

Effect of green coffee supplementation on lipid profile, glycemic indices, inflammatory biomarkers and anthropometric indices**Anil Batta**

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Polycystic ovary syndrome (PCOS) is a heterogeneous clinical syndrome. Recent studies examine different strategies to modulate its related complications. Chlorogenic acid, as a bioactive component of green coffee (GC), is known to have great health benefits. The present study aimed to determine the effect of GC on lipid profile, glycemic indices, and inflammatory biomarkers. Forty-four PCOS patients were enrolled in this randomized clinical trial of whom 34 have completed the study protocol. The intervention group (n = 17) received 400 mg of GC supplements, while the placebo group (n = 17) received the same amount of starch for six weeks. Then, glycemic indices, lipid profiles, and inflammatory parameters were measured. After the intervention period, no significant difference was shown in fasting blood sugar, insulin level, Homeostasis model assessment of insulin resistance index, low-density lipoprotein, high-density lipoprotein, Interleukin 6 or 10 between supplementation and placebo groups. However, cholesterol and triglyceride serum levels decreased significantly in the intervention group ($p < 0.05$). This research confirmed that GC supplements might improve some lipid profiles in women with PCOS. However, more detailed studies with larger sample sizes are required to prove the effectiveness of this supplement.

Keywords: Dyslipidemia; Glycemic index; Polycystic ovary syndrome; Inflammation**Biography**

Prof. Dr. Anil Batta is presently professor & Head with senior consultant in Govt. Medical College, Amritsar. He did his M.B.B.S. and M.D. in Medical Biochemistry from Govt. Medical College, Patiala in 1984 and 1991, respectively. His research interest is mainly in clinical application especially cancer and drug de-addiction. He has supervised more than 25 M.D., M.Sc. and Doctorate researches and published more than 130 international research papers. He is the chief editor of America's Journal of Biochemistry. He has done superspecialisation in Drug-de-addiction from PGIMER, Chandigarh.

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