



HORMONES 101 FOR WOMEN

Your hormones, *explained.*

Why you're foggy on day 22 and unstoppable on day 13. What plastics, stress, and that one glass of wine actually do to you. A plain-English guide to the chemistry quietly running your life.



by *Julia Garrahan*

MASTER NUTRITION THERAPIST

10 MIN READ

For the curious





Welcome to volume *three*.

If you're new here, welcome. I'm Julia, a Master Nutrition Therapist, and the Wholara Field Guides are my way of taking the science I geek out about and turning it into something you can actually read on the couch.

This one is hormones. Specifically, women's hormones. Estrogen, progesterone, cortisol, thyroid, and a few supporting characters. The goal is not to make you a hormone scientist. The goal is to make you go, "oh, that's what's been happening to me."



Ten minutes. No charts you need a PhD to read. Just the basics, told like a friend who happens to know.

WHAT'S INSIDE

Five short *chapters*, ten honest minutes.

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CHAPTER 01

Meet your *hormone cast*.

Hormones are tiny chemical messengers that your body makes in one place and ships somewhere else to deliver instructions. Think of them as the group text that's running your entire body, all day, without your permission.

You have dozens of hormones. For the purposes of this guide, we're focusing on the five that most often show up in real-life "something feels off" moments for women. Once you know what these five do, the rest of the system starts to make a lot more sense.

● Estrogen

THE SPARK

Energy, confidence, sharp thinking, glow. Peaks mid-cycle. Makes you feel like the main character.

● Progesterone

THE CALM

Mellows you out, helps you sleep, balances estrogen. Rises after ovulation. The cozy one.

● Cortisol

THE ALARM

Stress hormone. Helpful in bursts. A disaster on full blast 24/7. Lives in your adrenal glands.

● Thyroid (T3/T4)

THE THERMOSTAT

Sets your metabolism, energy, body temperature. Tiny gland. Massive influence on how you feel.

And one bonus character.

● Insulin

THE STORAGE MANAGER

Manages blood sugar. When it gets dysregulated, every other hormone above tends to wobble too. (If you read Volume 02, you already know her.)

These five aren't separate departments. They're a group chat. If one is screaming, the rest can't think straight.

WHY THEY ALL MATTER AT ONCE

The group chat *theory*.

Here's the thing nobody really explains: your hormones don't work in isolation. They're constantly talking to each other. When one goes off the rails, the others scramble to compensate, which often means they go a little off the rails too. This is why "fix your thyroid" or "balance your estrogen" rarely works as a standalone project.

A few examples of how this plays out in real life:

1 Cortisol bullies progesterone.

Your body actually makes cortisol and progesterone from the same starting material. When you're chronically stressed, your body prioritizes cortisol and steals from the progesterone supply. The result? Worse PMS, worse sleep, more anxiety in the luteal phase. Stress isn't just "in your head." It's literally rearranging your hormones.

2 Insulin disrupts estrogen.

Chronic blood sugar chaos drives up insulin, which can drive up testosterone in women, which can throw off estrogen and progesterone balance. This is part of why blood sugar work shows up in conditions like PCOS.

3 Thyroid touches everything.

A sluggish thyroid slows down your whole system, which slows down how you metabolize estrogen, which can lead to estrogen building up. Same dance in reverse if your thyroid is too fast.

THE WHOLE BOOK IN ONE LINE



You can't isolate one hormone and "fix" it. You support the system. The body is a group project, not a vending machine.

CHAPTER 02

Your cycle in *four acts*.

Most of us learned about periods in 30 minutes in a middle school gym class and never got the full picture. Here's the full picture, in plain English. Day 1 is the first day of your period.

Menstrual **DAYS 1 TO 5**

The reset. Couch and a heating pad weather.

Estrogen and progesterone are at their lowest. Energy and mood often dip. Your brain is literally working with less of the chemicals that usually power it. This is biology, not laziness. Be gentle.

Follicular **DAYS 6 TO 13**

The rise. You're funny again.

Estrogen starts climbing. Energy, mood, and motivation come back online. Brain MRI studies show estrogen boosts activity in the hippocampus (memory) during this phase. This is your best week for hard projects, hard conversations, and hard workouts.

Ovulation **DAY 14ISH**

The peak. Main character energy.

Estrogen hits its high. Studies show better verbal memory, social cognition, and confidence in this window. You feel like you. The day-13 you that your friends miss when you've been buried in deadlines for three weeks.

Luteal **DAYS 15 TO 28**

The slow exhale. Then the storm.

Progesterone rises first (calm, cozy, sleepy). Then in the second half, both estrogen and progesterone drop. This is when brain fog, irritability, and the famous "why am I crying at a commercial" energy show up. Research links this drop to a measurable dip in serotonin too.

LIVING WITH THE CYCLE

Day 13 you and day 22 you are *different.*

One of the most freeing things I tell clients is this: you are not the same person every day of the month. And that's not a character flaw, that's chemistry. The same task that took 20 minutes on day 11 might take two hours on day 24. You did not get worse at your job. Your brain is just running on different fuel.

This is why journaling, tracking, or just noticing your cycle can be life-changing. Once you know your patterns, you can plan around them.

You don't need to push through the hard days like they're regular days. You need to know they're coming and build a softer landing.

A practical reframe.

Some women find it helpful to think about the cycle like four small seasons inside each month: winter (period), spring (follicular), summer (ovulation), and fall (luteal). You wouldn't try to plant tomatoes in winter or push through a marathon in August heat. You meet the season where it is.

If your hardest meeting is on a luteal day, that doesn't mean reschedule (though sometimes you can). It means: get extra sleep that week, eat protein-rich meals, skip the second glass of wine, and give yourself an hour of buffer time. You're not less capable. You're just running on a different chemistry that day.

A note: this cycle assumes a 28-day rhythm. Real cycles vary widely. If yours is wildly different month to month, very long, very short, or missing, that's worth a conversation with a clinician.

CHAPTER 03

When hormones go *sideways*.

A lot of women walk around thinking the way they feel is just their personality. Tired all the time, foggy after lunch, anxious for no reason, achy joints, weight that won't budge. Sometimes that is your personality. Often, it's chemistry asking for help.

None of these are diagnostic. They're just patterns I see all the time in my practice. If three or more of these sound like you, it's worth paying attention.

BRAIN

Brain fog

ENERGY

Always tired

MOOD

Mood swings

SLEEP

2 am wake-ups

CYCLE

Wild PMS

SKIN

Hormonal acne

BODY

Stubborn weight

BODY

Hair thinning

JOINTS

Achy joints

The brain fog & inflammation connection.

Here's something that surprised me when I first learned it. The "brain fog" that so many women report (in luteal phase, in perimenopause, after pregnancy, with thyroid issues) is often not just a hormone problem. It's an inflammation problem that hormones are driving.

Estrogen has anti-inflammatory effects. When estrogen drops, inflammation can rise. Cortisol, when chronically elevated, drives systemic inflammation. Thyroid antibodies (like in Hashimoto's, which affects women way more than men) are literally an inflammatory autoimmune response. The brain doesn't think well in a body that's quietly on fire.

*If your brain feels foggy, your body is probably trying to tell you something.
Inflammation is one of the most common somethings.*

A NOTE ON THYROID

The tiny gland with *massive* influence.

If I could get every woman to check on one thing in her body, it would be her thyroid. Especially if she has any of the symptoms from the previous page. Thyroid issues affect women roughly 5 to 8 times more often than men, and the most common one (Hashimoto's, an autoimmune condition) often goes undiagnosed for years.

Here's what your thyroid actually does. It's a butterfly-shaped gland in your throat. It produces two hormones (T3 and T4) that set the pace for almost every cell in your body. If your thyroid is sluggish, your whole body runs slow: tired, cold, constipated, foggy, hair shedding, weight not moving even when you're doing "everything right." If it's revved up, the opposite happens: anxious, racing heart, can't sleep, losing weight.

What to ask for if you suspect thyroid stuff

Standard doctor visits usually just check TSH. That's a starting point, not the whole picture. A full thyroid panel includes TSH, free T3, free T4, reverse T3, and antibodies (TPO and Tg). If you've been told "your thyroid is fine" but you still feel like garbage, ask for the full panel.

This isn't to scare you. It's to say: your body keeps the receipts. When something is off, the symptoms usually have a real biological story underneath. You're not making it up.

WORTH SAYING

You are not "just tired." You are not "just stressed." You are not "just getting older." Sometimes you are. Often, your hormones are asking for backup.

CHAPTER 04

The invisible things *messing* with you.

Your hormones don't operate in a vacuum. They're influenced, sometimes wrecked, by stuff in your environment that you'd never associate with your menstrual cycle. Knowing what these are is most of the battle.

Things that quietly affect your hormones

Plastics & receipts	BPA and phthalates are "endocrine disruptors." They mimic estrogen in your body and have been linked in meta-analyses to PCOS, endometriosis, and fertility issues. They live in plastic water bottles, food storage, receipt paper, and most cosmetics.
Chronic stress	Constantly elevated cortisol steals from your progesterone supply, throws off your cycle, and drives the inflammation we just talked about. "I'm stressed but it's fine" is, biologically, not fine.
Bad sleep	Most of your hormone repair work happens between roughly 10 pm and 2 am. Skip that window enough, and cortisol, insulin, thyroid, and sex hormones all get cranky. Bedtime is hormone hygiene.
Alcohol	Even a couple of drinks a week increases estrogen levels and reduces progesterone in studies. Plus, alcohol disrupts the sleep where your hormones rebuild. Sorry. Not the answer anyone wants.
Under-eating	Especially under-eating carbs and protein. Your hormones, especially thyroid and reproductive ones, need calories to function. Diet culture is one of the most common (and ignored) hormone disruptors I see.
Conventional cleaning & beauty products	Parabens, fragrance, synthetic dyes. Many contain endocrine-disrupting chemicals that absorb through skin. You don't have to overhaul your house overnight. Just start replacing as things run out.

A REALITY CHECK

You can't avoid *everything*. Don't try.

Here's the thing about endocrine disruptors. They are everywhere. They're in our water, our food, our air, our furniture. You will drive yourself insane trying to live in a hermetically sealed pod, and the stress of trying will, ironically, mess with your hormones more than the plastic you used.

Aim for "less," not "none." A few priorities that get the most return for the least effort:

3

swaps that matter most: water bottle, food storage, body lotion.

95%

of women in one large biomonitoring study had detectable BPA in their urine.

Drink water from a glass or stainless steel bottle instead of plastic. Store leftovers in glass instead of plastic containers (especially if you reheat). And switch your daily body lotion or face cream to something without fragrance, parabens, and phthalates. Those three swaps cover the highest-exposure routes for most people.

Everything else? Helpful, not urgent. Don't burn yourself out trying to be perfect about it.

Perfectionism is a hormone disruptor too. Just say no.

CHAPTER 05



Six small things that *actually* help.

No 90-day reset. No 47-supplement protocol. These are six things that, in my practice, move the needle more than almost anything else. Pick one. Do it for two weeks. Then add another.

1 Eat enough protein.

Especially at breakfast. 25 to 30 grams. Hormones are literally built from amino acids. If you're chronically under-eating protein, your body will protest in a dozen sneaky ways. This is the most-skipped, highest-leverage move there is.

2 Make sleep non-negotiable.

Aim for in-bed by 10 pm at least four nights a week. Your hormone repair window starts around then. One bad night is fine. Chronic late nights are slow hormone damage.

3 Walk most days.

Not crush a workout. Just walk. Movement helps clear estrogen, supports insulin sensitivity, lowers cortisol, and helps the lymphatic system drain. Twenty minutes outside, ideally in the morning, is more powerful than it sounds.

4 Eat the rainbow, especially the green.

Cruciferous vegetables (broccoli, cauliflower, cabbage, brussels sprouts) help your liver process and clear excess estrogen. Two to three servings a week is enough to matter.

5 Stop doom-scrolling at night.

Blue light and stress content right before bed pushes cortisol up exactly when it should be coming down. A real book, even a boring one, is better. Phones outside the bedroom changes lives.

6 Track your cycle.

Even just a note in your calendar. Knowing where you are in your cycle gives you context for everything else. "Oh, that's why I cried at the dog food commercial" is a real form of self-knowledge.



You're not *crazy*.

I want to leave you with the same thing I tell every client who walks into my office convinced something is wrong with them.

You are not too sensitive. You are not lazy. You are not making it up. Your body is a complicated, intelligent, hormonal symphony, and sometimes the conductor needs a little support.

You don't have to fix all of this. You just have to start paying attention. Once you understand what's actually happening in there, the whole thing gets less scary and a lot more navigable.



If you want help building a real plan that takes your specific hormones, cycle, and life into account, that's exactly what Wholara is here for.

Be good to yourself.

Julia

Wholara

PERSONALIZED NUTRITION · REAL SCIENCE

Your body has been talking. *Time to listen.*

Hormones are the quiet drivers behind your energy, focus, mood, weight, and sleep. When they're balanced, you barely think about them. When they're not, you feel it in everything. Wholara was built by a Master Nutrition Therapist to help women understand what their bodies are actually saying, and build sustainable, personalized plans that meet them where they are.

This guide is just the start. When you want support tailored to you, come find us.

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