of use, stimulation,

alkaloids