

Polycystic ovary syndrome

Polycystic ovary syndrome (PCOS) is one of the most common hormonal problems in women during their reproductive years. It's a leading cause of fertility problems and can also be a risk factor for pre-diabetes, gestational diabetes and type 2 diabetes.

What are the symptoms?

There are a number of different symptoms of PCOS, and you don't have to have all of these to be diagnosed with this condition. Symptoms are listed below.

- » Irregular or no periods
- » Excessive facial and body hair
- » Hair loss from the head
- » Acne on the face or body
- » Difficulty becoming pregnant.

How is PCOS diagnosed?

At least two of the following must be present for PCOS to be diagnosed:

- Multiple small follicles or cysts on the ovaries (seen on an ultrasound)
- » Clinical evidence of elevated androgen levels (high levels of male-type hormones)
- » Menstrual problems (lack of or irregular periods)
- » 70% of women with PCOS are undiagnosed.





PCOS is a risk factor for pre-diabetes, gestational diabetes and type 2 diabetes.

PCOS and diabetes

Up to 80% of women with PCOS have insulin resistance. This occurs when the body's cells can't respond properly to insulin. Insulin is an important hormone for regulating blood glucose levels. When insulin resistance occurs, the pancreas needs to make more and more insulin to manage blood glucose levels.



Insulin resistance is a risk factor for pre-diabetes, gestational diabetes (diabetes during pregnancy) and type 2 diabetes. Women with PCOS are up to seven times more likely to develop type 2 diabetes than women without PCOS.

For this reason, it is recommended that all women with PCOS be checked for type 2 diabetes every two years. If you have other risk factors - such as a family history of diabetes, previous gestational diabetes, or you are overweight - you should be checked for diabetes every year. The oral glucose tolerance test (OGTT) is the best way to diagnose prediabetes and can also be used to diagnose type 2 diabetes.

Problems associated with PCOS

There are other health problems that may be associated with PCOS, including:

Weight issues

If you have PCOS you may have difficulty managing your weight - and carrying too much weight can make the symptoms worse. Being a healthy weight can help you improve the symptoms of PCOS, manage existing diabetes or reduce your risk of developing type 2 diabetes.

Fertility problems

Problems with your menstrual cycle can make it harder to become pregnant naturally and can increase your risk of miscarriage. However, you may still be able to get pregnant without the need for fertility treatment.

If you are diagnosed with diabetes, it's important to plan your pregnancy. Talk to your doctor or credentialled diabetes educator at least three to six months before trying to have a baby. It's important to plan for pregnancy at a time when your diabetes is well-managed.

Being a healthy weight can help you manage PCOS and reduce your risk of developing type 2 diabetes.





Emotional effects

Living with PCOS may impact your emotional health by affecting your mood, self confidence or body image. When you have PCOS, you may be more likely to experience emotional problems such as depression or anxiety. This may be due to hormonal changes or the symptoms you are experiencing. If you have diabetes or PCOS and it's affecting your emotional health, talk to a health professional for support.

Other risk factors

Additionally, you may be more likely to develop other risk factors. For instance, insulin resistance may contribute to elevated blood lipid levels (for example cholesterol, triglycerides) and high blood glucose levels. This can increase your risk of cardiovascular disease and type 2 diabetes. If you have existing diabetes, it could also increase the risk of diabetes-related complications.

How is PCOS treated?

The treatment of PCOS involves lifestyle changes, including making healthy food choices, regular physical activity, and aiming for a healthy weight. These lifestyle changes are also recommended for reducing the risk of type 2 diabetes or managing existing diabetes.

There are many different kinds of medications that may be used to treat PCOS. Treating PCOS can also help manage other conditions, including high blood lipids, blood pressure and hormone levels.

Making healthy food choices

An eating plan that facilitates weight loss for women who are overweight – or helps to prevent weight gain for women in the healthy weight range – helps lower diabetes and cardiovascular disease risks in women with PCOS. No specific diet is recommended, but examples of making healthy food choices include: eating regular meals, choosing foods that have a low glycemic index (GI), are low in saturated fat, and are high in fibre (such as wholegrains, fruits and vegetables).

Regular physical activity

Doing 30 minutes of exercise every day, or at least 150 minutes per week, has been shown to help reduce the symptoms of PCOS and other health problems. Resistance exercise such as strength or weight training is also recommended.

Aiming for a healthy weight

A weight loss of as little as 5% can improve acne, ovulation and fertility, reduce excessive hair growth, and improve mental health.

Medications

Your doctor may prescribe medications to help manage PCOS. A commonly used medication for PCOS is metformin. This has been shown to reduce insulin resistance. It may also help with improving menstrual cycles and fertility, as well as preventing weight gain. Like any medication, metformin may have side effects and should be used along with recommended lifestyle changes.

Other medications that may be used to treat PCOS include the oral contraceptive pill. This can help to regulate your menstrual cycle, reduce male-type hormones, and restrict excess hair growth and acne. There are other medications that can be used to treat PCOS and fertility problems, if necessary. Ask your doctor for more information.

Aiming for a healthy weight

A dietitian can help you with advice on healthy food choices and managing your weight.



To find out more about PCOS, talk to your doctor. Alternatively, you can contact the:

Polycystic Ovary Syndrome Association of Australia at **posaa.asn.au**

Jean Hailes Foundation at **jeanhailes.org.au** or by phoning **1800 532 642**.

The NDSS and you

A wide range of services and support is available through the NDSS to help you manage your diabetes. This includes information on diabetes management through the NDSS Helpline and website. The products, services and education programs available can help you stay on top of your diabetes.