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

- multiple small follicles or cysts on the ovaries (seen on an ultrasound)
- elevated androgen levels (high levels of male-type hormones in the blood)
- menstrual problems (lack of/irregular periods).

PCOS and diabetes
Up to 80% of women with PCOS have insulin resistance. This occurs when the body 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.

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

**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 manage 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 fall pregnant naturally and can increase your risk of miscarriage. However, you may still be able to fall 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 diabetes educator at least three to six months before trying to having 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 on 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 may be experiencing. If you have diabetes or PCOS and it’s affecting your emotional health, talk to a health professional for support.

**Other risk factors**

In addition to the problems above, you may be more likely to develop other risk factors, such as elevated blood lipid levels (eg cholesterol, triglycerides) and high blood glucose levels. This can increase your risk of cardiovascular disease and type 2 diabetes or if you have existing diabetes, increase the risk of diabetes-related complications.
How is PCOS treated?

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 a number of different types of medications that may also be used to treat PCOS. Treating PCOS can also assist with managing other risk factors, including high blood lipids, blood pressure and hormone levels.

Making healthy food choices

Making healthy food choices involves eating regular meals, choosing foods that have a low glycemic index (GI), are low in saturated fat, and 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. A dietitian can help you with advice on healthy food choices and managing your weight.

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 and blood pressure. 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 it 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, so ask your doctor for more information.

More information

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

- Polycystic Ovary Syndrome Association of Australia at www.posaa.asn.au
- Jean Hailes Foundation at www.jeanhailes.org.au or by phoning 1800 532 642.