An overview of probiotics on the ergogenic effect

Yali Xia
Shanghai University of Sport

Objective The paper provides an overview of probiotics on the ergogenic effect, which is prepared to demonstrate that moderate doses of probiotics have many benefits for the physical exercise, the development of related probiotic functional food is of great benefit to the majority of sports people.

Methods while probiotics as one of the most popular nutritional supplements, Many studies have shown that probiotics mixture (mainly lactic acid bacteria and bifidobacterium) are supplemented can improve intestinal microflora, reduce intestinal permeability, control endotoxin transport and reduce the incidence of intestinal leakage; Promoteing the metabolism of short-chain fatty acids (SCAFs), provide metabolic energy, enhance muscle strength and endurance, optimize muscle fiber composition, improve anti-fatigue ability; Improving the ability of immune regulation, such as reducing upper respiratory tract and gastrointestinal tract infection symptoms; Reducing the oxidative stress level, increasing the scavenging rate of superoxide anion radical, reducing capacity and iron ion chelating activity can alleviate the oxidative stress after heavy exercise; Supplementation of probiotics can reconstruct intestinal flora, and intestinal flora can affect bone health and enhance calcium absorption; Ther studies have confirmed that probiotics can regulate emotional disorders through the hypothalamus-pituitary-adrenal axis and relieve anxiety and depression, which also contributes to the mental health of the exercise population.

Results In addition, the amount of exercise, the variety of probiotics, the quantity of supplementation and the time of supply in the reference literature are different. Therefore, the experimental results are different, and the mechanism remains to be further studied.

Conclusions Moderate doses of probiotics have many benefits for the physical exercise, the development of related probiotic functional food is of great benefit to the majority of sports people.