

REVIEW ARTICLE

UNLOCKING THE POTENTIAL OF RESVERATROL IN MANAGING POLYCYSTIC OVARY SYNDROME: A SYSTEMATIC REVIEW

Dharani Bhaskarana^{a*}, Suba Angappan^a and Stephy Sebastian^a

(Received 02 August 2025) (Accepted 13 March 2026)

ABSTRACT

Polycystic ovary syndrome (PCOS) is a complex endocrine disorder that affects women of reproductive age. Resveratrol, a phytoestrogen with multiple pharmacological properties, has shown potential in managing PCOS. This review explores the beneficial effects of resveratrol on hormonal, metabolic and clinical outcomes in women with PCOS. A comprehensive review of relevant literature was conducted using databases and articles were selected based on their examination of resveratrol's effects on PCOS. Both clinical and preclinical studies were analyzed. Resveratrol has demonstrated significant benefits in managing PCOS by reducing androgen levels, improving ovarian morphology, enhancing antioxidant, anti-inflammatory responses and regulating insulin sensitivity. Resveratrol reduces menstrual irregularities, reduces testosterone and LH levels and mitigates oxidative stress. Resveratrol offers promising therapeutic potential for the management of PCOS. While the compound shows potential in clinical applications, further research is necessary to determine optimal dosing, improve bioavailability overcome adverse effects and assess long-term safety.