

**FACT SHEET:**

Polycystic ovary syndrome

Polycystic ovary syndrome, or PCOS, is one of the most common condition involving the hormone system in women during their reproductive years. Research shows that 7 out of 10 women with PCOS have yet to be diagnosed with the condition.

It is a leading cause of fertility problems. It is also a risk factor for pre-diabetes, gestational diabetes (also known as diabetes during pregnancy) and type 2 diabetes.

PCOS and diabetes

Insulin sensitivity is lower in women with PCOS and even lower if overweight or obese. Insulin is an important hormone for regulating blood glucose levels. When insulin sensitivity is low, the pancreas needs to make more and more insulin to manage blood glucose levels.

Low insulin sensitivity is a risk factor for pre-diabetes, gestational diabetes, and type 2 diabetes. Women with PCOS are 3 times more likely to develop type 2 diabetes than women without PCOS.

It is recommended that all women with PCOS check for type 2 diabetes every 2 years. If you have other risk factors – such as a family history of type 2 diabetes, previous gestational diabetes, or you are carrying extra weight – you should be checked for diabetes every year. The oral glucose tolerance test (OGTT) is the best way to diagnose pre-diabetes and can also be used to diagnose type 2 diabetes.

What are the symptoms?

There are a number of different symptoms of PCOS. You do not have to have all of these to be diagnosed with this condition. Symptoms can include:

- 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 2 of the following three features must be present to diagnose PCOS:

- several small follicles or cysts on the ovaries as seen on an ultrasound
- high male-type hormone levels (also known as elevated androgen levels) as seen on a blood test
- menstrual problems such as lack of or irregular periods.

Problems associated with PCOS

There are other health problems that may be associated with PCOS.

Weight issues

If you have PCOS you may have difficulty managing your weight. Carrying extra weight can make your 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 such as irregular or infrequent periods can make it harder to become pregnant naturally and can increase your risk of miscarriage. Most women with PCOS are still able to get pregnant without the need for fertility treatment. Lifestyle changes and, if you are carrying extra weight, losing weight can improve ovulation and fertility.

It is important to plan your pregnancy if you are also diagnosed with pre-diabetes or type 2 diabetes. Talk to your doctor or diabetes educator at least 3-6 months before trying to have a baby. It is important to plan for pregnancy at a time when your diabetes is well managed.

Emotional effects

Living with PCOS may impact your emotional health by affecting your mood, self-confidence or body image and 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. Talk to a health professional for support if you have diabetes or PCOS and it is affecting your emotional health.

Other risk factors

You may be more likely to develop risk factors for other health problems. For instance, lower insulin sensitivity may contribute to elevated blood lipid levels such as cholesterol and triglycerides and high blood glucose levels. This can increase your risk of cardiovascular disease such as heart disease and stroke. If you have diabetes, it could also increase the risk of diabetes-related complications.

How is PCOS managed?

The management 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 or managing type 2 diabetes.

Some women may also need medication. 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 – also helps lower the risks of diabetes and cardiovascular disease in women with PCOS. No specific diet is recommended. 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 reduce the symptoms of PCOS and other health problems. Resistance exercise such as strength or weight training is also recommended. It is also important to reduce the time spent sitting.

An exercise physiologist can help you with advice on an exercise plan that meets your needs.

Aiming for a healthy weight

For women with PCOS who carry extra weight, a weight loss of as little as 5% can improve ovulation and fertility, reduce excessive hair growth, and improve mental health. For women who are a healthy weight, preventing weight gain is important.

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

Medications

There are many different kinds of medications that may be used to treat PCOS, alongside lifestyle changes.

Your doctor may prescribe medications to help manage your PCOS if lifestyle changes alone have not been effective. Metformin is a medication that is often used to manage PCOS. Metformin together with lifestyle changes increases insulin sensitivity and reduces male hormone levels. This also improves menstrual cycles and fertility and help with weight management. Like any medication, metformin may have side effects and is best used along with recommended lifestyle changes.

Other medications that may be used to manage 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.



More information and support

- Go to [ndss.com.au](https://www.ndss.com.au) and search for the 'Healthy food choices', 'Physical activity' 'Understanding pre-diabetes', 'Understanding type 2 diabetes', 'Understanding gestational diabetes' and other fact sheets.
- Go to [healthdirect.gov.au](https://www.healthdirect.gov.au) to find diabetes health professionals near you or search for:
 - » diabetes educator at [adea.com.au](https://www.adea.com.au)
 - » a dietitian at [dietitiansaustralia.org.au](https://www.dietitiansaustralia.org.au)
 - » an exercise physiologist at [essa.org.au/find-aep](https://www.essa.org.au/find-aep).
- For information and resources for women with PCOS, go to [jeanhailes.org.au](https://www.jeanhailes.org.au) or call the Jean Hailes Foundation on **1800 532 642**.



Top tips

- Ask your doctor for advice if you have symptoms of PCOS
- Having PCOS increases your risk of other health problems including type 2 diabetes. Ask your doctor to have a check for type 2 diabetes.
- A dietitian can provide you with individualised advice on healthy food choices to help manage your PCOS. An exercise physiologist can provide you with individualised advice on exercise to help you manage your PCOS.

Notes



The NDSS and you

Whether you have just been diagnosed with diabetes, or have been living with diabetes for a while, the NDSS provides a range of support services, information, and subsidised products to help you manage your diabetes, stay healthy and live well. For access to more resources (including translated versions), or to find out more about support services, go to [ndss.com.au](https://www.ndss.com.au) or call the NDSS Helpline on **1800 637 700**.

This information is intended as a guide only. It should not replace individual medical advice and if you have any concerns about your health or further questions, you should contact your health professional.