

Individual Anteaiox Phenols and Polycystic Ovary Syndrome

Curcumin, Resveratrol, Quercetin, Catechin, Apigenin, Rutin, Genistein, Diadzein

“Different research papers have described the anti-androgenic, ovulatory, estrogenic and fertility, menstrual, hormonal and menopause regulating activities of polyphenols. Moreover, these polyphenols are capable of decreasing the incidence of other metabolic diseases such as infertility, insulin resistance, hyperglycemia, hyperlipidemia, obesity and Type-2 diabetes caused by PCOS.”

155. Phytomedicine Plus, 2022

Ellagic Acid

“EA supplementation can be helpful as a diet supplement in women with PCOS through improvement in insulin resistance. This supplement may be used to reduce metabolic disorders in women.”

156. Journal of Ovarian Research, 2021

Gallic Acid

“Thus, the study concluded that HT (Gallic acid) could be used as an herbal medicine for the treatment of leading metabolic and infertility diseases like obesity and polycystic ovarian syndrome in females.”

157. Nature, Scientific Reports, 2020

Cinnamic Acid

“This meta-analysis showed that cinnamon alone (Cinnamic acid) and herbal mixture containing cinnamon (Cinnamic acid) improve level of FBS (fasting blood sugar), fasting insulin, TG (triglyceride), TC (total cholesterol), LDL (low density lipoprotein), MDA malondialdehyde, TT (total testosterone), and FT(free testosterone) serum level.”

158. International Journal of Women’s Health and Reproduction Sciences, 2019

Protocatechuic Acid

“Thus, protocatechuic acid shows a blend of pharmacological activities like estrogenic, antihyperlipidmic, antioxidant and hypoglycemic effects which could be useful in managing PCOS condition and preventing ovarian cell dysfunction, ovulation and thereby improving the fertility index. Together, broad spectrum biological effects of protocatechuic acid make it a promising drug for treating clinical and pathological abnormalities in PCOS condition.”

159. Asian Pacific Journal of Reproduction

Kaempferol, Epicatechin, Epigallocatechin

“Due to the presence of various compounds such as polyphenols with many biological activities, these plants are effective in the prevention and treatment of many reproductive disorders such as PCOS, endometriosis, POF, hypothalamic dysfunction, hyperprolactinemia, PID, menopausal symptoms, osteoporosis, and female reproductive related cancers (cervical, ovarian, uterine/endometrial, vaginal and vulvar cancers).”

160. Food Sciences and Nutrician, 2021

EGCG, Caffeic acid phenethyl ester (CAPE)

“Endometriotic lesions treated with CAPE were histologically demonstrated to undergo atrophy and regression, compared with untreated controls....Lesions treated with EGCG exhibited significantly downregulated VEGF-A mRNA.”

161. Current Women’s Health Reviews, 2010

“Current evidence indicates that green tea extract (EGCG) supplementation has potential beneficial effects on PCOS. Despite a lack of human studies on ovarian histology, animal studies support the impact of GTE in improving ovarian function and histology. Moreover, GTE could lead to improving glycaemic control in PCOS and may decrease body weight, LH, and androgens in PCOS patients.”

162. Reproductive Biology and Endocrinology, 2021

Protocatechuic, Caffeic, p-coumaric, Chlorogenic and Vanillic acids, Fraxetin, Scopoletin, Isorhamnetin, Hersperidin, Naringenin, Formononetin, Xanthotoxel, Rutin

“In granulosa cells with PCOS, the result showed that cell viability was improved, and cell apoptosis was inhibited after CFD administration. Further experiments suggested that CDF improves follicular development and IR, inhibits apoptosis and inflammatory microenvironment, and contributes to the regulation of the IGF-1-PI3K/AktBax/Bcl-2 pathway. Given that CFD sufficiently suppresses IR and improves follicular development, exploring these mechanisms might help to optimize the therapeutic treatment of CFD in PCOS patients.” 163. Mediators of Inflammation, 2020