

inito

The PCOS Handbook



Contents

- Chapter 1 **What PCOS Really Is:
Why It's Hard To Pin Down**
- Chapter 2 **It's More Than Fertility:
PCOS Changes Everything**
- Chapter 3 **Insights From Experts:
One Condition, Countless Stories**
- Chapter 4 **The Diagnosis Gap In PCOS:
Interview With Dr. Alexandra Stiles**
- Chapter 5 **Getting The Care You Deserve:
Hear From Dr. Lora Shahine**
- Chapter 6 **From Confusion To Clarity:
Tracking Hormones With Inito**
- Chapter 7 **Keep Going, You're Not Alone:
Resources That Help You**

What PCOS Really Is

Why It's Hard To Pin Down

PCOS isn't just about irregular periods, acne, or weight gain. It shows up in many different ways—or sometimes with no obvious signs at all. And that's where the trouble begins: if doctors are looking for just one picture of PCOS, a lot of people slip through the cracks.

WHAT EXACTLY IS PCOS?

PCOS (polycystic ovary syndrome) is a hormonal imbalance that mainly affects the ovaries. Here's what it can look like:

- Ovaries with many small cysts
- Irregular or absent ovulation
- High levels of androgens (male hormones like testosterone)

Doctors don't know the single "cause" of PCOS. It's likely a mix of genetics, environment, and family history.

1 in 2

women took more than a year to get an official PCOS diagnosis.¹

3 in 4

women felt they didn't have access to PCOS-aware professionals.¹

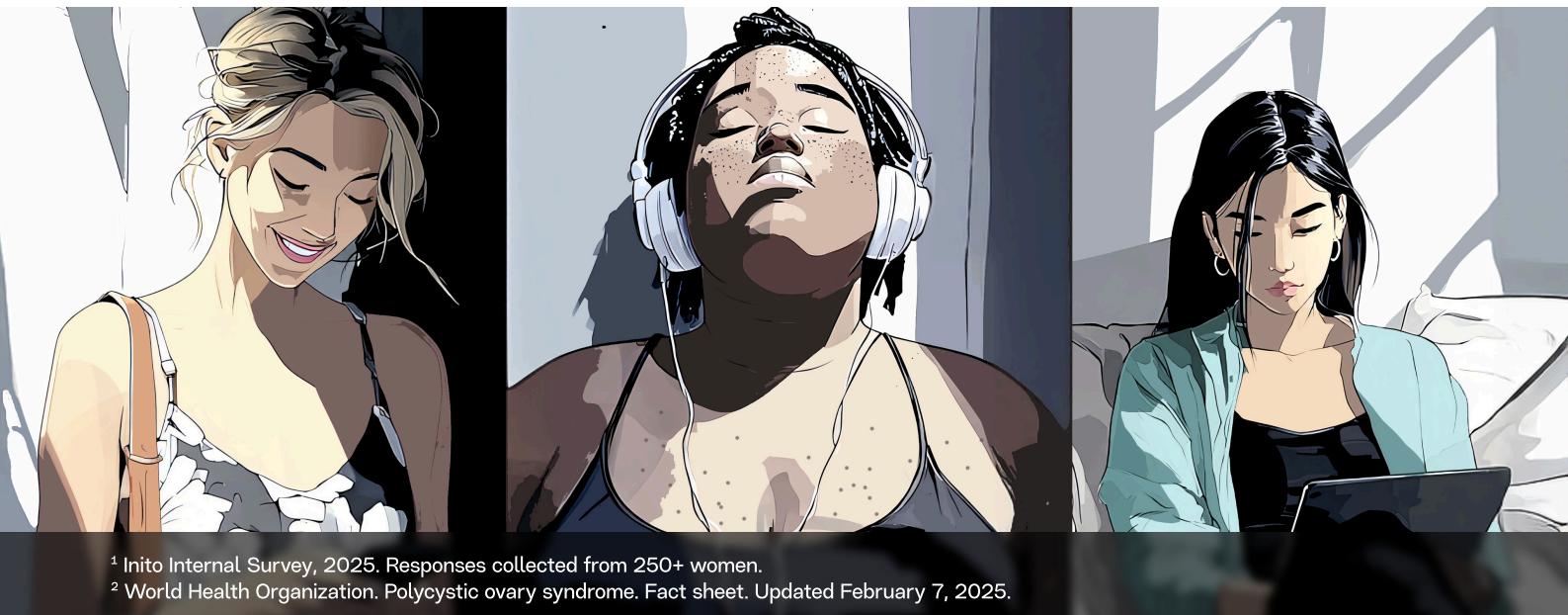
5-6m

of women in the USA of reproductive age are affected by PCOS.²

Up to

70%

of women with PCOS remain undiagnosed.²



¹ Initio Internal Survey, 2025. Responses collected from 250+ women.

² World Health Organization. Polycystic ovary syndrome. Fact sheet. Updated February 7, 2025.

THE FOUR MAIN “TYPES” OF PCOS

Based on the Rotterdam criteria, you’re considered to have PCOS if two of these three things are true: irregular ovulation, high androgens, and polycystic ovaries.

That creates four possible phenotypes:

1. HIGH ANDROGENS + IRREGULAR OVULATION + CYSTS*
2. HIGH ANDROGENS + IRREGULAR OVULATION
3. HIGH ANDROGENS + CYSTS*
4. IRREGULAR OVULATION + CYSTS*

The Rotterdam criteria, established in 2003 by ESHRE and ASRM, remain the most widely used diagnostic framework for PCOS.

HOW OFTEN DOES PCOS GET MISSED? SHOCKINGLY OFTEN.

34% of women waited over 2 years for a diagnosis.

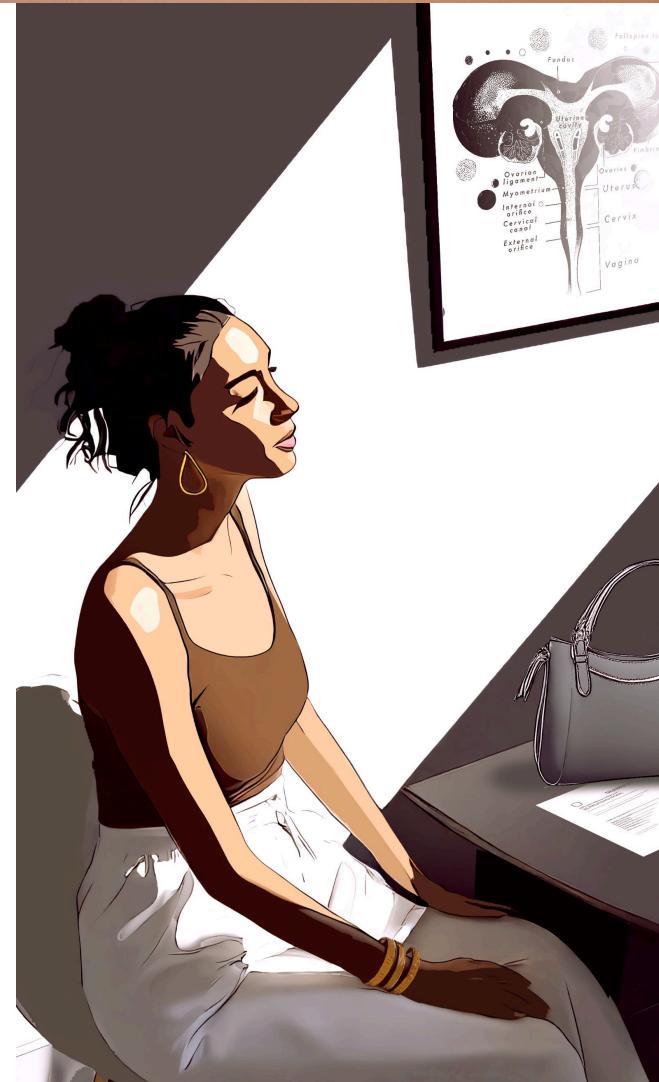
47% had to see 3 or more healthcare professionals before getting answers.

Only **35%** were satisfied with their diagnosis experience.

Just **16%** were satisfied with the information they received.

Bottom line? PCOS is common, but many people don’t recognize it in themselves, and many doctors don’t either. Which means too many people are left navigating confusing symptoms without real support.

*Cyst means a fluid collection in the body and eggs are stored in fluid filled structures called follicles. Many people with PCOS have a high follicle count which can appear like ‘polycystic ovaries’ on ultrasound.



The ripple effect of PCOS

PCOS doesn't play fair. One person may only notice irregular cycles. Another might struggle with acne and weight changes but still ovulate.

Someone else may have no outward signs at all.

And that's the hardest part: because it looks so different, PCOS often gets brushed off—or treated piecemeal—leaving people to patch together answers on their own.

CYCLES	Irregular, long, heavy, or skipped periods
SKIN & HAIR	Acne, oily skin, excess facial/body hair, hair thinning, skin darkening
METABOLISM	Insulin resistance, weight struggles (but note: “lean PCOS” is real), cholesterol issues
MOOD & BRAIN	Anxiety, depression, brain fog, poor sleep
DIGESTION	Bloating, constipation, indigestion
ENERGY	Fatigue, inflammation
GENITO-URINARY TRACT	Recurring UTIs and yeast infections
SELF- IMAGE	body confidence issues, pressure around femininity, even questions of identity.



It's More Than Fertility

PCOS Changes Everything

PCOS is the leading cause of anovulation (irregular ovulation leading to unpredictable menstrual cycles) which can impact fertility. But here's the thing: PCOS doesn't just affect fertility – it impacts multiple hormonal systems in the body.



Androgens

8 in 10 people with PCOS have higher-than-normal levels of androgens (often called "male hormones"). The PCOS patients exhibit hyperandrogenism which can cause acne, extra hair growth, or hair loss at the scalp.

BUT WHERE DO THEY COME FROM?

In PCOS, the ovaries (and sometimes the adrenal glands) make too much androgen, which includes hormones like Testosterone, Androstenedione, and DHEA-S.



Insulin Threshold In Blood

Fasting Insulin <25 mIU/L



Typical LH Blood Levels

Follicular Phase	1.68 to 15 IU/mL
Midcycle Peak	21.9 to 56.6 IU/mL
Luteal Phase	0.61 to 16.3 IU/mL
Postmenopausal	14.2 to 52.3 IU/mL

Insulin

Around 50–70% of people with PCOS have insulin resistance, which plays a major role in how PCOS develops.

The insulin-androgen link: Higher insulin levels are closely tied to higher testosterone levels in PCOS.

What this means for ovulation: Insulin resistance lowers the liver's production of sex hormone binding globulin (SHBG).

The vicious cycle:

- Less SHBG → more free testosterone in the body.
- More free testosterone → higher androgens, which keep the cycle going.

LH

In PCOS, the brain signals that control hormones don't follow the usual rhythm.

LH should rise just before ovulation to trigger egg release. Instead, LH levels can be high at random times in the cycle.

Too much LH can stop follicles from maturing properly. This makes ovulation and fertilization more difficult.



Typical Progesterone Blood Levels

Follicular Phase 0.1 to 0.7 ng/mL
Luteal Phase 2 to 25 ng/mL

Progesterone

In PCOS, progesterone levels are often low because ovulation doesn't happen regularly.

No ovulation → No corpus luteum (the leftover structure from the ruptured follicle) → No progesterone

Progesterone is essential for regulating cycles, preparing the uterine lining, and supporting early pregnancy. Low levels can mean irregular periods and fertility challenges.



Typical Estrogen Blood Levels

Premenopausal 10 to 300 pg/mL
Postmenopausal <10 pg/mL

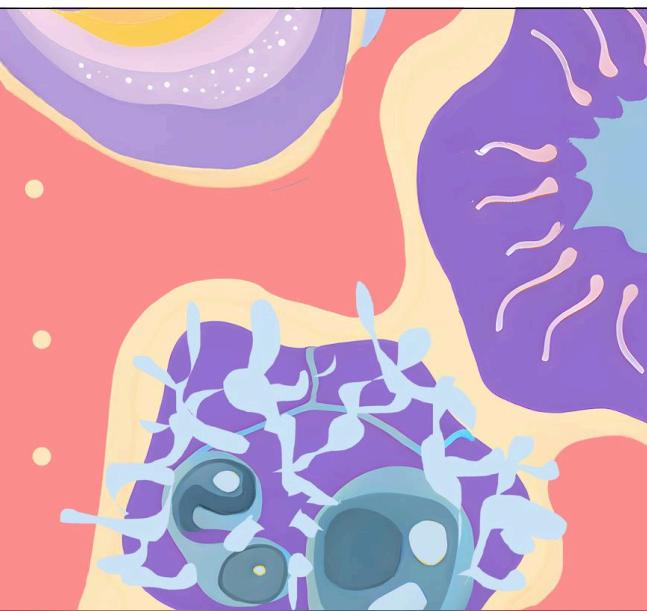
Estrogen

Estrogen levels in PCOS can vary. Sometimes low, sometimes normal, and sometimes elevated.

The bigger issue is because progesterone is often low (from lack of ovulation), the estrogen-to-progesterone ratio becomes unbalanced.

This relative increase in estrogen compared to progesterone is called estrogen dominance.

Estrogen dominance can affect cycles, increase PMS-like symptoms, and contribute to fertility issues.



Typical AMH Blood Levels

20–24 years: 0.478 – 15.7 ng/mL
25–29 years: 0.493 – 11.3 ng/mL
30–34 years: 0.256 – 9.72 ng/mL
35–39 years: 0.052 – 10.9 ng/mL
40–44 years: 0.030 – 6.76 ng/mL

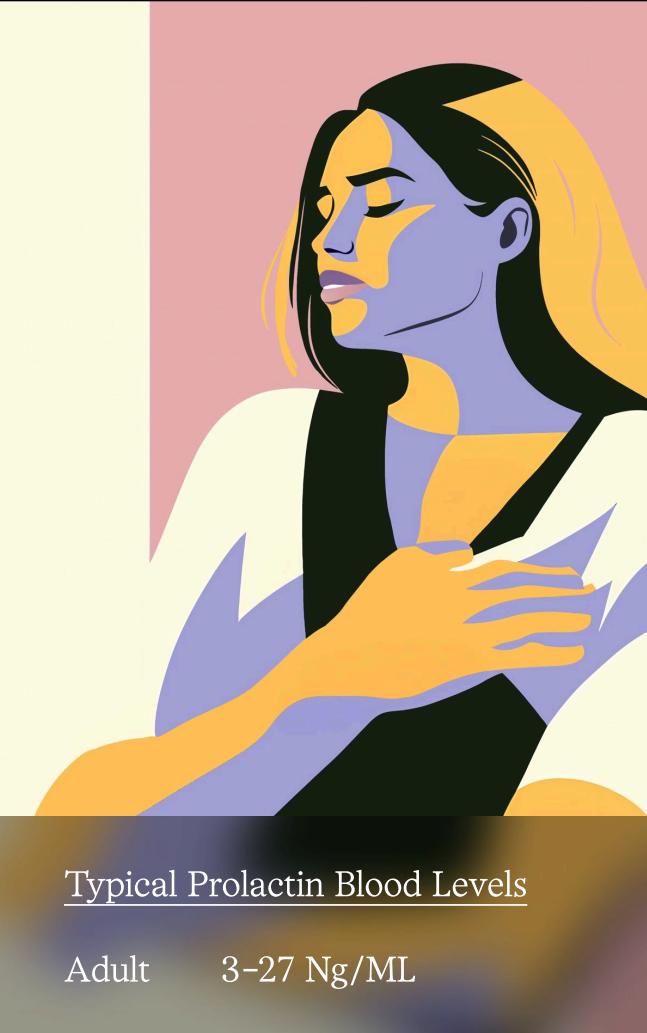
AMH

People with PCOS often have many small (antral) follicles in their ovaries. This leads to higher AMH levels than usual.

AMH is linked to the number of follicles, so it can be a useful marker when diagnosing PCOS.

The vicious cycle:

- Research shows AMH levels often match other diagnostic criteria for PCOS.
- In one fertility clinic study, over 97% of women with very high AMH (>10 ng/mL) had PCOS.



Typical Prolactin Blood Levels

Adult 3–27 Ng/ML

Prolactin

About 3 in 10 people with PCOS may have slightly higher prolactin levels in both the follicular and luteal phases. The exact link between prolactin and PCOS isn't fully understood.

- May be tied to insulin resistance
- May also relate to faster GnRH signaling from the brain

In PCOS, increases are usually modest, not extremely high.

Insights From Experts

One Condition, Countless Stories

PCOS is complex, but knowledge is power. The more you understand the science, the better you can back yourself up, make sense of your symptoms, and push for the care you deserve. Here's what experts explain, and how you can turn that into advocacy.

Why Weight Feels Out of Your Control

Dr. Alessia Roehnelt,
MD, Endocrinologist

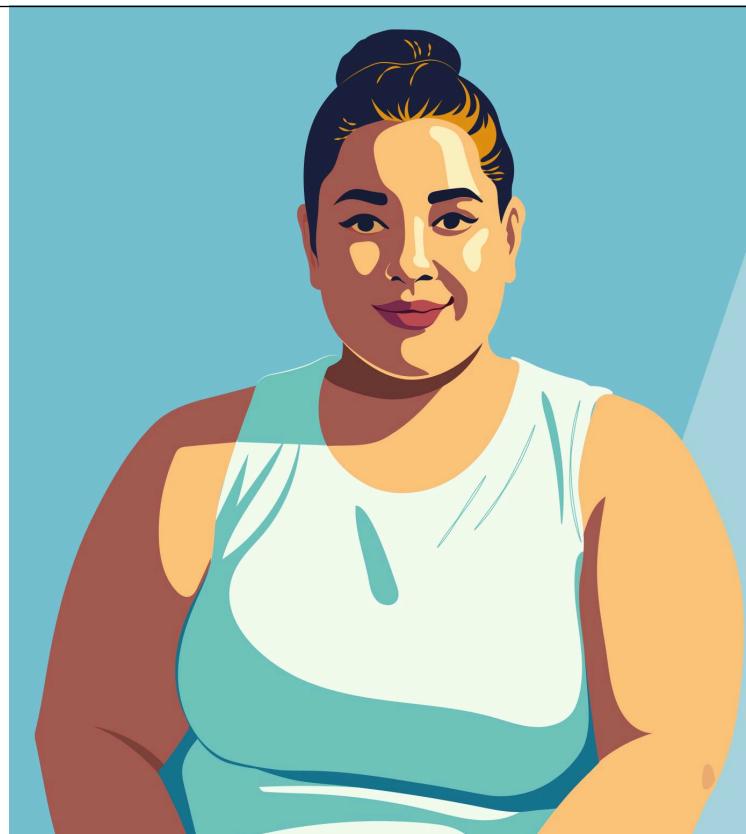
Insulin resistance and elevated testosterone can change how the body stores and uses energy, making weight shifts feel discouraging and often out of your control.

PCOS CAN SHAPE YOUR METABOLISM

Normally low in women, hormones like testosterone rise in PCOS. They overstimulate oil glands, causing acne, and can trigger unwanted facial or body hair while thinning hair on the scalp.

To better manage your health with PCOS, consider incorporating a few simple yet effective lifestyle changes.

Gentle movement, such as a 10–15 minute walk after meals, can help your body use glucose more efficiently.



BETTER MEALS + BETTER SLEEP = BETTER BALANCE

When eating, be sure to pair carbohydrates with protein and high-fiber foods; this slows digestion, stabilizes glucose levels, and prevents energy crashes.

Finally, prioritize restorative sleep, as poor sleep can raise cortisol and make it more difficult to regulate energy and weight.



When Skin and Hair Speak Hormones

Sisley Fraser, The Acne Nutritionist, R.H.N.

Skin and hair changes are a common sneaky symptom of PCOS - cystic acne, random chin hair growth - this can feel overwhelming!

EXCESS ANDROGENS

High androgens boost oil production, trapping bacteria and causing cystic acne, hair thinning, and unwanted hair growth. Insulin resistance worsens this by spiking insulin, which tells the ovaries to make even more androgens.

LOW PROGESTERONE

Low progesterone is super common in PCOS because of irregular ovulation, and leaves

estrogen unbalanced, often causing breakouts in the luteal phase (1–2 weeks before your period).

WHAT YOU CAN DO

- Sip spearmint tea or swap coffee for matcha
- Eat cruciferous veggies & wild fish
- Reduce stress with yoga & 9 hrs sleep
- Use HOCL spray under makeup to curb bacteria



When Hormones Steal Your Sleep

Rebekka Wall, Adult Sleep Consultant

Fatigue in PCOS isn't just about feeling tired — it's driven by a mix of hormonal, metabolic, and stress-related factors.

THE SCIENCE OF RESTLESS NIGHTS

High androgens (like testosterone) and low progesterone can disrupt natural sleep rhythms, making it harder to fall and stay asleep. Insulin resistance can trigger blood sugar fluctuations that lead to nighttime wake-ups and morning grogginess.

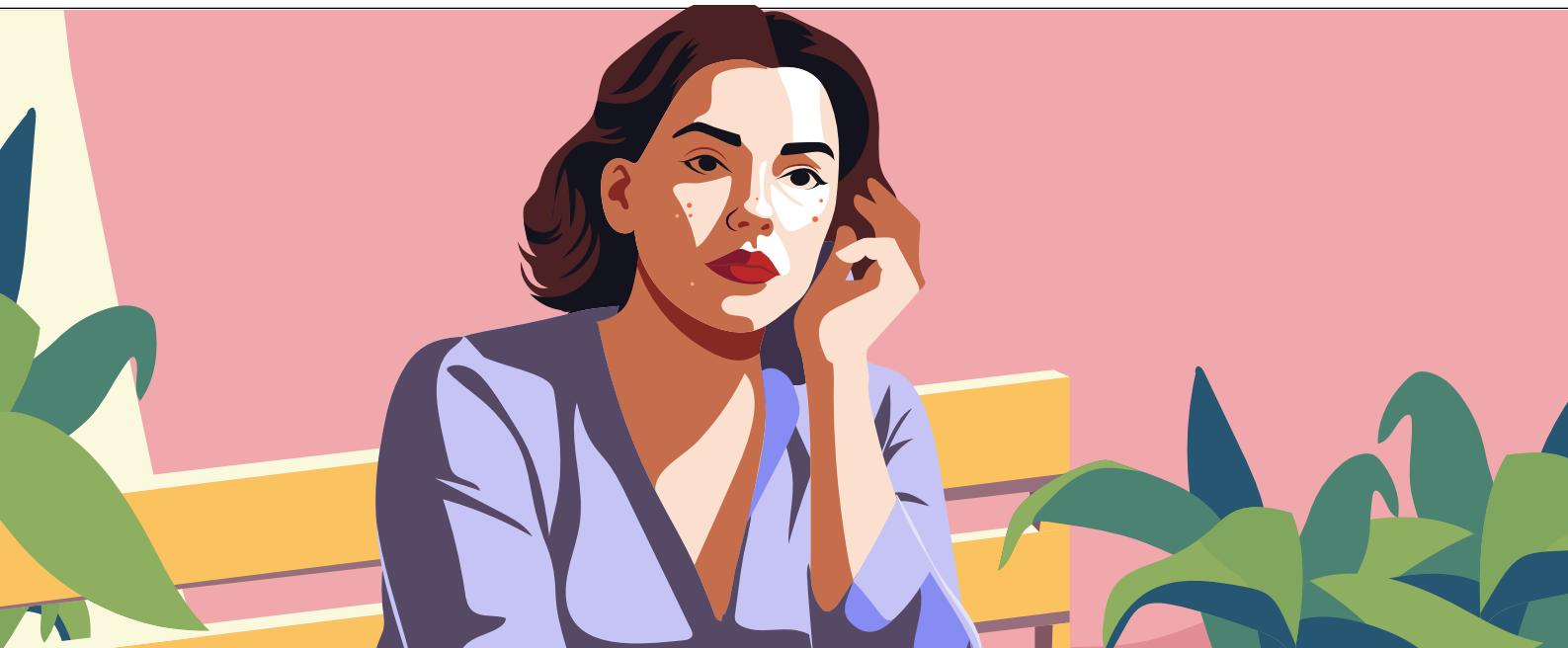
At the same time, elevated cortisol, the body's stress hormone, keeps the nervous system on high alert, preventing deep, restorative rest.

Many women with PCOS are also at higher risk for sleep disorders like obstructive sleep apnea, which causes repeated breathing pauses and fragmented sleep.

PROTECTING YOUR REST

Protect your sleep by limiting late-night scrolling, caffeine, sugar, and stress. Move daily, stay hydrated, and eat balanced meals with enough protein. Support your nervous system with breathwork, yoga, or meditation.

If you wake up gasping, snore heavily, or often wake at night to urinate, ask your doctor about a sleep study to rule out sleep apnea.



The Hidden Strain On Your Mental Health

Kelly McKenna, LCSW, MBA

Nearly 1 in 2 women said the mental health impact was the hardest part of their PCOS journey.

PCOS affects the brain as much as the body. Elevated androgens and insulin resistance can disrupt neurotransmitters like serotonin and dopamine, making women more vulnerable to mood swings, anxiety, and depression.

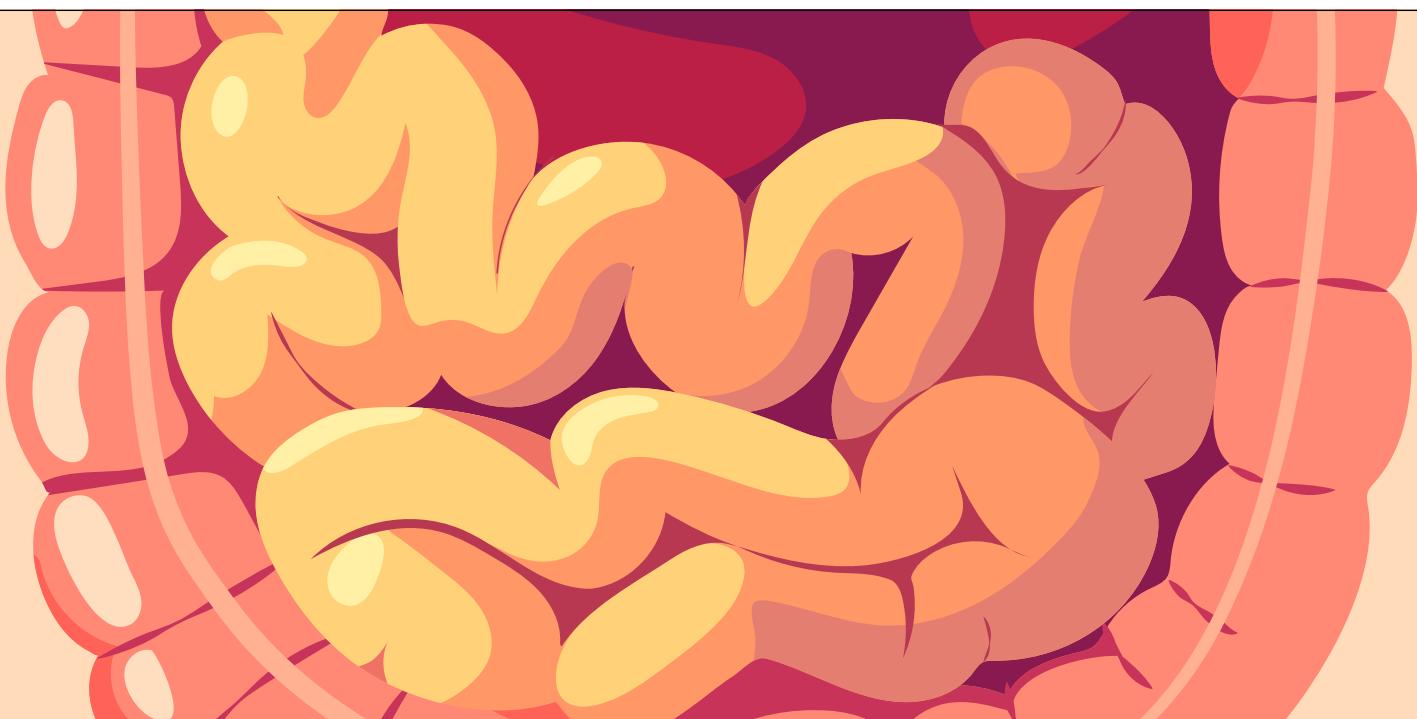
Visible symptoms like acne, hair growth, or weight changes can erode self-esteem, while fatigue and irregular cycles add another layer of stress.

Together, these biological changes and emotional strains create an invisible weight many women carry every day.

WHAT YOU CAN DO

Start by practicing self-compassion. Keep a journal to track mood patterns alongside your cycle, since noticing when dips occur can help guide treatment.

Explore mindfulness, breathwork, or therapy approaches like CBT (Cognitive Behavioral Therapy) or ACT (Acceptance and Commitment Therapy), which are proven to ease anxiety and negative thought cycles. And don't underestimate the power of community — connecting with others who understand PCOS can help lift the isolation and remind you that you're not alone in this journey.



How Your Gut Shapes Your Health

Kirsten Screen, Registered & Licensed Dietitian (RD, LD)

Digestive issues are one of the most common complaints with PCOS. Nearly 1 in 2 women we surveyed reported bloating or gut discomfort.

The gut is deeply linked with hormones and immune health. Your intestines are home to trillions of microbes that digest food, regulate hormones, and support immunity. PCOS reduces microbial diversity, and when this balance is disrupted, it can lead to bloating, fatigue, and symptom flare-ups.

Shifts in specific bacteria, such as increased *Bacteroides* and *Sutterella*, can worsen

inflammation, insulin resistance, and hormonal imbalances, creating a vicious cycle.

WHAT YOU CAN DO

Stay consistent with meal timing, since irregular eating can intensify bloating.

Kirsten recommends prioritizing hydration and soluble fiber, oats, chia seeds, and flax to support bowel regularity and reduce estrogen recirculation. Track digestive symptoms alongside your cycle: many women notice flare-ups during hormonal shifts. Sharing these patterns with your doctor can guide testing and the right next steps.



Food, Fatigue, and Cravings

Alyssa Pacheco, Registered Dietitian

INSULIN, PCOS AND WEIGHT

Start by practicing self-compassion. Keep a journal to track mood patterns alongside your cycle, since noticing when dips occur can help guide treatment.

Explore mindfulness, breathwork, or therapy approaches like CBT (Cognitive Behavioral Therapy) or ACT (Acceptance and Commitment Therapy), which are proven to ease anxiety and negative thought cycles. And don't underestimate the power of community — connecting with others who understand PCOS can help lift the isolation and remind you that you're not alone in this journey.

CHANGES YOU CAN COUNT ON

Managing this isn't about strict diets or punishing routines. Pair carbs with protein, fiber, and healthy fats (like oatmeal with nuts and berries) to keep blood sugar steady.

Move consistently rather than intensely; even a short walk after meals makes a difference.

Prioritize whole, balanced foods over restrictive diets. And don't stress over "perfect" eating. Allowing a cheat meal now and then helps you stay consistent and avoid burnout.

The Diagnosis Gap In PCOS

An Interview with Dr. Alexandra Stiles

WHY DIAGNOSIS TAKES TIME

OBGYN Dr. Alexandra Stiles explains: “PCOS is heterogeneous. Some women have irregular cycles, others have regular cycles but don’t ovulate.” This variability, plus the fact that birth control can regulate cycles and mask symptoms, means many women may not learn they have PCOS until their late 20s, often when trying to conceive.

WHAT DOCTORS LOOK FOR

Doctors use the Rotterdam criteria: irregular cycles, elevated androgens (either through lab tests or physical signs like acne or excess hair), or polycystic ovaries on ultrasound. You need two of the three for a diagnosis. But not all cases follow the script. Lifestyle factors, stress, or birth control withdrawal can complicate the picture.

WHEN WOMEN KNOW SOMETHING’S OFF

Some symptoms are hard to miss: absent or irregular periods, acne, excess hair, or difficulty conceiving. Others are more subtle but worth mentioning to your physician: difficulty losing weight, hair thinning, or hair growth on the chin, chest, or back.

THE ROLE OF SELF-ADVOCACY

Diagnosis often moves faster when patients track cycles, symptoms, and medical history. Patients can also request labs that may help explain their symptoms: thyroid function, vitamin D, B12, iron, pre-diabetes screening, and cycle-related hormones.

Self-advocacy tip: phrase requests collaboratively, e.g., “Can we run these labs?” rather than confrontationally.



“There’s no one-size-fits-all approach”

Dr Alexandra Stiles, MD, OB/GYN

Getting The Care You Deserve

Hear from Dr. Lora Shahine, Reproductive Endocrinologist

It's not uncommon for women to feel dismissed or unheard when their symptoms are complicated and a clear answer seems out of reach. When your body isn't following the textbook, it can feel like solving a puzzle with missing pieces — and a medical system that doesn't always have the time to look for them. This guide is your tool for finding those pieces. It gives you the language and confidence to walk into any doctor's office and be heard.

WHAT TO TRACK?

Keep a detailed log. Note the start and end dates, cycle length (day one of one period to the next), spotting between cycles, and changes in flow or symptoms. This is a foundational piece of information.

- Acne: Is it new? Where (chin, jawline, back)? Is it cystic?
- Hair Growth: New or excessive hair on the face, chin, chest, or stomach.
- Hair Loss: Thinning on the scalp, especially at the front or top.
- Weight & Body Changes: Unexplained gain or difficulty losing weight, especially around the midsection.
- Mood & Energy: Persistent fatigue, anxiety, or depression, which can be linked to hormonal imbalances.
- Family History: Any history of irregular periods, diabetes, or PCOS in close relatives.



WHAT TESTS TO ASK FOR IF YOU SUSPECT PCOS?

When a patient tells me, “I’ve been tracking these symptoms and suspect PCOS. What tests do you recommend?” I’m happy to order the right labs. A clear diagnosis means getting a:

- Hormone Panel: Total and Free Testosterone, DHEA-S, LH, FSH, Prolactin. Elevated androgens or an abnormal LH:FSH ratio can point to PCOS.
- Metabolic Panel: Fasting glucose, insulin, lipid panel.
- Thyroid Panel: Check TSH to rule out hypothyroidism, which can mimic PCOS.
- Transvaginal Ultrasound: Looks for small, pearl-like follicles or increased ovarian volume. These are not true cysts, but part of the diagnostic criteria.

Diagnosis can take time and may not happen on the first try. But with preparation, data, and persistence, you’re better equipped to get the answers you deserve.

HOW TO TALK TO YOUR PROVIDER

- Be Direct and Prepared: “Doctor, I’ve been tracking irregular periods, weight gain, and acne. I suspect PCOS and have notes to share.”
- Bring Your Data: Notes, charts, or app logs show patterns that help me diagnose faster.
- Ask Open-Ended Questions: Instead of “Do I have PCOS?” ask: “Based on my symptoms, what are the next steps?” or “Can we order blood tests and an ultrasound?”
- Advocate for Yourself: If dismissed, say: “I’m concerned about these symptoms and want clarity. Can you explain why you’re hesitant to order tests?”
- Take Notes and Ask for Clarity: Write down the tests, what they’re for, and follow-up instructions. Ask for terms to be explained simply.

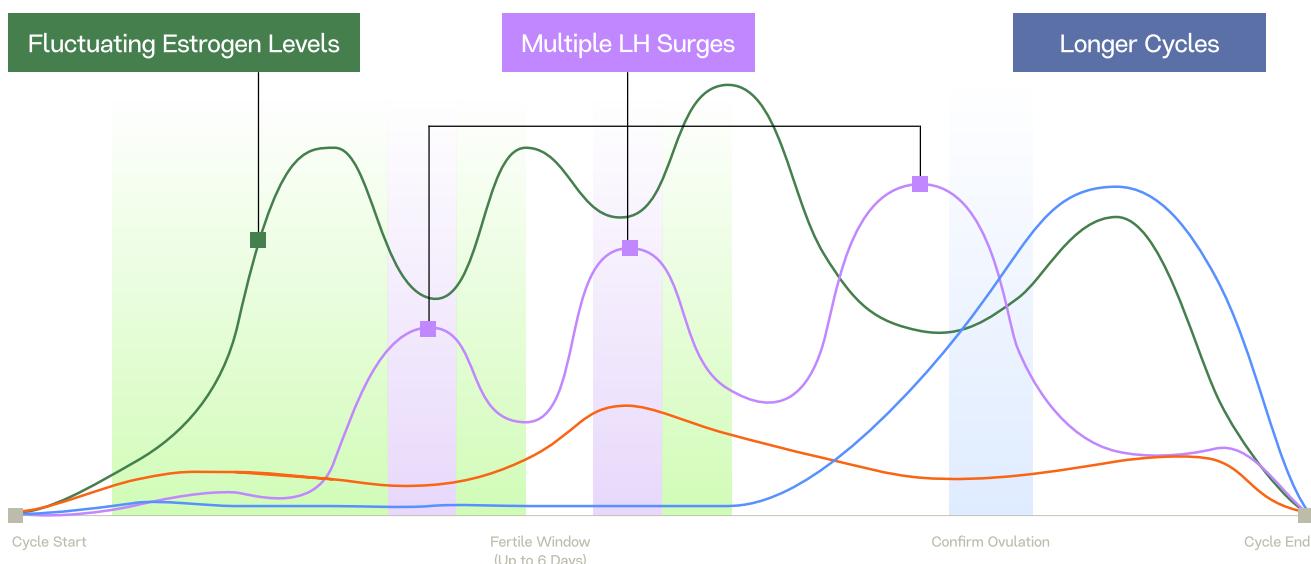


From Confusion To Clarity

Tracking Hormones With Inito

For many with PCOS, cycles feel like a puzzle with missing pieces. LH levels stay high, estrogen rises and falls unpredictably, and ovulation often doesn't happen. Standard ovulation tests can't capture this nuance—they measure only LH, leading to constant false positives.

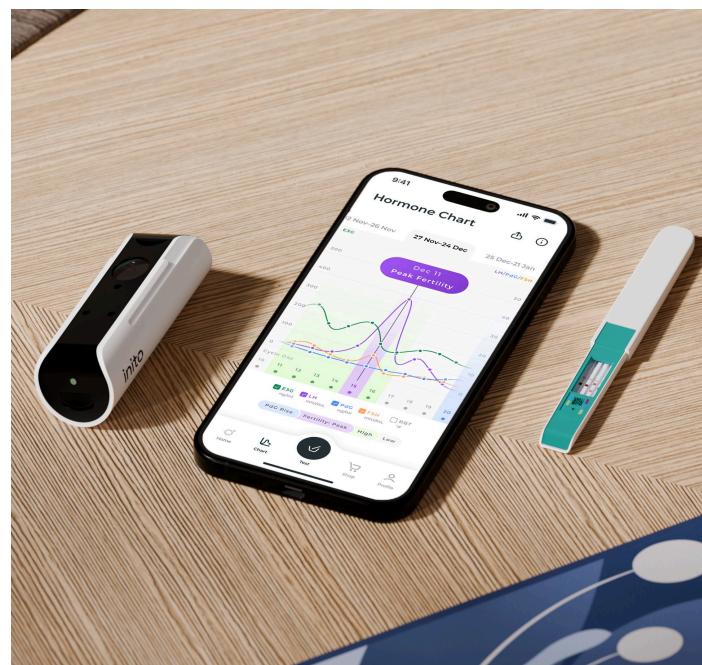
That's where Inito changes the story. Instead of guesswork, you get lab-grade hormone data right at home. Inito maps your hormones into clear, personalized charts by measuring Estrogen, LH, and FSH to spot your fertile window, and PgD (metabolite of progesterone) to confirm ovulation.



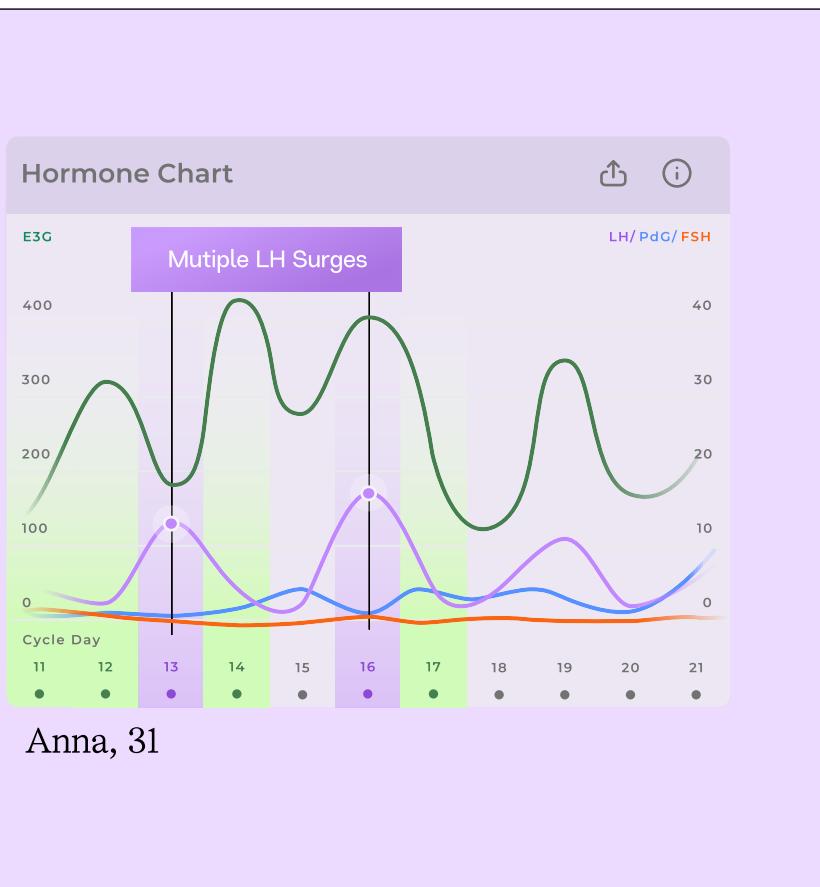
This visibility matters. Nearly 9 in 10 women with PCOS experience anovulatory cycles.

While Inito doesn't diagnose PCOS. What it does is give you the data to see how your hormones are behaving, so you can have better, more informed conversations with your doctor.

PCOS doesn't follow one script. Two people may share the same diagnosis, but their hormone scan look completely different.



With PCOS, hormones can rise, dip, or plateau in different ways. That's why no two charts ever look the same. Here are a few common patterns from Inito users. Every chart shared is with the user's permission.



Anna, 31

Irregular Cycles

Her cycles don't follow the "classic" pattern.

Instead of one LH surge before ovulation, she gets random spikes throughout her cycle. She falls into the 60% of women with PCOS who experience this irregularity.

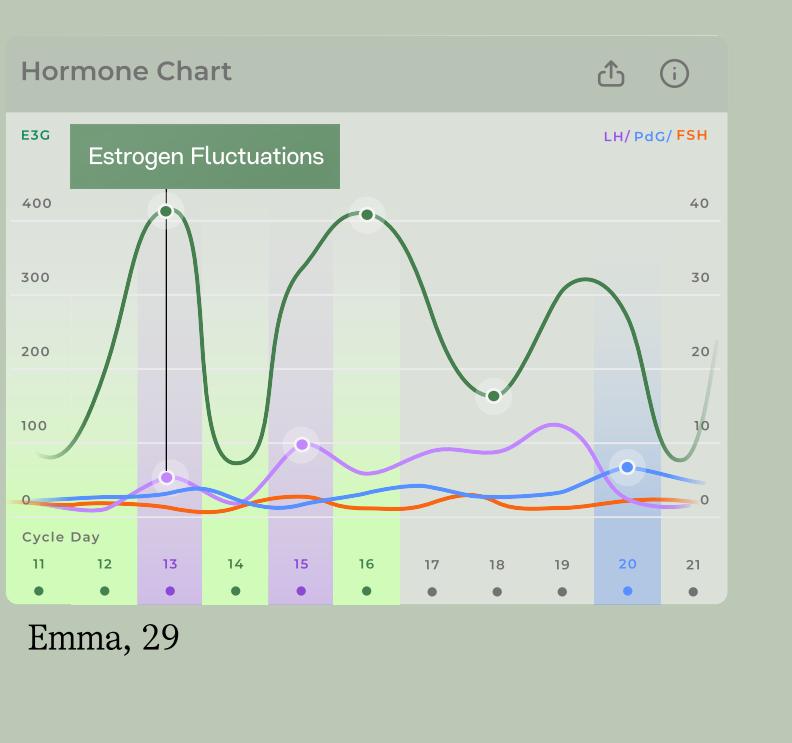


Dove, 26

Long Cycles And Late Ovulation

Her cycle stretches over 40 days, sometimes longer.

Ovulation comes late, if at all. She's part of the 85% who experience cycles lasting more than 35 days.



Fluctuating Estrogen

Her estrogen levels rise and fall unpredictably, triggered by excess androgens and disrupted hormonal feedback. For her, that means irregular periods and mood swings that don't fit a neat pattern.



Anovulatory Cycles

She gets periods regularly, but her cycles are anovulatory. That means no egg is released.

PCOS is linked to 9 out of 10 cases of anovulatory infertility.

Your hormones tell a story that symptoms alone can't. By tracking the shifts, you start to see patterns. And those patterns can help you make sense of your own PCOS journey.



Try Inito

Keep Going, You're Not Alone

Resources & Tools

If you've made it to this page, you're already doing the hard work: reading the signs your body gives you, turning confusion into clarity, and arming yourself with tools and language that matter.

MORE PLACES TO DIG IN

Inito's blog dives deeper into topics that matter when PCOS is part of your story:

Ovulation tests with PCOS?

They can mislead if used alone.
Learn why [here](#).



Supplements & medications.

What's out there—from what helps, to what's hype.

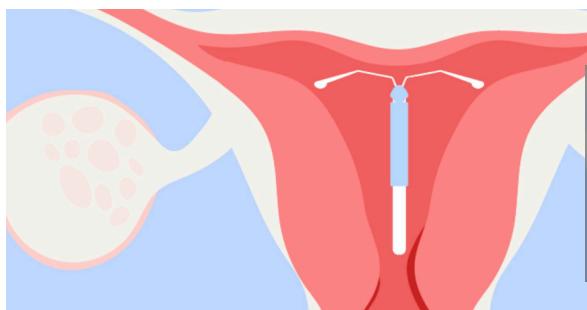
Pregnancy with PCOS?

It's possible. Read real strategies, timing tips, and what to expect.



Birth control and PCOS—myth or method?

Spoiler: It doesn't cause PCOS. Sometimes, it helps manage symptoms.



YOU DON'T HAVE TO GO IT ALONE

Remember: 1 in 3 women say they don't feel emotionally supported in their PCOS journey. That statistic doesn't have to define yours. There are real communities, online and offline, waiting with shared experience, advice, and empathy.

[Join the PCOS Community](#)

YOUR NEXT MOVE

- Bookmark Inito's PCOS blog and circle back whenever you want to go deeper.
- Keep tracking your cycles, your symptoms, and your energy.
- Take those notes into your next appointment—arm yourself with data and context, not just questions.
- Reach out to friends or groups that get it. Your story matters, and you matter.



inito

www.inito.com

