The purpose of this study was to determine whether there is a difference in oxidative stress levels between women with Polycystic Ovarian Syndrome (PCOS) and healthy controls, and to investigate the effects of resveratrol supplementation on oxidative stress levels. Women recruited from the general population in this double-blinded study were divided into two groups: a healthy control group and a PCOS group. Participants were required to meet the Androgen Excess and Polycystic Ovarian Syndrome Society's criteria for the diagnosis of PCOS. Participants underwent a questionnaire to measure age, body mass index, amount of physical activity, current diet, and a blood test was used to quantitatively determine levels of lipid peroxidation and reactive oxygen species. Oxidative stress was measured using two biomarkers: nitric acid (NA) and malondialdehyde (MDA). Additionally, the PCOS group was further divided into two groups, one that underwent a treatment in which resveratrol (250 mg) was supplemented orally daily, and a control group given a placebo. A blood test was then administered every three months for the duration of a year to track levels of oxidative damage. A t-test showed that PCOS was correlated with higher oxidative stress levels. Additionally, resveratrol supplementation showed a significant decrease in oxidative damage by lowering the levels of MDA and NA. PCOS is correlated with higher oxidative stress levels, and as a result makes patients more susceptible to cancer pathogenesis. Reducing the symptoms of oxidative stress could therefore lower patients risk of cancer.

Themes:

Check (highlight) the most applicable theme according to the abstract.

| Innovation and Technology | Health and Wellness | Culture and Society | Sustainability and Conservation |

Comments: Wonderful primer on resveratrol supplementation and its effects on PCOS and implications for cancer development. All the best at MURC!