FREE GUIDE · PERIMENOPAUSE

The missing link: how your gut could be driving your worst perimenopause symptoms

A symptom checklist, what the latest research shows, and practical first steps.

CHARMAINE SHEPHERD

Charmaine Shepherd
IFM Certified Functional Medicine Practitioner,
acupuncturist and biomedical scientist
4 Albyn Place, Edinburgh • and online

IS THIS YOU?

Something has shifted

You're in your forties or fifties, and it's not just the hot flushes or missed periods. Those you half expected.

It's the other things. The bloating that appeared from nowhere. Foods you've always eaten that now make you feel terrible. Brain fog like wading through treacle. Anxiety with no obvious cause. Cholesterol that's crept up. Blood sugar swings that leave you exhausted and ravenous by 3pm.

You've mentioned it to your GP and been told it's "just menopause". But these symptoms feel connected, even if nobody has explained how. **You're right to trust that feeling.**

The symptom checklist

Tick any that feel familiar, even if they've only started recently.

Digestive

- ☐ Bloating, especially after meals or for no obvious reason
- ☐ Constipation, or alternating constipation and loose stools
- ☐ New or worsening food reactions, such as to gluten, dairy or certain vegetables
- ☐ Reflux or heartburn that has worsened in recent years
- ☐ Heaviness or discomfort after eating

Metabolic & inflammatory

- ☐ Energy crashes, or feeling shaky if you don't eat
- ☐ Cholesterol that has risen without big diet changes
- ☐ Joint aches or stiffness that have appeared or worsened
- ☐ Skin changes: new sensitivities, redness or flares

Brain & mood

- ☐ Brain fog: difficulty concentrating, feeling slow
- ☐ Anxiety that feels as physical as it is emotional
- ☐ Low mood or mood swings that feel out of proportion
- ☐ Fatigue that sleep doesn't fix

If you ticked three or more, across more than one column, these may not be isolated symptoms. They may share a common thread, and that thread could be your gut.

Please see your GP about persistent bloating, especially with a change in bowel habit, weight loss, bleeding or feeling full quickly. These need checking before they're put down to hormones.[1]

1. NHS: Perimenopause symptoms: https://www.nhs.uk/conditions/perimenopause/symptoms/

THE RESEARCH

What the research is telling us

For decades, perimenopause has been treated mainly as a hormonal event. Oestrogen falls, symptoms follow, manage the hormones and you manage the symptoms. Emerging research tells a more complex and, in my view, more useful story.

In 2026, the *Journal of Clinical Investigation* published a study that followed **964 women** through the menopause transition, with repeated blood tests over time.[2] The researchers weren't simply comparing older and younger women. They tracked the same women as their hormones changed.

What they found. Markers of strain on the gut lining (FABP2) and of bacterial products reaching the bloodstream (sCD14) stayed steady until about **two and a half years before the final period**. They then rose for around nine years before levelling off. The pattern was similar across ethnic groups and body weights.

In functional medicine we call this **increased intestinal permeability**, which you may have heard called "leaky gut". It doesn't mean the gut is broken. It means a barrier that should be selective has become less discriminating, and a low-grade, sustained immune response can follow.

The study measured blood markers rather than symptoms, so it doesn't prove these changes cause any particular symptom. But it fits closely with what I see in clinic, and it matters because the immune system, brain, gut and metabolism are in constant two-way communication.

FIVE THINGS WORTH UNDERSTANDING

1 Oestrogen protects the gut lining, and that protection changes as it falls

There are oestrogen receptors throughout the digestive tract. Oestrogen helps maintain the gut lining, supports healthy gut movement and calms the immune response in the gut. As it falls, the environment in your gut changes, which is why many women say their digestion was completely reliable until their forties, then seemingly changed overnight.

2 Your gut microbiome shifts during menopause

The community of microbes in your gut is partly regulated by oestrogen. Its diversity and make-up change through the transition, affecting immunity, mood, metabolism and how you respond to foods. It works both ways: the microbiome also influences how oestrogen is broken down and recirculated. A less diverse microbiome can amplify hormonal symptoms.

2. Shieh et al. 2026, Journal of Clinical Investigation, gut barrier markers across the menopause transition: https://jci.org/articles/view/205059

3 A less effective gut barrier can drive inflammation

When the barrier becomes more permeable, fragments from the outer wall of certain gut bacteria can reach the bloodstream. The immune system responds, creating chronic, low-grade inflammation. This kind of inflammation is linked with fatigue, joint pain, brain fog, raised cardiovascular risk markers and mood changes. Sound familiar?

4 The gut–brain axis explains more than we once thought

Most of the body's serotonin is made in the gut, and the vagus nerve runs a continuous two-way line between gut and brain. When the gut is inflamed or out of balance, the messages reaching the brain change. That is one of the most plausible explanations for why anxiety and brain fog in perimenopause so often arrive alongside gut symptoms.

5 Blood sugar and cholesterol changes may have a gut component

Falling oestrogen affects how the body handles glucose and fats, and the microbiome plays a part in blood sugar control and fat metabolism too. This helps explain why diet changes alone sometimes don't move the numbers as you'd expect in midlife.

WHAT YOU CAN DO

Where I'd start

Eat a wide range of plants. The microbiome thrives on fibre from many different sources. Aim for 30 different plant foods a week: herbs, spices, nuts, seeds and pulses all count.[3]

Support your gut lining. Fibre feeds the bacteria that make short-chain fatty acids, which nourish the lining. Nutrients such as zinc and L-glutamine may help too, ideally guided by testing.

Include fermented foods if you tolerate them: kefir, live yoghurt, sauerkraut, kimchi, miso or kombucha. If they make bloating worse at first, that's worth investigating rather than a reason to avoid them for ever.

Reduce the common gut disruptors: ultra-processed food, excess alcohol, chronic stress and unnecessary antibiotics. Perimenopause isn't the time to push through stress; your gut will register it.

Consider testing if symptoms persist. A comprehensive stool test, gut permeability markers and nutrient testing can make diet and lifestyle changes far more targeted.

These steps sit alongside, not instead of, treatments such as HRT, which NICE guidance sets out.[4] I'm always happy to work with your GP or menopause specialist.

3. McDonald et al. 2018, mSystems, American Gut: plant diversity and the microbiome: https://journals.asm.org/doi/10.1128/msystems.00031-18
4. NICE NG23: Menopause, identification and management: https://www.nice.org.uk/guidance/ng23

NEXT STEPS

When self-help isn't enough

This guide is a genuine starting point, and for some women diet and lifestyle changes make a real difference.

But in clinic I regularly see women who've done all the right things, changed their diet, added the supplements and reduced stress as best they can, and still feel unwell. That isn't a failure of willpower or commitment. Often it reflects an underlying pattern that hasn't been identified because nobody was looking for it. That's the work I do with patients.

Join my workshop: The Menopause Journey

A live, small-group online session exploring the hormonal, gut, brain and lifestyle factors that shape perimenopause. For you if you're in perimenopause or post-menopause, feel you're managing individual symptoms rather than understanding the bigger picture, and want to understand your body, not just be handed a prescription.

See dates and reserve your place: charmaine-shepherd.com/events

Book a 1:1 functional medicine consultation

For complex or long-standing symptoms. We look at your full health history, review existing results and design a targeted plan for you. Start with a free 20-minute discovery call, by phone or video.

Book your free call: charmaine-shepherd.com/book · 0131 235 1232

About Charmaine

Charmaine Shepherd is an IFM Certified Functional Medicine Practitioner, acupuncturist and biomedical scientist with over 20 years of clinical experience and more than 3,000 patients seen. She works at 4 Albyn Place, Edinburgh, and online by video.

Edinburgh Health Limited is a private limited company registered in Scotland, company number SC586863. Registered office: 4 Albyn Place, Edinburgh EH2 4NG.

Important: this guide is for general education and isn't medical advice, diagnosis or treatment. Target ranges described here reflect a functional medicine approach and published research; they don't replace an individual assessment. Please speak to your GP or a qualified practitioner before starting supplements or changing any treatment, and seek medical advice promptly about new or worrying symptoms. © 2026 Edinburgh Health Limited.