

Meno.Well *Practitioners*

**MPowder**®

**Meno.Well** *Practitioners*

# Menopause & Gut health

How to support gut health during the  
menopause transition

With

Dr. Vera Martins, PhD, DipBSLM, MAMH, Naturopath & Herbalist

# Hello. We're MPowder

*A co-creation community of 17k+ women with a shared mission.*

Born out of personal experience, today we are a team of strategists, medical doctors, holistic practitioners, data scientists, nutritionists and naturopaths.

We work with our community to co-create data-informed products, services and programmes to nourish the body and mind through menopause.

# Our host tonight

Dr. Vera Martins, PhD, DipBSLM, MAMH, naturopath and herbalist, clinical lead MPowder.

- MSc in Plant Biology and PhD in Cancer Biology.
- Passionate about natural health, retrained as a Herbalist and Naturopath; certified Lifestyle Medicine practitioner
- Specialises in Women's health, perimenopause and menopause.
- Works alongside menopause specialist doctors.
- Clinical lead at MPowder, perimenopause and menopause co-creation community and supplement range.



# Tonights flow

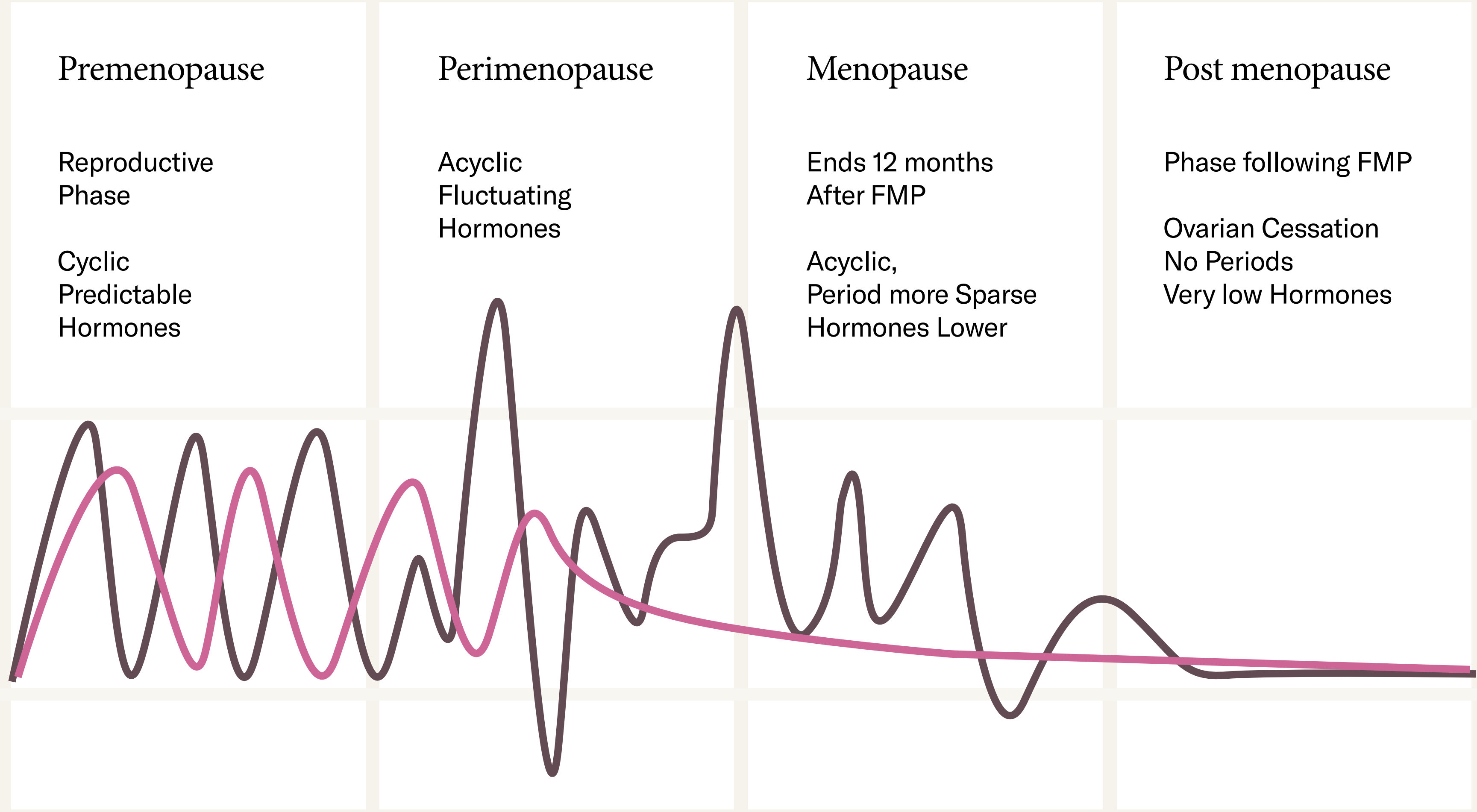
- Menopause & Gut health - the science behind
- Key botanicals and their different categories: science and application
- Naturopathic tools to consider
- The impact of a naturopathic lens in supplement formulation
- Case studies
- Key take aways

# How does menopause impact on gut health?

# Our hormones in midlife

## 3 Bio-chemical Stages

- Progesterone
- Estrogen



# Menopause & Gut health

- Common GIT symptoms in menopause include bloating, reflux, constipation and increased food intolerances.
- Increased incidence of gastroesophageal reflux disease (GERD) in perimenopause and menopause <sup>1</sup>.
- Bloating is the second most commonly reported symptom within our menopause community, affecting approximately 23% of women (*\*Data from Powder's consumer survey, n=5000+*)

Fatigue  
Anxiety  
Insomnia  
Low mood  
Bloating  
Weight gain  
Brain fog  
Hot flushes  
Skin changes  
Joint pains  
Low libido  
Vaginal dryness  
Night sweats  
Heart palpitations

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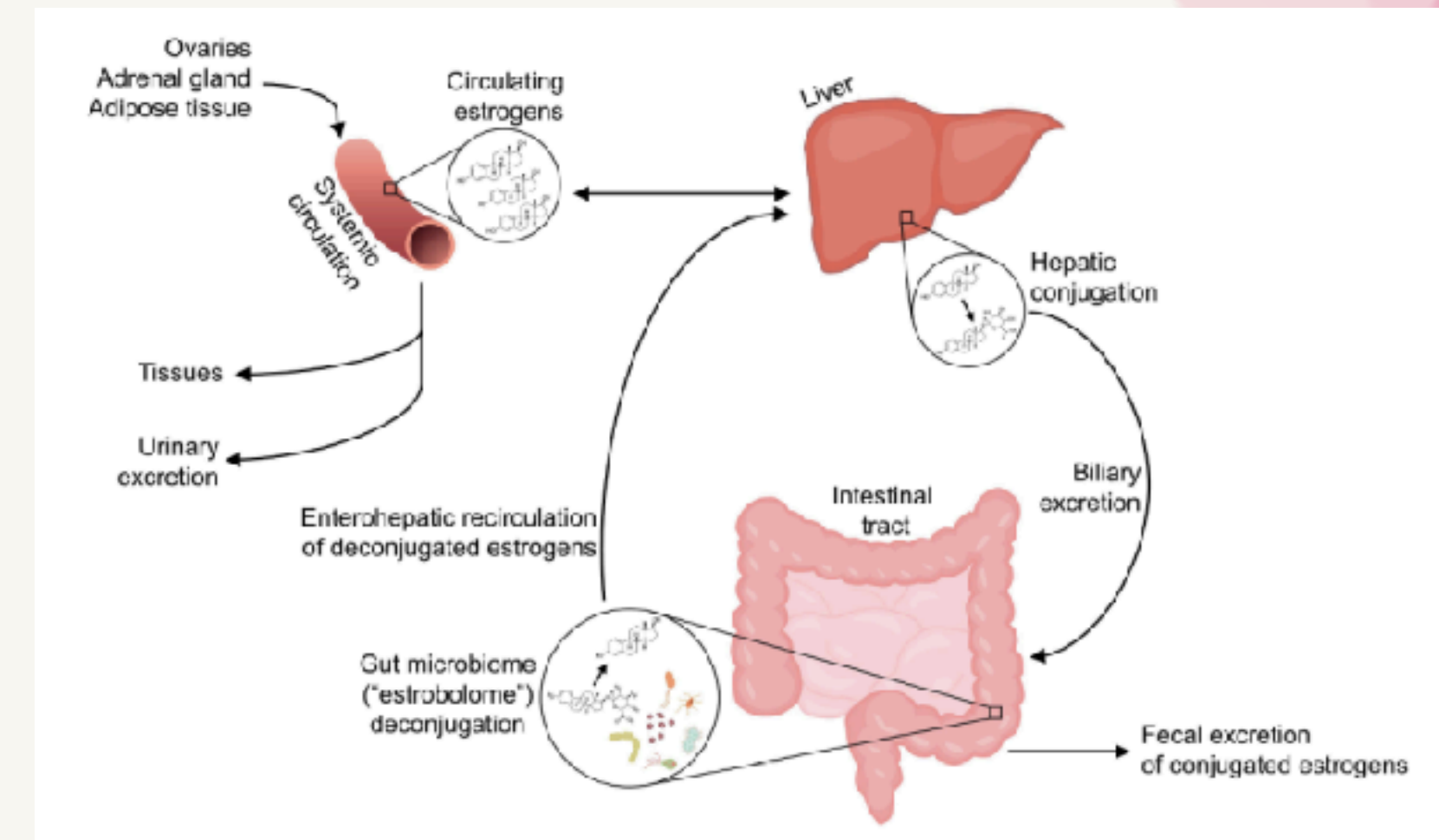


# Menopause & Gut permeability

- In animal models, lower levels of progesterone and oestrogen cause down-regulation of epithelial junction proteins and an increase in gut permeability, allowing for translocation of bacterial lipopolysaccharide - LPS and production of proinflammatory cytokines <sup>2</sup>.
- Conversely, also in animal models, 1) oestrogen protects mucous producing epithelial cells in the gut and 2) oestradiol and progesterone upregulate tight junctions <sup>3</sup>.
- *In vivo* data in pregnant women shows that progesterone decreases plasma LPS and *in vitro* data shows that progesterone decreases the inflammatory protein NF-κB in response to LPS and further decreases gut permeability by increasing the tight junction protein occludin <sup>4</sup>.
- Gut permeability increases during menopause and suggests a relation between gut permeability, inflammation and bone mass density - Pilot study, 65 women from SWAN study <sup>5</sup>.

# Menopause & the Gut microbiota

- Postmenopause women have a reduced microbiota diversity with an increased ratio of Firmicutes:Bacteroidetes, suggestion higher predisposition for weight gain <sup>6</sup>.
- In animal models, lower oestrogen levels can cause changes to the gut microbiota, to a profile that is associated with decreased metabolic rate, insulin resistance and increased central adiposity <sup>6</sup>.
- **“The sex hormone - gut microbiome axis”**: sex hormones influence the gut microbiota and conversely, changes in the gut microbiota affect oestrogen deconjugation and circulating levels. This is because some gut bacteria have the ability to deconjugate oestrogen - called the “estrobolome”. The same applies to progesterone and androgens <sup>3</sup>.



*Peters et al., 2022*

# Menopause & the Gut-brain axis

- Psychological and emotional symptoms of menopause: low mood, anxiety, poor memory.
- Short-chain fatty acids (SCFAs) produced by the microbiota can stimulate the sympathetic nervous system, mucosal serotonin release and influence memory <sup>7</sup>.
- A study of 54 menopausal women with vasomotor symptoms showed a significant decrease in *Bifidobacterium* and *Lactobacillus*, and an increase in opportunistic strains (*Klebsiella* and *Clostridiodes difficile*). The interaction is thought to be carried out by more than 30 neurotransmitters, endocrine mediators, metabolites (SCFAs), affecting hot flushes but also mood, anxiety, sleep <sup>8</sup>.
- A triple-blind randomised controlled trial with 66 postmenopausal women showed that consuming probiotic yogurt (with *Bifidobacterium lactis* and *Lactobacillus acidophilus*) improved reduced stress and anxiety, and improved quality of life <sup>9</sup>.
- A double-blind controlled trial with 80 menopausal women showed that a paraprobiotic of *Lactobacillus gassier* CP2305 (known to increase resistance to psychological stress) improved menopause scores, including sleep and vasomotor scores <sup>10</sup>.

# Menopause & Gut health

Review > [Int J Womens Health](#). 2022 Aug 10;14:1059-1072. doi: 10.2147/IJWH.S340491.

eCollection 2022.

## Spotlight on the Gut Microbiome in Menopause: Current Insights

Brandilyn A Peters<sup>1</sup>, Nanette Santoro<sup>2</sup>, Robert C Kaplan<sup>1 3</sup>, Qibin Qi<sup>1</sup>

- Menopause is associated with lower gut microbiome diversity
- More research is needed to learn about the impact on menopause-related disease risks
- A recent study in postmenopausal women showed that menopause-related microbiome alterations were associated with adverse cardiometabolic profiles
- The modifiable nature of the gut microbiome represents an exciting opportunity for improving menopause health<sup>3,11</sup>.

# Botanicals and naturopathic tools that work...

# Botanicals

## Carminatives

Prevent or relieve excess gas in the GIT, usually by relaxing intestinal smooth muscles

**Support:** dyspepsia including reflux and bloating, excess gas/flatulence and cramping

Ginger (*Zingiber officinale*)<sup>12-15</sup>

- Accelerates gastric emptying and stimulates peristalsis.

Fennel seeds (*Foeniculum vulgare*)<sup>16,17</sup>

- Calms digestion by encouraging relaxation of smooth muscles and helps reduce gas, bloating and stomach cramps.

Lemon balm (*Melissa officinalis*)<sup>18-21</sup>

- A mild relaxant with digestive properties; traditionally used in nervous dyspepsia (digestive issues linked to the nervous system and spasms).



# Botanicals

## Bitters

- Stimulate bitter receptors (BTRs) type 2 receptors (T2Rs), in mouth, stomach, gut, liver and pancreas.
- Promote healthy digestion by increasing digestive secretions and also bile secretion by the liver.
- Regulate GIT hormone secretion (ghrelin, GLP-1), postprandial glycemic and appetite <sup>22-25</sup>

**Support:** dyspepsia including bloating, excess gas/flatulence, constipation, liver detoxification, cravings

Artichoke leaf (*Cynara scolymus*) <sup>26-30</sup>

- Reduces dyspepsia and IBS symptoms: RCT, n= 247, AL extract significantly reduced symptoms of dyspepsia (QOL, NDI)

Dandelion root (*Taraxacum officinalis*) <sup>31,32</sup>

- Also a powerful antioxidant and blood sugar regulator

Gentian root (*Gentiana lutea*) <sup>33,34</sup>

- Regulates appetite and reduces heartburn



# Botanicals

## Demulcents

Produce a mucilage that protects mucosal barrier function, resulting in reduced inflammation and less sensitivity to gastric acids. This mucilage consists of a complex profile of polysaccharides with prebiotic properties.

**Support:** gut inflammation, constipation, reflux

Slippery elm inner bark (*Ulmus fulva*)<sup>35-37</sup>

- Demulcent herb with a strong tradition in supporting gut health
- Prebiotic and anti-inflammatory properties
- An interesting study demonstrates slippery elm's prebiotic properties by modulating the microbiota, which is the community of beneficial bacteria in the gut.

Marshmallow root (*Althea officinalis*)<sup>38,39</sup>

- Demulcent herb with a strong tradition in supporting gut health
- Prebiotic and anti-inflammatory properties





# Botanicals

## Herbal anti-microbials

**Support:** gut microbiota balance and address gut dysbiosis

- Berberine-containing herbs: Barberry (*B. vulgaris*), Oregon grape (*M. aquifolium*): anti-bacterial including *S. aureus*, anti-fungal (*Candida* spp.) and anti-viral; also regulate blood sugar levels <sup>40-42</sup>
- Garlic (*Allium sativum*): broad-spectrum anti-microbial, anti-viral and anti-fungal <sup>43</sup>
- Sweet Annie (*Artemesia annua*; constituents: artemisinin) and Black walnut hulls (*Juglans nigra*; constituents: juglone, tannins): traditionally used as anti-parasites



# Naturopathic tools

## Nutritional support:

- Anti-inflammatory/Mediterranean diet
- Reduce sugar, simple carbohydrates, UPFs and alcohol
- Probiotic foods (e.g. sauerkraut, kefir)
- Prebiotic foods (fibre-rich foods such as oats, flaxseeds and chicory root; antioxidants-rich foods such as berries and cacao; herbs such as slippery elm, marshmallow root)

## Cacao (*Theobroma cacao*)

- A RCT (n=48) demonstrates that dark cacao exerts prebiotic effect and improves gut microbiota diversity in association with improved mood and reduced anxiety - Gut-brain axis <sup>44</sup>

## Self-care tools for stress management:

- Good sleep hygiene (prioritise sleep, 7 hours minimum)
- Light therapy to reset the circadian rhythm - exposure to daylight AM & PM (circadian rhythm)void blue screens
- Breath work
- MeditationEmotional Freedom Technique (EFT)/Tapping

## Supplements to consider:

- L-glutamine <sup>45,46</sup>
- Zinc <sup>47,48</sup>
- Probiotics (e.g. *Saccharomyces boulardii*)
- But also magnesium and adaptogenic herbs to support the stress response

The impact of a naturopathic lens in  
supplement formulation.

# Introducing MPowder's Peri-Boost and Meno-Boost

Unique blends of wholefoods, botanicals, vitamins and minerals carefully selected to support the body during the distinct stages of perimenopause, menopause & beyond

## *The philosophy behind our blends*

- Designed to act as a foundation layer and be taken long-term
- Based on herbal synergy (e.g. red clover and slippery elm)
- Botanicals selected for their health benefits shown in clinical trials
- Wholefoods whenever possible for better bio-availability and extra health benefits (e.g. moringa)
- Conservative doses of ingredients but based on clinical trials (e.g. calcium, magnesium, iron)
- What's "missing" in our blends and why (e.g. black cohosh, vitex)

- Allows for flexibility if layering up treatment protocols
- Versatile, easily take as part of your morning routine, in a drink, smoothie or breakfast bowl
- Community studies and symptom tracking - learning from our community/continuous improvement - what works, what can be improved, how they take it and how we can help creating a habit (e.g. flavour, dose refinement)
- Not a silver bullet, every pouch comes with access to our community, expert events with topics voted on by our community, and a 1:1 support from our health concierge team, whenever you need
- Can be taken alongside HRT (always recommended to discuss with doctor first)
- Contraindications? History of hormone-sensitive cancers; if on several medications check with doctor
- Developed in collaboration with a naturopath and medical functional doctor

# Peri-Boost

## For perimenopause and women 40+

- 30 wholefood-led ingredients
- DracoBelle™ Nu (Moldavian dragonhead extract), to improve skin moisture, elasticity & density <sup>49</sup>
- Flaxseeds, a source of phytoestrogens and fibre to support oestrogen metabolism <sup>50</sup>
- Moringa, for healthy blood sugar and cholesterol levels <sup>51,52</sup>
- Organic cacao, to improve cognitive function, mood and reduce anxiety <sup>44, 53-55</sup>
- Cinnamon, for healthy blood sugar balance and weight management <sup>56-58</sup>
- Ginger root, for improved digestion and joint pain <sup>12-15</sup>
- Soya isoflavones, for hormone balance

- Deliver 7g of plant protein per serving
- Rich in antioxidants & minerals
- High in magnesium, to support the nervous system and sleep
- With vitamin B6 for hormone balance
- With zinc, selenium and iodine for thyroid function
- With vitamin D and K2 for bone health
- With vitamins A, E, C, B12 & methylfolate



**27% of women take  
alongside HRT**

\* MPowder's Peri-Boost ingredients are selected based on their minimal contraindications, minimal potential drug-herb and herb-herb interactions and long-term safety of usage, allowing for more flexibility when used as part of a clinical treatment protocol.

# Meno-Boost

## For menopause & postmenopause and women 45+

- 36 wholefood-led ingredients
- Ashwagandha KSM-66™ for hormone balance, to provide resilience to stress, reduce anxiety, support cognitive function and libido <sup>59-66</sup>
- Rosehip, a powerful antioxidant with anti-inflammatory properties, for bone health and joint pain <sup>67-69</sup>
- Maca, for hormone balance, reduced hot flashes, mood and improved libido <sup>70-75</sup>
- Lemon balm, for mood, anxiety and sleep <sup>18-21</sup>
- Pomegranate extract for reduced blood pressure, healthy cholesterol and blood sugar levels <sup>76-79</sup>
- Slippery elm bark, a demulcent herb with a strong tradition in supporting gut health, contains prebiotic and anti-inflammatory properties <sup>35-37</sup>

- Red clover, for hormone balance and reduced hot flashes <sup>80-83</sup>
- Cranberry to reduce the incidence of UTIs <sup>84-87</sup>
- Rich in antioxidants & minerals
- High in magnesium, to support the nervous system and sleep
- With chromium for healthy blood sugar levels
- With zinc, selenium and iodine for thyroid function
- With vitamins A, D, K, C, and complete vitamin B complex, including B6, B3 and methylfolate



**67% of women take  
alongside HRT**

\* MPowder's Meno-Boost ingredients are selected based on their minimal contraindications, minimal potential drug-herb and herb-herb interactions and long-term safety of usage, allowing for more flexibility when used as part of a clinical treatment protocol.

# Case studies

# Case study — 1

C.R. 49 years old, perimenopausal, regular cycles, on HRT (Estradot, Utrogestan)

- **Presenting symptoms:** fatigue, stomach pain and reflux after eating (on Omeprozale which would like to reduce/discontinue), constipation, and sugar cravings
- **Aggravating factors:** several years of dieting and focus on calorie-counting (would like to establish a healthier relationship with food), not eating any carbs, needs coffee (2-3 cups) when wakes up to “get going”
- **Treatment plan:** protein with every meal including breakfast, introduce complex carbs, reduce coffee intake and avoid it first thing in the morning; Peri-boost (start by increasing the dosage gradually) AM; additional gut support (herbal blend of marshmallow root and slippery elm – to reduce gut inflammation and sensitivity to acids), continue with meditation daily

Tests recommended – comprehensive gut health analysis, bloods (ferritin, vit B12, vit D)

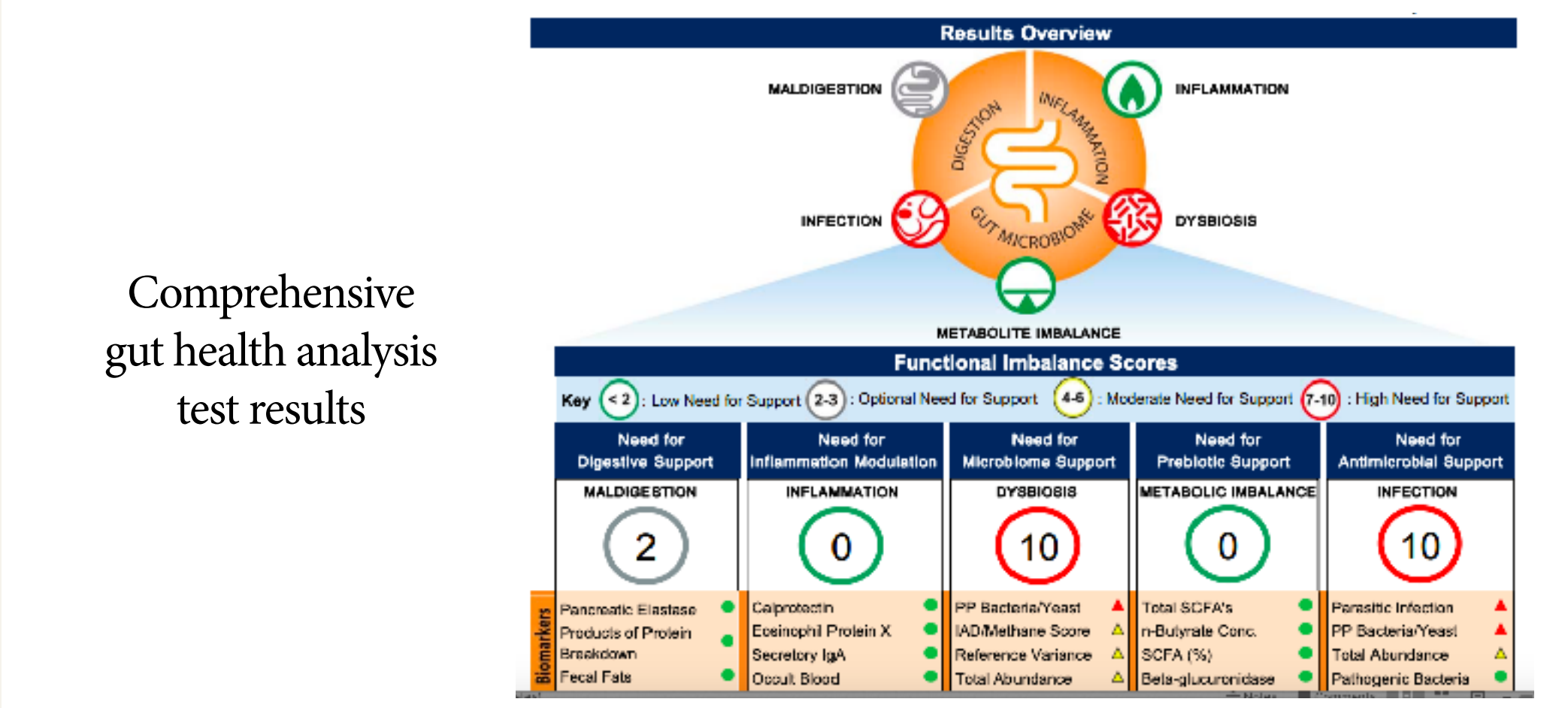


# Case study — 1 cont.

## Follow-up 1 (5 weeks later)

Dropped coffee intake from 3 to 1 daily, felt it was a significant change for her as she used to rely on coffee

Test results: low serum ferritin; Comprehensive gut health analysis -dysbiosis, infection including candida and parasites



- **Treatment plan**

Continue with plan as before + increase intake of iron-rich foods + probiotic foods + 5R protocol (broad-spectrum herbal antibacterial/antiparasitic/antifungal formulation including berberine, black walnut, gentiana, garlic + *S. boulardii* probiotic)

## Follow-up 2 (5 weeks later)

Pain in stomach and reflux have resolved and bowel movements are now regular (decided to discontinue Omeprazole under the doctor's supervision)

Fatigue has reduced significantly (90%) as well as sugar cravings (70%)

- **Treatment plan**

Continue with plan while reducing dosage of broad-spectrum herbal antibacterial/antiparasitic/antifungal formula and *S. boulardii* probiotic

## Follow-up 3 (5 weeks later)

Patient continues reporting good energy levels, good sleep, good digestion (and pain-free), one daily bowel movement, and sugar cravings are rare

Incorporated probiotic (*Lactobacillus* and *Bifidobacterium* spp.)

# Case study — 2

S.B. 59 years old, post-menopausal, on HRT

- **Presenting symptoms:** digestive complaints (bloating, reflux and constipation), painful joints, fatigue, weight gain, skin rashes, “not feeling like herself”
- **Aggravating factors:** low protein diet, sweeteners, UPFs, cholecystectomy years ago
- **Treatment plan:** protein with every meal including breakfast, remove sweeteners and reduce UPFs, add fermented foods, prebiotic foods and sourdough bread; Meno-boost (start by increasing the dosage gradually) AM; additional gut support (bitters & carminatives blend before main meals)

Waiting for coeliac test results prescribed by GP, as well ferritin, Vit D and B12

## Follow-up 1 (4 weeks later)

“Feeling 100% better”, digestive complaints significantly improved (no reflux, bloating and having a daily bowel movement), energy levels significantly improved, joint pains improved by 50%, skin rashes decreasing and lost 2 kg .

Feels the dietary changes were key, as started first with diet: became aware of amount of foods containing sweeteners, and added sugars she was consuming, enjoying a wholefood-based diet and introducing new foods like kefir

Test results all came back normal

- **Treatment plan:** continue as before, introduce a herbal blend (as an infusion) daily to further address inflammation/joint pains (devil’s claw, burdock, nettle and hibiscus)

# Case study — 3

S.T. 53 years old, history of BC, not on HRT, on Tamoxifen

- **Presenting symptoms:** fatigue, hot flushes, joint pains, poor sleep
- **Aggravating factors:** generally good diet but low in protein (has seen rheumatologist who recommended to follow a gluten-free diet, waiting for diagnosis), no apparent gut health issues
- **Treatment plan:** protein with every meal including breakfast, replaced industrial bread with sourdough; supplements: vitamin B complex, magnesium glycinate (to replace magnesium oxide) at bedtime; vits D & K; Omega-3

Recent blood tests showed borderline low levels of vit D but normal levels of iron, B12 and vit D, TSH, tTg-IgA and ANF

Tests recommended – complete thyroid function profile (TSH, free T4 and free T3), including Thyroid Peroxidase Abs (TPO) and Thyroglobulin Ab.

## Follow-up 1 (6 weeks later)

Sleep has improved significantly (thinks change in magnesium really helped); can still feel fatigued but recovering much quicker (thinks that having more protein in her meals is key for energy); hot flushes slightly better but still a concern; joint pains still a concern

Test results showed TPO > 1300 U/ml

- **Treatment plan:** continue as before, introduce L-glutamine & zinc, and a herbal blend of marshmallow root and slippery elm - gut barrier/autoimmunity link ; repeat thyroid function test in 3-4 months time

## Follow-up 2 (4 months later)

Fatigue has gradually improved (can do a full Pilates class, travel to work and needs shorter breaks to recover), joint pains have reduced significantly, hot flushes have resolved, sleep still very good.

Test results showed lower TPO (250 U/ml)

Would still like to work towards reducing fatigue further, no stress

- **Treatment plan:** continue as before, introduce cacao and moringa powders to improve energy levels (review in 3 months' time)

# Key take aways

- Recognise the wideness of menopause symptoms and therefore the value of an holistic approach to support them
- Due to emerging data linking gut health and menopause, the gut microbiota represents an exciting therapeutic target to improve symptoms and quality of life in menopausal women
- The role of herbal medicine and naturopathy in supporting gut health during menopause
- Its value alongside medical protocols and a 360° approach to the body and mind
- The power of the health practitioner as a facilitator and in empowering the patient
- Menopause as an opportunity to reframe life priorities and improve wellbeing

# Questions

# Working with us

Co-creation and collaboration in action:

How we can support you:

- A dedicated 1:1 support function
- Product sampling
- Event sponsorship
- Unique discounts for your clients
- Signposting your services to our community

How you can support us:

- Share our story and ambition
- Share our formulations - and share your clients' feedback
- Expert panel participation



Proudly listed at:



To learn more: Email: [sales@mpowder.store](mailto:sales@mpowder.store) / [clinicalsupport@mpowder.store](mailto:clinicalsupport@mpowder.store)

# MPowder®

MAKE MIDLIFE  
A SUPERPOWER



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