

عنوان مقاله:

Effect of crocin, a carotenoid from saffron, on plasma cholesteryl ester transfer protein and lipid profile in subjects with metabolic syndrome: A double blind randomized clinical trial

محل انتشار:

مجله آریا آترواسکلروز, دوره 13, شماره 5 (سال: 1396)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Ali Javandoost - *Metabolic Syndrome Research Center AND School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Asma Afshari - *Assistant Professor, Department of Nutrition, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Irاندokht Nikbakht-Jam - *Metabolic Syndrome Research Center AND School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Mohammad Khademi - *PhD Candidate, Student Research Committee, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran*

Saied Eslami - *Professor, Pharmaceutical Research Center AND School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran*

Mina Nosrati - *Biochemistry and Nutrition Research Center AND School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Mojtaba Foroutan-Tanha - *Metabolic Syndrome Research Center AND Cardiovascular Research Center AND School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Amirhossein Sahebkar - *Associate Professor, Department of Sciences and Technologies, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Shima Tavalaei - *Biochemistry and Nutrition Research Center AND School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Majid Ghayour-Mobarhan - *Professor, Cardiovascular Research Center AND Metabolic Syndrome Research Center AND School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Gordon Ferns - *School of Brighton and Sussex Medical, Division of Medical Education, Mayfield House, University of Brighton, Brighton, UK*

Farzin Hadizadeh - *Professor, Biotechnology Research Center AND School of Pharmacy, Mashhad University of*

Abolghasem Tabassi - *Pharmacological Research Center of Medicinal Plants AND School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

Ahmad Mohajeri - *Associate Professor, Pharmacological Research Center of Medicinal Plants, School of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran*

خلاصه مقاله:

BACKGROUND: Metabolic syndrome is defined by insulin resistance and a clustering of other cardiovascular risk factors. Crocin is a carotenoid derived from the stigmas of the saffron flower and had previously been shown to affect lipid profile. However, the mechanism for this function is not well understood. The present trial aimed to investigate the possible effect of crocin on plasma levels of cholesteryl ester transfer protein and lipid profile in individuals with metabolic syndrome. **METHODS:** This was a randomized, double-blind, placebo-controlled, clinical trial consisting of an 8-week treatment with crocin, or placebo tablets between April and June ۲۰۱۴, in the Nutrition Clinic of Ghaem Teaching Hospital, Mashhad, Iran. Participants were randomly assigned to take a ۳۰ mg/day crocin ($n = ۲۲$) in the intervention group or placebo ($n = ۲۲$) in the control group. Anthropometric, hematological and biochemical parameters were measured and recorded during pre and post-treatment periods. **RESULTS:** Whilst plasma cholesteryl ester transfer protein was increased in the group taking the crocin tablet by ۲۷.۸۱% during the trial period ($P = ۰.۰۱۳$), the difference between the crocin and placebo groups was not significant ($P = ۰.۱۱۶$). Moreover, the percent changes in cholesterol ($P = ۰.۷۰۲$), triglyceride ($P = ۰.۰۸۰$), low-density lipoprotein (LDL) ($P = ۰.۹۸۶$), high-density lipoprotein (HDL) ($P = ۰.۶۸۷$) and fasting blood glucose ($P = ۰.۶۱۴$) did not differ significantly between intervention and control groups. **CONCLUSION:** Although crocin supplements increased the serum cholesteryl ester transfer protein in patients with metabolic syndrome, this change was not significant between treatment and placebo groups.

کلمات کلیدی:

Cholesteryl Ester Transfer Protein, Crocin, High-Density Lipoprotein Cholesterol, Low-Density Lipoprotein Cholesterol, Metabolic Syndrome, Saffron

لینک ثابت مقاله در پایگاه سیولیکا:

<https://civilica.com/doc/1504738>

