

Chapter 1

Sensible and Straightforward Solutions for a Difficult Condition

In This Chapter

- ▶ Understanding PCOS and its symptoms
 - ▶ Taking the initial steps when you think you may have PCOS
 - ▶ Tackling PCOS through diet, exercise, and emotional well-being
 - ▶ Looking at treatment options
 - ▶ Working out what you can do to help yourself
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This chapter is a great place to get on the right course if you suffer or suspect you suffer from PCOS, or if you have a friend, relative, or partner with the condition and you want a quick overview of the most important things you need to know about PCOS.

This chapter gives an overview of the entire book. In one chapter you get a feel for what PCOS really is and what its symptoms are. Just as important, you get an overview of treatments and lifestyle changes that are aimed at reducing the symptoms; many are things that you can do to help yourself.

Understanding PCOS

PCOS is the most common ovarian function disorder in premenopausal women. Yet, until recently, it was one of the least-understood conditions. Research into the causes and symptoms of PCOS has shown it to have consequences more far-reaching than the obvious physical symptoms; the long-term effects extend into menopause and beyond.

Defining the condition

According to the American Society for Reproductive Medicine, PCOS is defined as having any two of the following signs and symptoms:

- ✓ *Oligo-ovulation* (irregular ovulation) or *anovulation* (a complete lack of ovulation)
- ✓ Clinical or biochemical signs of high *androgen* (male hormone) levels
- ✓ Polycystic ovaries, which means many small cysts on the ovaries (normal ovaries have five or six follicles, whereas polycystic ovaries have ten or more)



The hormones involved in controlling periods and, ultimately, reproduction, are produced in the pituitary gland, located in the brain. In women with PCOS, two of these hormones — luteinizing hormone (LH) and follicle stimulating hormone (FSH) — are produced in abnormal proportions. The imbalance of these two hormones prevents the follicles in the ovary from developing properly: The follicles tend to remain small and don't mature enough to release an egg. As a result, a string of small follicles, or cysts, form on the ovary, giving rise to the characteristic polycystic ovary that gives the disorder its name.



Polycystic ovaries alone are not enough to diagnose PCOS. If the symptoms of PCOS do develop, that marks the change from simply having symptom-free polycystic ovaries to having PCOS. Around 20 percent of women have polycystic ovaries but no symptoms of PCOS.

PCOS statistics

The rates of PCOS appear to be increasing. Increasing rates of PCOS are most likely to be related to the rise in obesity rates in the United States. Around 68 percent of all adults in the United States are now overweight or obese, and, even more alarming, 20 percent of children ages 6 to 11 and 18 percent of teens are overweight. The potential increase in overweight even in children could herald the development of even more women developing PCOS in the future.

Chew on these PCOS statistics for more on how this disorders affects women of nearly all ages:

- ✓ Around 5 million American women have PCOS.
- ✓ PCOS can start in girls as young as age 11.
- ✓ About 5 percent to 10 percent of American women have PCOS.

It's in the genes

Researchers in the United States studied 215 mothers of women with PCOS and compared them with mothers of women who didn't have PCOS. Results showed that mothers of women with PCOS themselves had some of the symptoms of PCOS, including high cholesterol levels, insulin resistance, and other metabolic abnormalities associated with PCOS.

In addition, a high proportion of these mothers who had daughters with PCOS reported that they had had menstrual irregularities. Those mothers who had reported the menstrual problems had higher male hormone levels than those who hadn't reported irregularities.

All this points to the fact that the mothers of daughters with PCOS had a much higher incidence of PCOS symptoms than mothers of non-PCOS daughters. It seemed that whether the mothers had been diagnosed with PCOS or not, a genetic tendency was definitely present.

Knowing you're at risk

The exact cause of PCOS is unclear, but certain conditions do predispose women to developing it:

- ✔ **Being obese, especially if obesity began before puberty:** Overweight that develop before puberty appears to increase male androgen levels.
- ✔ **Elevated insulin levels:** High insulin levels stimulate increased male hormone production.
- ✔ **Genetics:** You're at increased risk if your mother or sister has the condition or if your father has female family members with PCOS.



Here are the stats showing the genetic tendency toward PCOS (you can read more about the link in the sidebar "It's in the genes"):

- ✔ Thirty-five percent of PCOS sufferers inherit the disorder from their mother.
- ✔ Thirty-five percent of PCOS sufferers inherit the disorder from their father's side of the family.
- ✔ Fifty percent of PCOS sufferers have female relatives with PCOS on both sides of their family.

- ✔ In one study, 77 percent of women with PCOS had a close relative with PCOS; 50 percent had a mother or sister with the disorder and 25 percent had a maternal or paternal aunt with PCOS.

A single gene responsible for PCOS has not been found. Developing PCOS may be a complex issue with genetic, environmental, and lifestyle components, such as early diet.

Identifying the symptoms

The symptoms of PCOS vary from woman to woman and can be present in any combination. They also can change over time, so if you have PCOS, your symptoms are likely to be different from someone else you know with PCOS.

The most common PCOS symptoms include the following:

- ✔ **Weight gain, especially around the tummy:** Turn to Chapter 2 for more on the causes and effects of weight gain in women with PCOS and check out Chapter 5 for help with losing weight.
- ✔ **Increased hairiness on the face and other regions (called *hirsutism*):** Excess *androgens* (male hormones) cause this symptoms. We talk more about the effects and treatments of excess hair where you don't want it in Chapter 2.
- ✔ **Male pattern baldness or thinning hair:** This symptom, another side effect of increased male hormones, is also addressed in more detail in Chapter 2.
- ✔ **Oily skin with acne:** This is another side effect of androgen production. We cover it in greater detail in Chapter 2.
- ✔ **Absent or irregular menstrual cycles:** This condition leads to infertility. The issues of the menstrual cycle are discussed in detail in Chapter 10. Ways to improve fertility are found in Chapter 11.
- ✔ **Insulin resistance:** Being insulin resistant means your body can't use insulin efficiently. This leads to high circulating blood levels of insulin (called *hyperinsulinemia*). High levels of insulin in the blood may cause PCOS symptoms to worsen gradually. Being diagnosed with insulin resistance also increases your chances of having PCOS. See Chapter 3 for an in-depth discussion of insulin resistance and its role in PCOS.

Taking Your First Steps toward Living with PCOS

If you suspect you have PCOS, your first reaction may be panic, followed by anger or depression. Without proper care, PCOS can impact nearly every aspect of your life, so fear, anxiety, and worry are normal reactions — but don't hold onto them for too long! Be proactive in your care by taking positive steps toward improving your health and finding a medical care partner who can guide you on the way.

But also remember, first and foremost, that this is *your* medical condition and *your* life. No one has more motivation or more to gain from getting PCOS under control than you do. Take these first steps:

- ✔ **Find a knowledgeable medical practitioner.** This may or may not be your current family doctor or gynecologist. Finding someone who has a real interest in PCOS may take some sleuthing and involvement in support groups (group members normally have the inside track on who's good at treating the condition), which leads to the next step. . . .
- ✔ **Get involved with a support group.** If there are support groups in your area, tap into their resources, because they're your best source for competent and concerned medical care. If you have no local support groups, connect with people online. Chapter 16 has a list of resources on PCOS, including helpful websites if there are no active groups in your area or you're not the joining type.
- ✔ **Do your research.** Some practitioners may not be up on the latest info on PCOS, so make sure *you* are. Read everything you can find online, particularly from reputable organizations like the American Congress of Obstetricians and Gynecologists (www.acog.org), Mayo Clinic (www.mayoclinic.com), or the Polycystic Ovarian Syndrome Association (www.pcosupport.org). Take with a grain of salt anything you read on lesser-known sites — the Internet is home to a number of charlatans with questionable medical practices. Check out applicable books from your library, but pay attention to the publication dates to make sure you're getting the latest info. Invest in a few well-recommended books, including this one!
- ✔ **Stay active and involved with life.** PCOS isn't life-threatening, but it can cause dangerous complications if it gets out of control. Letting PCOS become your whole life is as unproductive as ignoring it completely.

- ✔ **Find ways to cope with stress.** After you're diagnosed, it can be a relief to know that the symptoms aren't just in your mind. But then you're left with the stress of knowing that you have to cope with a long-term condition. Empower yourself by knowing what PCOS is and what you can do about it so that you're in control — this strategy can help to lessen the emotional frustrations.

The Three-Pronged Attack

Unfortunately, no cure exists for PCOS, but you can control the symptoms so that the effect of PCOS on your body is minimal. To decrease symptoms of PCOS, you need to tackle the following issues:

- ✔ **Improving insulin sensitivity:** This improvement prevents the whole cascade of later problems, such as developing type 2 diabetes and abnormal blood fat levels, which can give rise to heart disease. (See Chapter 3 for the details on how insulin resistance develops and how it causes many of the symptoms associated with PCOS.)
- ✔ **Restoring normal ovulation, which helps restore normal fertility:** Part III tells you how to improve menstrual symptoms and increase your chances of getting pregnant.
- ✔ **Stopping androgen levels in the blood from rising.**

Although medications may help, you also can do your part by mounting a three-pronged attack using the following tools at your disposal:

- ✔ **Diet:** Follow a low-glycemic-index diet. See Chapter 4 for information on the *glycemic index* (a way of categorizing foods by their effect on your blood glucose levels) and how the glycemic index affects PCOS symptoms.
- ✔ **Exercise:** Strive to be more physically active on a day-to-day basis and throughout the day. Exercise not only improves mood but increases weight loss.
- ✔ **Emotional well-being:** If you lack motivation or are moody and/or depressed, try some techniques for mood lifting and motivation. Maintaining a positive attitude can have a positive effect on your physical as well as your mental health.



Even if you're at a normal weight, research has shown that if you have PCOS, you still have a tendency to have higher blood concentrations of insulin compared to women without PCOS of the same weight. So, eating a low-GI, balanced diet and being physically active is important, even if you don't have a weight problem.

Treatment should be tailored to you and the symptoms you're experiencing, but it should also take into consideration whether you're aiming to get pregnant. If you're not planning on having a baby just yet, treatment needs to focus on:

- ✔ Correcting abnormal hormone levels
- ✔ Losing weight (or maintaining a healthy weight if you aren't overweight)
- ✔ Managing cosmetic concerns (such as increased hairiness where you don't want hair, and the loss of hair on your head where you do want it)

If you're hoping to get pregnant, treatment needs to focus on:

- ✔ Losing weight, because a healthy diet with increased physical activity allows more efficient use of insulin and decreases blood glucose levels and may help you to ovulate more regularly
- ✔ Promoting ovulation with ovulation-induction medications

Maximizing your health before you conceive and normalizing blood glucose and blood insulin levels help ensure that, if you do conceive, there's less risk of miscarrying or having a baby that develops problems. (See Chapter 12 for more on the risks of pregnancy with PCOS.)

Diet under the spotlight

The high insulin level commonly found in PCOS sufferers is to blame for the tendency to gain weight and the inability to lose it. That's why, when you have PCOS, your diet is of vital importance because you have to balance several factors: calorie intake (to avoid excess weight gain), carbohydrate intake (to stabilize blood sugars), and so on.

A PCOS-friendly diet helps you to

- ✔ Lose weight to get to a healthy weight, or to maintain a healthy weight
- ✔ Reduce insulin resistance and the risk of developing type 2 diabetes
- ✔ Reduce the risk of cardiovascular disease
- ✔ Ensure a balanced and nutritionally adequate dietary intake

For detailed information on the low-GI diet and how to lose weight successfully, head to Chapters 4 and 5.

Diets to avoid

Avoid diets that restrict the intake of certain groups of foods or ban them completely. Also avoid diets that advocate you take certain supplements. Such diets are likely to be unbalanced. Low-carb diets are often advocated in popular books and websites for PCOS. These diets aren't recommended by many doctors and dietitians because they:

- ✔ **Are high in fat:** A high-fat diet may raise your cholesterol level, putting you at a higher risk of heart disease. Several studies, however, show that low-carb diets lower cholesterol in some people.
- ✔ **Tend to be high in protein:** A high-protein diet may put you at a higher risk of kidney problems, especially if you already have diabetes, which can cause kidney damage.
- ✔ **Cause you to produce more ketones from the breakdown of fats:** Ketogenic diets are not recommended in pregnancy; high ketone levels in the blood could have damaging effects on the fetus.

Getting physical

The good news about getting more active is that it offers huge benefits to symptom reduction in PCOS. The benefits extend well beyond PCOS and into many other areas, from cancer prevention to improving your mental state. Chapter 8 tells you everything you need to know about the benefits of exercising, including different ways to exercise and how to vary your routine.

Benefits of exercise

The reasons to exercise if you have PCOS (and for general health) include the following:

- ✔ **To help maintain weight loss and allow you to have a few more calories while on a weight-loss diet:** The ideal combination is to lose weight by following a sensible weight-control diet along with a minimum of half an hour of physical activity a day.
- ✔ **To improve the relative amount of muscle to fat as well as overall body shape.**
- ✔ **To improve insulin sensitivity.**
- ✔ **To increase the levels of high-density lipoprotein (HDL), or “good” cholesterol, in the blood.**
- ✔ **To reduce blood pressure.**

- ✔ **To decrease your risk of developing heart disease and diabetes.**
- ✔ **To improve bone density, reducing your risk of developing osteoporosis.**
- ✔ **To improve your psychological health, such as self-confidence, well-being, and self-image.**



To maximize the advantages of doing exercise, you need to combine aerobic exercise (which causes you to get a bit breathless) with some resistance training (such as lifting weights) and some stretching and flexibility work to maintain strain-free movement. Chapter 6 explains what you need to know.



Tips for exercising success

There's a high dropout rate among people who take up exercise. To avoid this, plan ahead and keep a few things in mind:

- ✔ **Don't be too ambitious, or you'll never keep it up.** Instead of swearing that you'll swim for 30 minutes, run for 30 minutes, and bike for 30 minutes every day, shoot for something manageable, like a 30-minute walk.
- ✔ **Plan to do a form of exercise that fits into your lifestyle and that you enjoy doing.** If getting to a gym is difficult for you, choose an exercise you can do at home. When in doubt, opt for walking — you can do that anywhere, and you don't need anything other than a good pair of shoes.
- ✔ **If you don't have time to exercise — and who ever does, unless they're motivated enough to make time for it? — incorporate exercise into your daily routine.** For example, if you normally stop in at the grocery store to pick up a few things every day, think about walking or even bicycling there instead.



The amount of moving about you do throughout the day is as important as any formal exercise session you undertake. So, think about how you can build in more activity throughout the day (take the stairs instead of the elevator, park far away from the mall entrance, and so on).

Looking after the inside

Knowing the wonderful results that you can achieve by diet and exercise is fine, but if an overload of stress, anxiety, or depression are preventing you from following through, having an encyclopedic knowledge of PCOS isn't going to do you a lot of good. In order to be able to act on your knowledge about what you should do, you

need to feel empowered with the knowledge that you understand your condition, are ready to take action, and are on a fairly even keel, emotionally speaking.



An important key to getting well is to treat yourself kindly. Recognize that PCOS is a major stressor in your life and give yourself permission to work through the feelings associated with it. To diminish the symptoms associated with PCOS, you must also recognize the emotional effects of PCOS, accept them, and learn to deal with them.

PCOS often leads to feelings of anxiety, low self-esteem, and loss of control. The emotional effects of PCOS can start in the teenage years when the symptoms such as weight problems, excess facial or body hair, and acne, start to emerge. To make matters worse, the journey to a diagnosis can be long and painful.

Chapter 9 explains in more detail the effects of PCOS on your emotional well-being and offers strategies and advice on how to avoid or ameliorate the most common emotional pitfalls.

Trying Medications, Supplements, and More

Paying attention to your diet, your exercise levels, and your emotional health are things that you can do yourself, with a bit of support from friends, family, and some relevant experts such as personal trainers and dietitians. However, sometimes this just isn't enough and you have to get extra support, as outlined in the following sections.

Medications

Even if you get to work on the diet, exercise, and motivational advice in this book, your doctor may feel you also need some medication to help reduce your symptoms. This is especially important if you're at risk of developing other diseases such as diabetes, heart disease, or possibly even *endometrial cancer* (cancer of the uterine lining). See Chapter 7 for a rundown of different medications and their potential benefits.



Only take medication that is prescribed by your doctor or specialist especially for you.

Depending on your symptoms, medications can play an important part in your PCOS treatment. If you're having trouble getting

pregnant, medications often become a necessity. Medications also can help with hair loss and acne as well as insulin resistance, which can decrease your chance of developing diabetes, as well as long-term complications such as high cholesterol and heart disease. Chapter 7 is loaded with information on the types of medications used to treat PCOS.

Supplements and herbals

When you read up on PCOS, you find that a whole plethora of herbal remedies and supplements are recommended for PCOS. Go to Chapter 8 for more information about supplements and herbals.



Be wary of advice you hear, especially from unproven sources. Supplements and herbal remedies can be harmful, especially if you decide to take them without the backing of a professional, medically qualified practitioner. Before you take any herbal or supplement, consult your doctor.

Alternative therapies

Natural remedies should be tried only if you follow the advice of an experienced, qualified practitioner with an interest in women's health, including fertility. At present, no clinical trials have been completed on alternative therapies in this area.

However, you can try some treatments that may help you to relax and that should be relatively safe, including acupuncture, massage, and reflexology. Chapter 8 discusses alternative therapies — both good and bad.

What about surgery?

Surgery is rarely used to treat PCOS. In some cases, however, a technique known as *ovarian drilling* may help women who are trying to get pregnant but who don't respond to medications given to regulate menstrual cycles and start ovulation. During this procedure, a doctor punctures a small hole in the ovary with an electric needle or laser that destroys part of the ovary.

Ovarian drilling can help decrease male hormone levels by reducing the number of cells producing those hormones, but the effect is usually short-lived and the procedure can cause scarring in the ovary and negatively affect fertility, which is why it's used only as a last resort.

Living a Lifetime with PCOS

Unfortunately, menstrual irregularities and the metabolic symptoms (such as insulin resistance and abnormal blood fat levels) of PCOS seem to be inherited and can cause diseases that persist throughout life. Also, unfortunately, neither the removal of ovaries nor going through menopause seems to eliminate the symptoms. However, you can look for a light at the end of the tunnel, and that is the fact that by adopting a healthy lifestyle you can reduce most symptoms to insignificant levels.



No cure exists for PCOS, but in many cases symptoms can be controlled. Treatment involves breaking the vicious cycle of insulin resistance and overweight, which leads to even higher insulin levels and triggers worsening PCOS symptoms. Remember, too, that not all women with PCOS are obese or even overweight — it's possible to have PCOS symptoms even when you're at a normal weight.



If you know you have PCOS in your family, one way to prevent it from developing in the first place or to minimize its effects is to stay within the right weight range. This can be measured by a ratio called the body mass index (BMI). To figure your BMI, go to www.nhlbisupport.com/bmi. (Chapter 5 has more information on BMI.)

Waist circumference is another way of checking how much fat you're carrying, particularly in the danger area around the middle. You're in the danger zone (as a woman) if your waist circumference is more than 31½ inches. See Chapter 5 for more on this and other weighty issues of PCOS.

Monitoring mood and motivation

Vicious cycles are common in PCOS. Getting into shape and reducing the symptoms can seem such an uphill struggle that it may seem easier just to give up. But in giving up, you feel more and more depressed and believe that extreme actions are required. However, extreme actions just set you up for failure again, and the circle continues.

To offset a complete relapse, keep the following in mind:

- ✓ **Tripping up from time to time is inevitable.** When it happens, pick yourself up and set yourself back on the road.

- ✔ **Start gradually.** Maybe begin with a ten-minute walk every day — everybody has ten minutes to spare, right? — and work your way up gradually to your goal. Adding a minute to your walk every few days won't seem that hard. And before you know it, you'll be walking 30 minutes or more!
- ✔ **Make sure that the changes can be incorporated easily into your lifestyle and that you can keep them up long term.**
- ✔ **Set yourself smaller mini goals along the way.** Reward yourself with something other than food (maybe a massage or a day at the spa) each time you achieve a mini goal.



Keep a food diary and an exercise diary. If keeping a diary permanently is too much, just fill it in for a week or two initially, and then from time to time when you feel your resolve is slacking. Keep track of your moods, too. A diary can remind you what you were doing when things were going well, but it also can help bring to light problems when things aren't going so well.

Avoiding eating disorders

With so much emphasis placed on staying at a normal weight if you have PCOS, it's inevitable that some women fall into the pattern of thinking that if a little weight loss is good, a lot is better. This belief can lead to eating disorders.

If you have a distorted pattern of thinking about and behaving around food, you may have an eating disorder. If you have an eating disorder, you'll also have a preoccupation and/or obsession with food, and your eating (or lack of eating) is likely to be out of control.

Any eating disorder requires professional help. Acknowledging what the triggers are to this behavior is important — they're frequently mood-based, especially feelings of low self-esteem.

