

A peak into PCOS: managing one of the leading causes of female infertility



The World Health Organization (WHO) defines infertility as “A disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular, unprotected sexual intercourse”¹.

Infertility is a major problem in modern society and affects :

- 15% of couples globally²
- The rate increased by 0.37% per year for females in the last decade³

Polycystic Ovary Syndrome (PCOS) is the most common cause of anovulatory infertility. Approximately 90–95% of anovulatory women seeking treatment for infertility have PCOS⁴

What is PCOS?⁵

- A complex endocrine (hormonal) condition.
- Caused by a combination of lifestyle and genetics.
- Insulin resistance and increased levels of insulin, as well as heightened luteinizing hormone (LH) and androgen levels lead to PCOS.



PCOS's risk factors⁶



Unhealthy behaviors resulting in overweight, obesity, insulin resistance, hyperinsulinemia, and hyperandrogenism.

Over consumption of diets and drinks containing high sugar, fructose, trans fat, animal fat, and processed foods are considered a leading cause of PCOS.

Nutrition and PCOS infertility



Some studies showed that weight loss in overweight infertile women with PCOS can be associated to an increase in pregnancy and live birth rates.⁷



Lifestyle changes, promoting weight loss, are the first-line treatment recommended for women with PCOS (clinical consensus).⁷



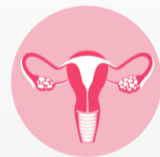
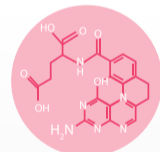
Certain supplements could also be considered. Myo-inositol is one of the supplement that has received special attention due to its potential to provide support for women with PCOS.⁸



There are no specific dietary recommendations, but a healthy and balanced diet, alongside exercise could be advised.⁷

PCOS and myo-inositol (MYO) supplement

- Inositol is a compound belongs to the family of B vitamins.⁹
- 99% of inositol in nature is present in the form of the myo-inositol (MYO) isomer.⁹
- MYO participates in the signaling cascade of the HPG⁹ (hypothalamic–pituitary–gonadal) axis. It is the second messenger of the follicle stimulating hormone (FSH) and LH.⁹
- MYO also can reduce levels of insulin, LH and androgens and increases estrogens levels.¹⁰
- It was found to have restored ovulatory menstrual cycle by 88% and ovulation by 72% in women with PCOS.¹⁰
- Several studies have shown the efficiency of MYO administration in achieving pregnancy in infertile PCOS patients.¹⁰



Summary

While there is no set therapy for PCOS patients, weight loss has been shown to improve the health and fertility of overweight and obese women with this condition.

Changes in lifestyle and food habits remain the first-line therapy for PCOS. Furthermore, supplements, such as Myo-inositol, have been proven to be therapeutic effectiveness in the treatment of PCOS infertility and should be considered in patients to increase their chances of getting pregnant.

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