

## The effect of Curcumin on the metabolic parameters of polycystic ovary syndrome

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### Abstract

**Background and Aim:** One of the most common causes of female infertility is polycystic ovary syndrome, which has adverse reproductive and metabolic consequences for affected women, and its management is a challenging clinical problem. Herbal medicine is a complex intervention with the potential for synergistic and antagonistic interactions between compounds. One of the herbal medicines for the treatment of PCOS is turmeric or curcumin, which has strong anti-inflammatory and antioxidant properties that have positive effects on lipid profile and insulin resistance. It seems to be a valuable treatment regimen for patients with PCOS. This research with The aim is to investigate the effect of curcumin on polycystic syndrome.

**Methods:** This study is a systematic review and about 20 articles between 2015 and 2024 were selected from various websites such as: Magiran, Sid Science direct, Google scholar, Pubmed, Scopus. To find articles from Persian databases, the keywords turmeric, curcumin, and polycystic ovary syndrome were used, and in Latin databases, the words curcumin, polycystic ovary syndrome were used.

**Results:** Curcumin present in turmeric has many pharmacological effects that are beneficial on the metabolic parameters of patients with polycystic ovary syndrome (PCOS). According to the findings presented in the research, curcumin has beneficial effects on serum markers of inflammation, weight loss, and glucose and lipid metabolism in patients with PCOS.

**Conclusion:** According to the researches, the use of medicinal plants containing strong anti-inflammatory and antioxidant effects such as curcumin is recommended for pcos patients.

**Keywords:** Curcumin; polycystic ovary syndrome