



food & PCOS

HOW DIET CAN HELP

One in every eight Australian women struggle to lose weight, are losing their hair and constantly feel tired as a result of PCOS. But as dietitian Kate Marsh reveals, food can help – you just need to know what to put on your plate.

If you've never heard of Polycystic Ovary Syndrome (PCOS) before, you could be forgiven for thinking it's a rare condition affecting very few people – but it's actually the most common hormonal disorder in the world for pre-menopausal women. Here in Australia, 12 per cent of women of child-bearing

age – that's one in every eight – are affected. Yet despite these huge numbers, many of us still don't know a lot about it. If you suffer from PCOS or think you might, it may feel like there's not much you can do about it, but there are lots of things that can help – and it starts with food.

Could I have PCOS?

Unfortunately, there is no one, single test used to diagnose PCOS. Instead, doctors look at blood test results, ovary ultrasound results and your symptoms before making a decision.

Common symptoms of PCOS include:

- irregular or absent menstrual periods
- hirsutism (excess hair growth on the face, chest and stomach)
- alopecia (scalp hair loss)
- acne
- acanthosis nigricans (dark skin pigmentation, often found at the back of the neck and under the arms and breasts)
- obesity and difficulty losing weight
- infertility or reduced fertility

What is PCOS?

Put simply, PCOS is the result of a hormonal imbalance, which prevents the ovaries from releasing an egg each month; resulting in tiny, cyst-like formations on the ovaries. For most women, the underlying cause of this is insulin resistance (turn overleaf to read "What is Insulin Resistance?").

A large proportion of PCOS sufferers will also experience symptoms like weight gain, acne, sub-fertility (difficulty falling pregnant) or infertility, excess hair growth on their body and face and scalp hair loss. Research also suggests they are at higher risk of miscarriage and of developing heart disease and diabetes.

Exactly why PCOS develops remains unknown, but it's thought to be a result of the interaction between genes and the environment. In countries like Australia, where the incidence of diabetes and obesity are increasing, the incidence of PCOS is higher also – in fact, The Jean Hailes Foundation for Women's Health estimates PCOS cost our economy \$40 million in 2006.

How food can help

Though it's unlikely that a poor diet alone causes PCOS, it can increase your chances of developing the condition if you are already genetically at risk.

What you eat can also affect your chances of developing insulin resistance and obesity, conditions

that are both strongly linked to PCOS, too. If you do have PCOS, eating the right foods can help to improve insulin resistance, potentially reducing your risk of developing long-term health problems linked with PCOS like impaired glucose tolerance, Type 2 diabetes and heart disease.

Eating healthily will also help you lose weight, which has been shown to restore ovulation, increase fertility and improve many of the symptoms of PCOS – even if you only lose a relatively small amount of your body weight (around 5–10 per cent).

What should I be eating?

Despite the known benefits of lifestyle changes, research into the best type of eating plan for women with PCOS is lacking, with no studies having yet shown any significant benefits of one type of diet over another.

As insulin resistance is usually the underlying problem however, an eating plan for PCOS should focus on lowering insulin levels and improving the body's sensitivity to insulin, while also helping with weight loss. (See "How to eat for PCOS" overleaf for more info.)

Lifestyle factors

Diet is a major contributor in managing your PCOS, but other lifestyle changes are essential too. Exercise for example, is proven to have a significant impact on the symptoms of PCOS, with a 



number of studies now showing the benefits of lifting weights for improving blood glucose and insulin levels. Aim to include resistance training (lifting weights) with moderately intensive aerobic activities such as walking, running and dancing, in 30–40 minute sessions on most days of the week.

Similarly, stress, inadequate levels of quality sleep and smoking have all been linked to insulin resistance. To maximise your PCOS management program, learn to manage your stress levels, develop regular sleep patterns and put those cigarettes down – for good!

How to eat for PCOS

- Swap processed grain foods like white bread, puffed or flaked breakfast cereals, most cracker biscuits and many snack foods for higher fibre, low-GI versions like heavy wholegrain bread, oats, barley and cracked wheat.



- Limit your intake of saturated fats by choosing lean cuts of meat, eating skinless poultry, eating more fish, and choosing low-fat dairy products over their high-fat counterparts.

- Fill at least half your plate at lunch and dinner with a variety of different coloured vegetables or salads and include grilled tomato, mushroom, asparagus, capsicum and/or spinach in cooked breakfasts.



- Prevent a large rise in your blood glucose and insulin level by switching those three big meals a day for smaller, regular meals and snacks every three hours or so.

WHAT IS INSULIN RESISTANCE?

Insulin is a hormone produced by the pancreas, which helps to regulate blood glucose levels. Insulin resistance means your insulin does not work effectively, so your body needs to produce increasing amounts of it to keep blood glucose levels under control.

These high levels of insulin circulating in the blood can cause many health problems, including PCOS. Being insulin resistant also increases your risk of developing other health problems, such as gestational diabetes, type 2 diabetes and cardiovascular disease.



- Swap your high-fat, high-sugar snacks in between meals for pieces of fruit, tubs of natural yoghurt with berries, small handfuls of raw nuts or slices of wholegrain fruit loaf.

Medications for PCOS

While lifestyle changes should always be your first line of treatment for PCOS, you may also require medication. Common medications used to treat PCOS can include the following:

- The oral contraceptive pill regulates menstruation and affects acne and excess hair growth.
- Metformin lowers insulin levels.
- Spironolactone, cyproterone and flutamide all block the action of male hormones, helping with skin and hair problems.
- Clomiphene stimulates ovulation.



Latest research

- A recent study found that women with PCOS had a significantly lower basal metabolic rate (BMR) than women without PCOS, meaning they burn less energy, even at rest. This could explain why women with PCOS are more likely to be overweight and seem to find it harder to lose weight.
- A pilot study in overweight and obese women with PCOS found that implementing a six-month long, self-directed, brisk walking program resulted in psychological benefits, including improvements in body image perceptions.
- A February 2008 study found replacing animal sources of protein with vegetable sources may reduce the risk of ovulatory infertility. The same authors also found small amounts of trans-isomer fats (trans fats) may increase the risk too. **HFG**

Case Study

Diet really can make a difference. One HFG reader, 32-year-old Jane Norris, shares her story.

Before I was diagnosed with PCOS, I'd never really considered myself 'unhealthy'. Like most people, I didn't think twice about the occasional fast food meal and considered myself an 'exerciser' – I did walk to the bus stop, after all!

But then I began experiencing symptoms nobody could explain. I complained constantly about feeling tired, I started losing my hair and, over a period of 12 months, I put on about 10 kilos – weight that wouldn't budge, even when I started eating more healthily and going to the gym. Then I was tested for insulin resistance. When the results came back positive, I was diagnosed with PCOS, put on medication, and referred to a dietitian. Life hasn't been the same since.

Before my diagnosis, I honestly thought eating salad once a week was 'healthy.' I'd never even tried a lentil before! So the eating plan my dietitian created for me initially felt a lot like a diet. But then I started to see results – I lost weight, my skin got better, my hair stopped falling out and I had a whole lot more energy. I began to exercise, too. And even though it's difficult to fit in with a really busy job, I still make sure I walk at least four times a week.

Three years after diagnosis, life is so different. My husband's life has changed too; he has so much more energy. We actually decided to start trying for a baby a few months ago. I knew it might take a while to fall pregnant so I was prepared for a long wait but, incredibly, we conceived within a month! I was in such disbelief that I took four pregnancy tests to make sure. It was such a wonderful feeling. I've been working so hard for a healthy body and to increase my fertility levels that it really felt like a validation.

Looking back, I'm amazed at how much I've changed. I used to think I had no control over changing my food habits, but now I know that I do. To all those women out there with PCOS, I would absolutely recommend paying attention to your diet. Honestly, if I can change, anyone can. You've only got one body. Look after it!

For more information about PCOS: • Polycystic Ovarian Syndrome Association of Australia www.posaa.asn.au • The Jean Hailes Foundation for Women's Health www.jeanhailes.org.au and www.managingpcos.org.au • The PCOS Project www.projectpcos.org • The New Glucose Revolution: Managing PCOS by Nadir Farid, Jennie Brand-Miller and Kate Marsh (Hodder Headline).



Kate Marsh is an Advanced Accredited Practising Dietitian who is currently completing her PhD in PCOS.