



# **Perimenopause: Taming the Heat in this Proinflammatory Life Phase**

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# Introduction (1)

Perimenopause is more than just an endocrinological transition.

I welcome you to assess this transition as a **shift in neuro-immuno-endocrinology**.

**If we can regulate this hormonal transition better, by understanding its impact on the immune system, we can then better protect neurological health during perimenopause.**

**And through into menopause where the risks become even more serious and potentially long lasting.**

**We also need to...**

Change the **narrative** of Perimenopause – it is a significant **prelude** to Menopause. A distinct, very different phase to Menopause.

The very 'experience' of menopause' may be dictated or mapped out by Perimenopause.

# Introduction (2)

*“Although primarily viewed as a reproductive transition, the symptoms of perimenopause are largely neurological in nature.... a hypometabolic state associated with neurological dysfunction can develop”. (\*1)*

**Neurological symptoms that emerge during perimenopause are indicative of disruption in multiple oestrogen-regulated systems:**

Such as...thermoregulation, sleep, cognitive and sensory processing, mood, general psychology, neurotransmitter production and regulation and more. Significant nervous system dysfunction and 'stress'.

*For some women, this hypometabolic state might increase the risk of developing neurodegenerative diseases later in life.” (\*2)*

*“Emerging evidence is showing that peri-menopause is pro-inflammatory and disrupts oestrogen-regulated neurological systems...”. (\*3)*

# A Functional approach...

My expertise over 13 years of clinical work has focused particularly on gynaecological nutrition, with particular interest and specialism in 'immunologically challenged' disease.

Such as Endometriosis, Polycystic Ovarian Syndrome and immuno-endocrinological overlaps such as autoimmune thyroid disease. And of course, the fascinating perimenopause to menopause transition.

**Immune modulation = addresses hormone function/ stability**

**Hormone modulation = addresses immune function/stability**

**Hormone & immune modulation = addresses neurological, cognitive and psychological, & cardio-metabolic health.**

# Key Take Aways...

1. It's the trio of support...

- Oestrogen (and oestrogen metabolism) and other steroid hormone support
- Combined with neuro protective nutrition
- Combined with immunological support (anti-inflammatory support)
- Make sure you assess the cardio-metabolic picture

2. Application of hormone support and replacements (medical, natural, botanical).

3. Check inflammatory markers or associated markers NOT just hormones. E.g Ferritin, HBA1C, lipid peroxidase, thyroid antibodies, thyroid reverse T3, C-RP, organic acids, toxicity (environmental functional medicine) melatonin, cholesterol lipoproteins and more...

3. Methylation assessment: genetics, neurotransmitter production (nervous system health), regulation of inflammation, antioxidant production. Nutrition for methylation (folate, B12, TMG and so forth).

4. Other medicines or herbs to support - omega 3 (NF-KB (Nuclear factor kappa B) expression of cytokines regulated by, steroid hormone production) and Vitamin D are critical. We still have mass population low levels.

# Botanicals

Shatavari (*asparagus racemosus*)

Dong quai (*angelica sinensis*)

Black cohosh (*cimicifuga racemose*)

Saffron (*Crocus sativus L*)

Agnus castus (*vitex agnus castus*)

Ashwagandha (*withania somnifera*)

Siberian Ginseng (*eleutherococcus senticosus*)

Botanical Mushrooms

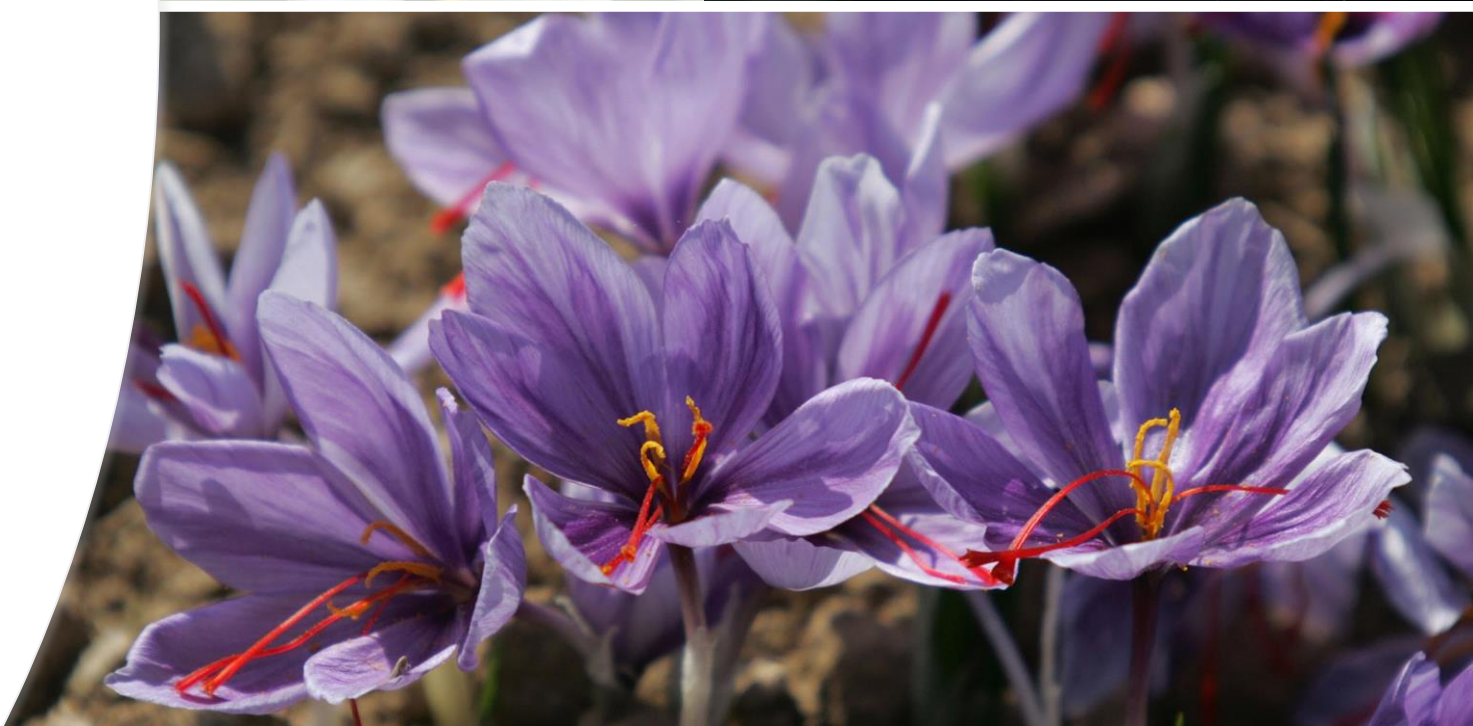
Nervous system herbs

Nootropics

Berberine (*hydrastis various*)

Echinacea

*Antioxidant plant sources*





Thank you for listening

As practitioners we all have opportunity to 'change' below what this study showed!

*A 2021 study commissioned by the UK government shows that of the 70% of those that experienced perimenopausal symptoms in their 30s and 40s, nine in 10 (90%) **failed to recognise the immediate link to their fluctuating and declining hormones, instead attributing symptoms to ageing, stress, anxiety or depression.***

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