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# PCOS (Polycystic Ovary Syndrome) and Diabetes



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Ever heard of polycystic ovary syndrome (PCOS)? If you're a woman who has had trouble getting pregnant, you might have. Just about everyone else? Probably not.

## What is PCOS?

PCOS is one of the most common causes of female infertility, affecting 6% to 12% (as many as 5 million) of US women of reproductive age. But it's a lot more than that. This lifelong health condition continues far beyond the child-bearing years.

Women with PCOS are often [insulin resistant](#); their bodies can make insulin but can't use it effectively, increasing their risk for type 2 diabetes. They also have higher levels of androgens (male hormones that females also have), which can stop eggs from being released (ovulation) and cause irregular periods, acne, thinning scalp hair, and excess hair growth on the face and body.

Women with PCOS can develop serious health problems, especially if they are overweight:

- [Diabetes](#)—more than half of women with PCOS develop type 2 diabetes by age 40
- [Gestational diabetes](#) (diabetes when pregnant)—which puts the pregnancy and baby at risk and can lead to type 2 diabetes later in life for both mother and child
- [Heart disease](#)—women with PCOS are at higher risk, and risk increases with age

- [High blood pressure](#)—which can damage the heart, brain, and kidneys
- High LDL (“bad”) [cholesterol](#) and low HDL (“good”) cholesterol—increasing the risk for heart disease
- [Sleep apnea](#) [↗](#) —a disorder that causes breathing to stop during sleep and raises the risk for heart disease and type 2 diabetes
- [Stroke](#)—plaque (cholesterol and white blood cells) clogging blood vessels can lead to blood clots that in turn can cause a stroke

PCOS is also linked to [depression and anxiety](#), though the connection is not fully understood.

## What Causes PCOS?

The exact causes aren’t known at this time, but androgen levels that are higher than normal play an important part. Excess weight and family history—which are in turn related to insulin resistance—can also contribute.

### Weight...

Does [being overweight cause PCOS](#) [↗](#)? Does PCOS make you overweight? The relationship is complicated and not well understood. Being overweight is associated with PCOS, but many women of normal weight have PCOS, and many overweight women don’t.

### Family History...

Women whose mother or sister has PCOS or type 2 diabetes are more likely to develop PCOS.

### ...and Insulin Resistance

Lifestyle can have a big impact on insulin resistance, especially if a woman is overweight because of an unhealthy diet and lack of physical activity. Insulin resistance also runs in families. Losing weight will often help improve symptoms no matter what caused the insulin resistance.

## Do You Have PCOS?

Sometimes symptoms are clear, and sometimes they’re less obvious. You may visit a dermatologist (skin doctor) for acne, hair growth, or darkening of the skin in body creases and folds such as the back of the neck (acanthosis nigricans), a gynecologist (doctor who treats medical conditions that affect women and female reproductive organs) for irregular monthly periods, and your family doctor for weight gain, not realizing these symptoms are all part of PCOS. Some women will have just one symptom; others will have them all. Women of every race and ethnicity can have PCOS.

It’s common for women to find out they have PCOS when they have trouble getting pregnant, but it often begins soon after the first menstrual period, as young as age 11 or 12. It can also develop in the 20s or 30s.

To determine if you have PCOS, your doctor will check that you have at least 2 of these 3 symptoms:

1. Irregular periods or no periods, caused from lack of ovulation
2. Higher than normal levels of male hormones that may result in excess hair on the face and body, acne, or thinning scalp hair
3. Multiple small cysts on the ovaries


Just having ovarian cysts isn’t enough for a diagnosis. Lots of women without PCOS have cysts on their ovaries and lots of women with PCOS don’t have cysts.

# Treatment

See your health care provider if you have irregular monthly periods, are having trouble getting pregnant, or have excess acne or hair growth. If you're told you have PCOS, ask about getting tested for [type 2 diabetes](#) and how to manage the condition if you have it. Making healthy changes such as losing weight if you're overweight and increasing physical activity can lower your risk for type 2 diabetes, help you better manage diabetes, and prevent or delay other health problems.

There are also medicines that can help you ovulate, as well as reduce acne and hair growth. Make sure to talk with your health care provider about all your treatment options.

### Learn More

- [Common Reproductive Health Concerns for Women](#)
- [Infertility in Women](#)
- [PCOS FAQs](#) 

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