

عنوان مقاله:

Effect of Chromium Supplementation on Body Weight and Body Fat: A Systematic Review of Randomized, Placebo-controlled Trials

محل انتشار:

نشریه بین المللی علوم تغذیه، دوره 7، شماره 3 (سال: 1401)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Mohammad Heidari Seyedmahalle - *Nutrition Research Center, School of Nutrition and Food Sciences, Shiraz University of Medical Sciences, Shiraz, Iran*

Fatemeh Haghpanah Jahromi - *Nutrition Research Center, School of Nutrition and Food Sciences, Shiraz University of Medical Sciences, Shiraz, Iran*

Marzieh Akbarzadeh - *Nutrition Research Center, School of Nutrition and Food Sciences, Shiraz University of Medical Sciences, Shiraz, Iran*

Zahra Sohrabi - *Nutrition Research Center, School of Nutrition and Food Sciences, Shiraz University of Medical Sciences, Shiraz, Iran*

خلاصه مقاله:

Background: Obesity is a public health and various methods are used to manage this health issue. The aim of this review was to investigate the possible effects of Chromium supplementation on body composition and body weight. Methods: Databases such as PubMed, EMBASE, The Cochrane Library, Scopus, and Web of Science were searched for human studies in English using keywords of body weight, body mass index (BMI), fat mass, adipose tissue, total body fat, obesity, overweight, ideal body weight, weight loss, weight reduction, and chromium supplementation. Results: Totally, ۳۴۵ articles were enrolled. The effect of ۴۰۰ mcg/day intervention was more pronounced when compared to ۲۰۰ mcg/day. Later, in ۱۹۹۸, the role of physical activity was illustrated and as a result, a significant change in body composition was seen. Volpe et al. found a slight relationship between ۴۰۰ mcg/day of chromium supplementation and decrease in body fat mass (mean=۱.۷۸%/max=۷.۵۴%). Liu et al. reported no significant changes in BMI, fat mass, and fat-free mass. Moreover, Yazaki et al. investigated the effect of ۱۰۰۰ mcg supplementation. Still, no change was seen in BMI neither in the first ۱۲ weeks nor whole ۲۴ weeks of the study. It might have slightly positive effects on decreasing body fat and increasing lean body mass. Conclusion: The undertaken studies mostly showed better and stronger results for the effect of chromium supplementation on body weight or fat mass when physical activity was included or higher doses were consumed.

کلمات کلیدی:

Chromium, Adipose tissue, Body weight, Body fat, Obesity

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1551787>



