

Polycystic Ovary Syndrome – A Common Cause of Infertility and Weight Gain

Polycystic Ovary Syndrome (PCOS) affects at least 10% of women and is the most common endocrine disorder in reproductive-aged women. It increases their risk of obesity, diabetes, heart disease, cancer and infertility.

Polycystic ovaries are typically larger, rounder and not actually cystic. Instead, they contain a string of small egg sacs called follicles that have a classic “string of pearls” appearance by ultrasound. This leads to infertility because the eggs within these follicles do not mature and are not released during ovulation.

A PCOS diagnosis requires two of three symptoms: irregular periods, elevated male-type hormones and the presence of a polycystic ovary by ultrasound. Because PCOS is a syndrome, not every woman affected will experience the same symptoms. This can make its diagnosis a tricky undertaking for physicians and one that can only be confirmed by combining a physical exam with blood tests and an ultrasound.

The menstrual irregularity associated with the condition increases a woman’s risk of developing endometrial cancer, which often begins in the lining of the uterus. The irregular cycles and unpredictable ovulation also make it difficult for women with PCOS to know the best time to attempt pregnancy. Ovulation predictor kits sometimes don’t work, though ovulation can often be improved using fertility medications such as Clomid.

Many women with PCOS also struggle with skin problems like acne and unwanted hair growth. The hair is usually darker, coarser and often grows on the lower abdomen, lower back, the face and the chin. PCOS also may cause thinning scalp hair, darkening of the skin on the back of the neck and underneath the breasts and skin tags in the armpit or neck area.

Despite their best efforts, women with PCOS historically have a very difficult time losing weight. Calorie restricting diets, increased exercise and weight loss medications seldom yield positive results, leading to frustration and feelings of failure. The excess weight also causes more than half of women with PCOS to develop Type 2 diabetes by age 40.

No one knows the exact cause of PCOS, but high production of insulin is one of the key signals of the condition. Metformin, an insulin sensitizer often used to treat diabetes, can be used to improve insulin levels in women with PCOS, but it has limited effects on improving their fertility.

Reproductive endocrinologists, also known as fertility specialists, encourage all women to optimize their health to improve fertility and to have the healthiest start to pregnancy. The treatment of PCOS is no different. Medical experts strive to diagnose the problem, help patients to achieve a healthy weight and correct any other basic medical problems before conception. Because PCOS is treatable, women who have it and who become pregnant generally experience healthy pregnancies and healthy babies.

To help improve the health of women with PCOS, researchers at the Texas Tech University Health Sciences Center (TTUHSC) have developed a new dietary approach to managing the syndrome. Though

the PCOS diet foregoes caloric restrictions, carb counting, fat counting, portion limitations or required exercise, the majority of women who have used it have experienced successful weight loss, improved health and fertility.

During an eight-week study conducted by the TTUHSC team, women lost an average of 19 pounds, with some participants experiencing a weight loss of more than 30 pounds. The PCOS Diet is licensed as a Texas Tech technology and is commercially available at www.pcos-diet.com.

The next step for TTUHSC researchers to develop an app women can subscribe to on a monthly basis that provides the latest research-proven methods for managing PCOS. The app will include PCOS diet instructions, grocery lists, recipes, healthy hints for eating out at restaurants, motivational videos and more.

The TTUHSC research team includes reproductive endocrinologists Jennifer Phy, D.O., and Jaou-Chen Huang, M.D., and Ali Chappell, Ph.D., a registered dietician who completed a women's health fellowship through the National Institutes of Health. Together, they are focused upon making weight loss and health improvement as easy and effective as possible for women with PCOS by providing education, resources and encouragement. Their ultimate goal, curing PCOS, is one they are working to accomplish one success story at a time.

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