
MENOPAUSE IS HOT
RIGHT NOW
KELLEY MATHIA MD

When your perimenopausal rage kicks in

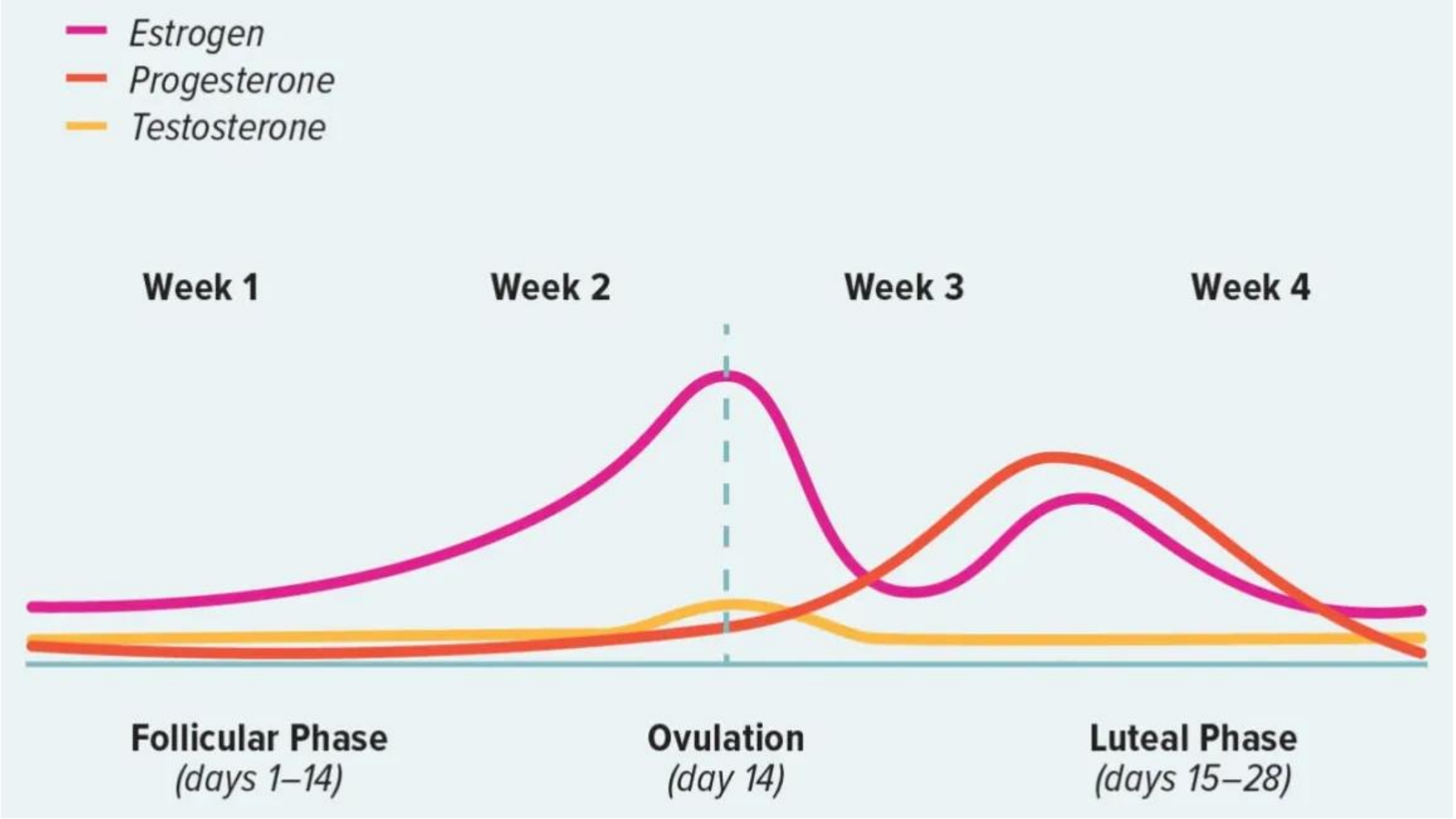
WHAT IS MENOPAUSE?

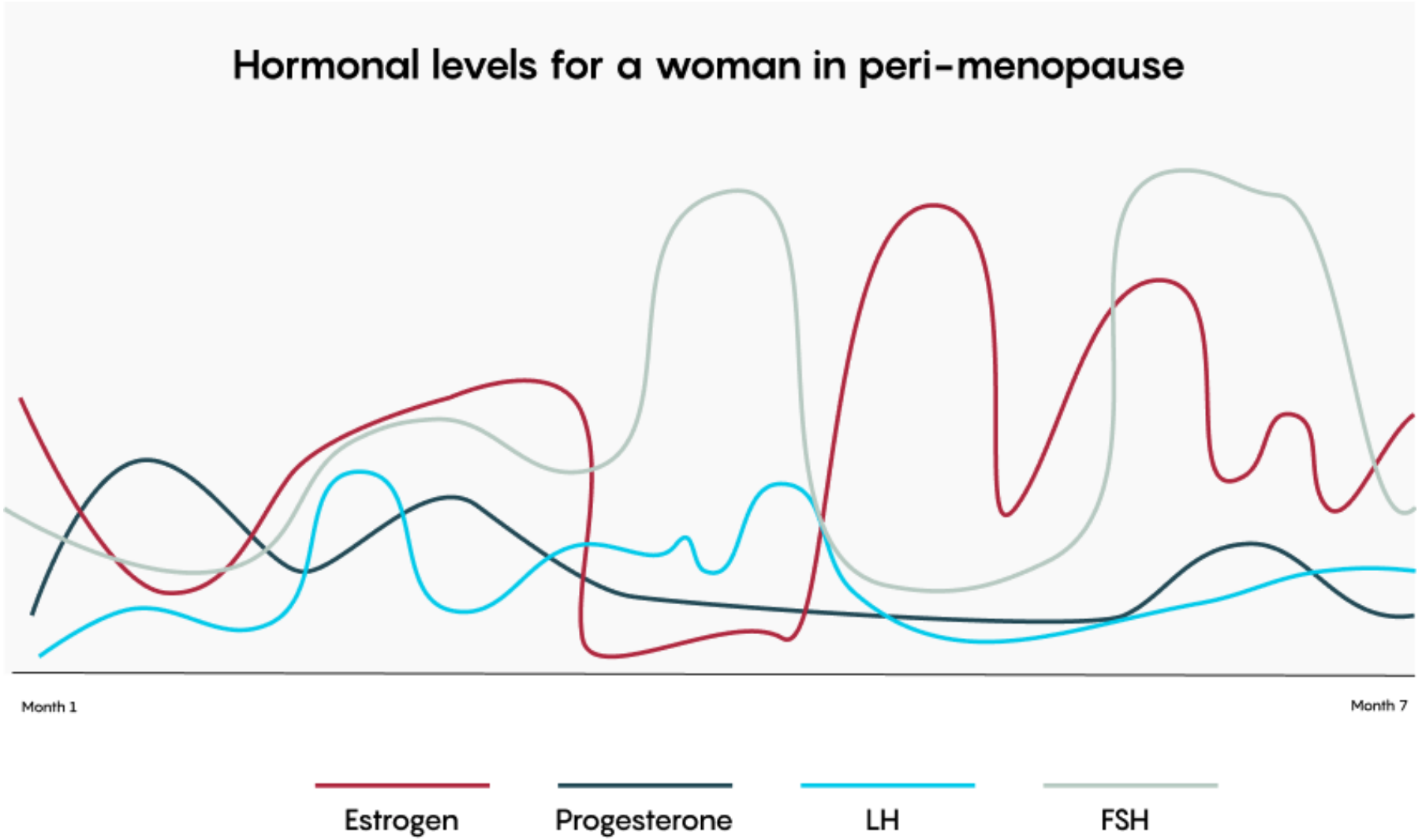
- **Menopause** – Mean age is 51 years
- **Perimenopause** – Mean age is 35 - 45 years old
- **Post Menopause** – Stage of life after menopause
- **Primary Ovarian Insufficiency** – Menopause that occurs before age of 40

WHAT IS HAPPENING?

Brief physiology overview:

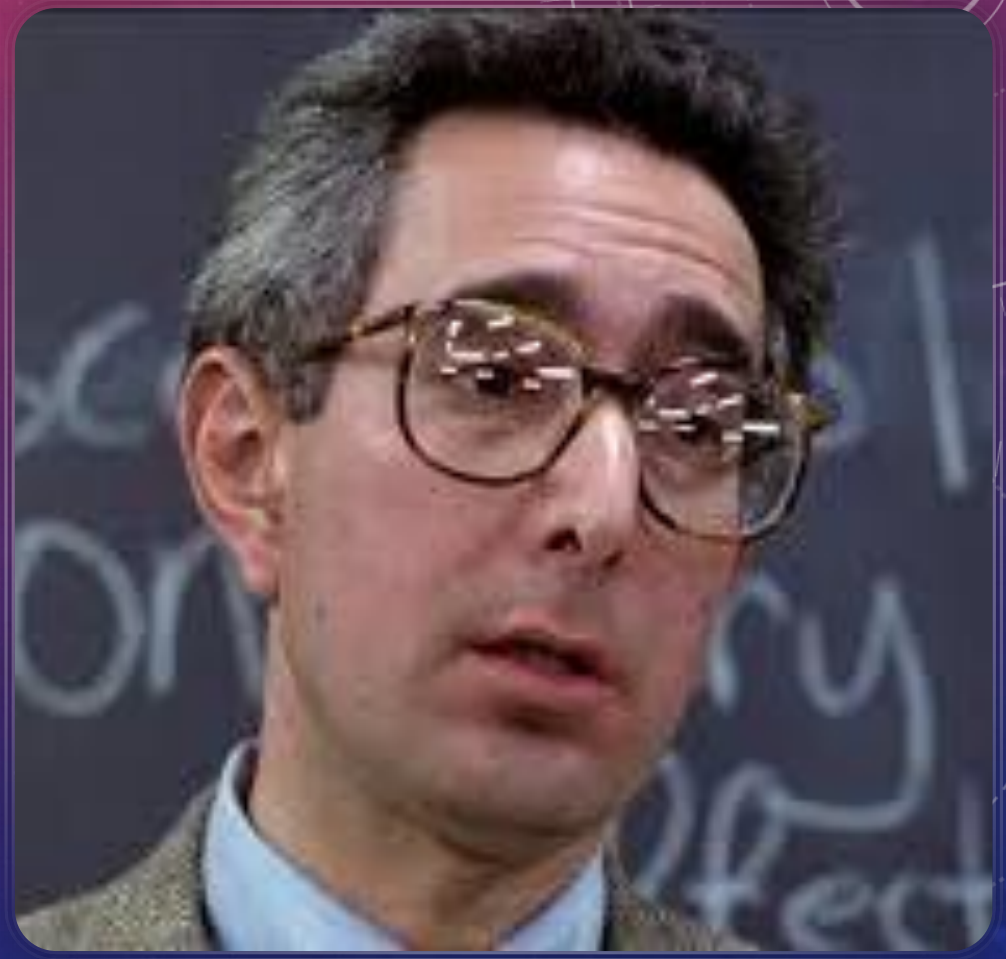
- At birth we have 1-2 million eggs
- By puberty we are down to 300-400 thousand eggs
- At menopause we have ZERO functioning eggs


Estrogen
Progesterone
Testosterone
Week 1
Week 2
Week 3
Week 4
Follicular Phase
(days 1–14)
Ovulation
(day 14)
Luteal Phase
(days 15–28)


Hormonal levels for a woman in peri-menopause
Month 1
Month 7
Estrogen
Progesterone
LH
FSH

HELLO? BUELLER? IS ANYBODY HOME?

- Aging eggs produce less estrogen, and the hypothalamus is less sensitive to estrogen
- GnRH from the HPO stimulates pituitary to increase FSH and LH
- Ovaries do not produce enough estrogen and progesterone
- Hot flashes, night sweats, irregular periods, moodiness, irritability, and other symptoms occur
- FSH levels vary during perimenopause
- Adrenal gland involvement increases cortisol



SYMPTOMS OF MENOPAUSE

Top 40 symptoms

1. Hot flashes
2. Cold flashes
3. Night sweats
4. Clammy feeling
5. Heart palpitations
6. Irritability
7. Mood swings
8. Trouble sleeping
9. Irregular periods
10. Low sex drive
11. Dry vagina
12. Fatigue
13. Anxiety
14. Depression
15. Lack of focus
16. Poor concentration
17. Faulty memory
18. Incontinence
19. Itchy, crawly skin
20. Achy joints, muscles
21. Tense muscles
22. Sore breasts
23. Headaches
24. Digestive issues
25. Bloating
26. Allergies worsen
27. Weight gain
28. Hair loss/thinning
29. More facial hair
30. Dizziness
31. Vertigo
32. Changed body odor
33. Electric shock feelings
34. Tingling extremities
35. Bleeding gums
36. Burning tongue/ roof of mouth
37. Chronic bad breath
38. Osteoporosis
39. Weakened fingernails
40. Ringing ears (tinnitus)

@THEMENOPAUSEROOM

TREATMENTS

The FDA has approved HRT to treat four conditions associated with menopause, there are many non-hormonal options as well, but none as effective as HRT

1. Vasomotor symptoms VSM
2. Bone loss – osteopenia leading to osteoporosis
3. Genitourinary Syndrome of Menopause GSM
4. Premature Hypoestrogenism – POI, surgical, chemo/radiation

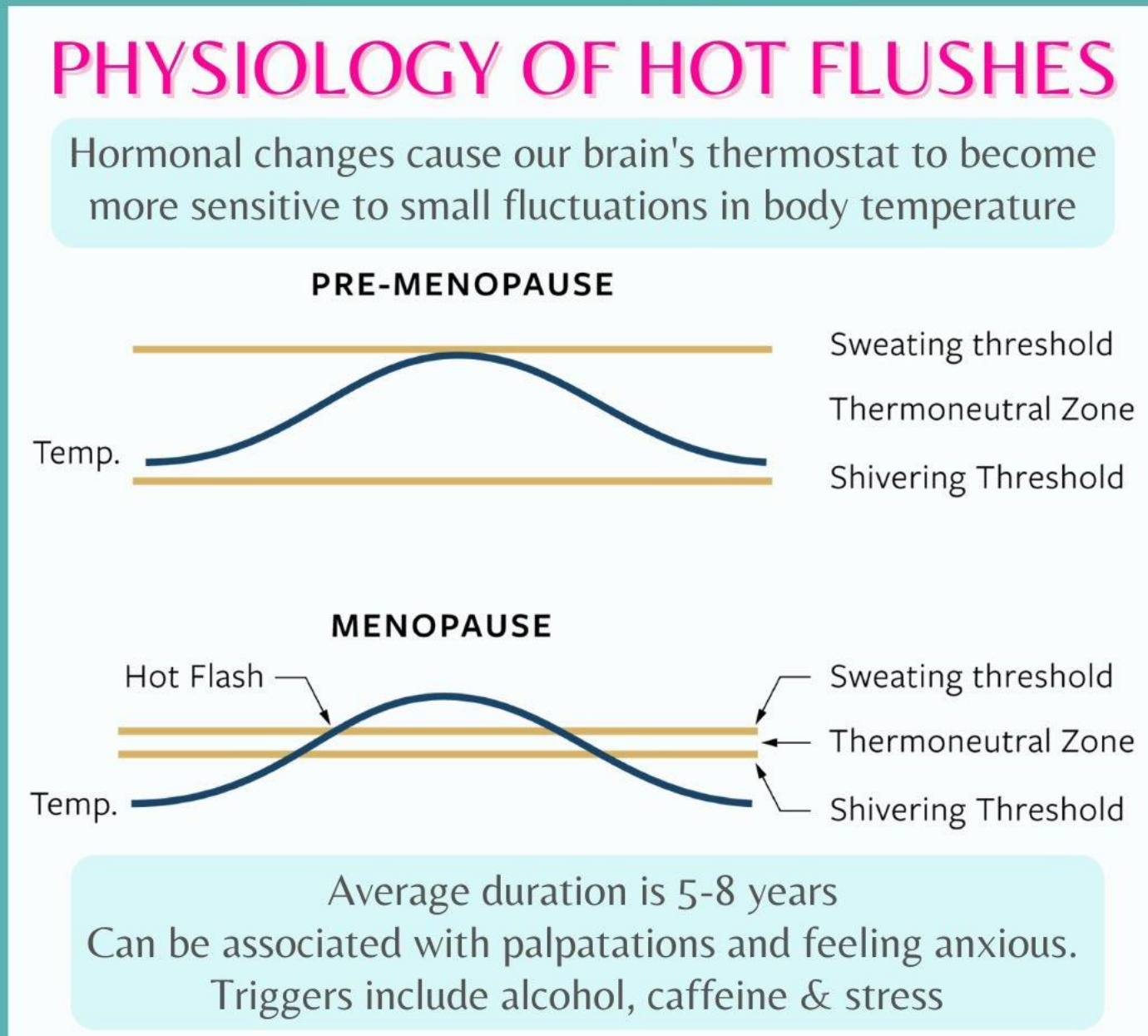
VSM

Thermoneutral zone narrows

Hot flashes are a sudden and intense feeling of heat in the upper body, chest, face, neck that can last 1-5 minutes

Night Sweats are HF that occur while sleeping

- Estrogen
- Veozah (NK3 receptor antagonist) Neurokinin B
- SSRIs
- Gabapentin
- Duavee (CEE/bazedoxiphene)
- Cognitive behavioral therapy



BONE LOSS

Osteopenia predisposes patients to increased risk of bone fractures, mainly hip and spine. Rate of loss highest during perimenopause, **2%/year** for up to 5 years. Followed by **0.05%/year**. The T-score can be decreased by **1** during the menopause transition

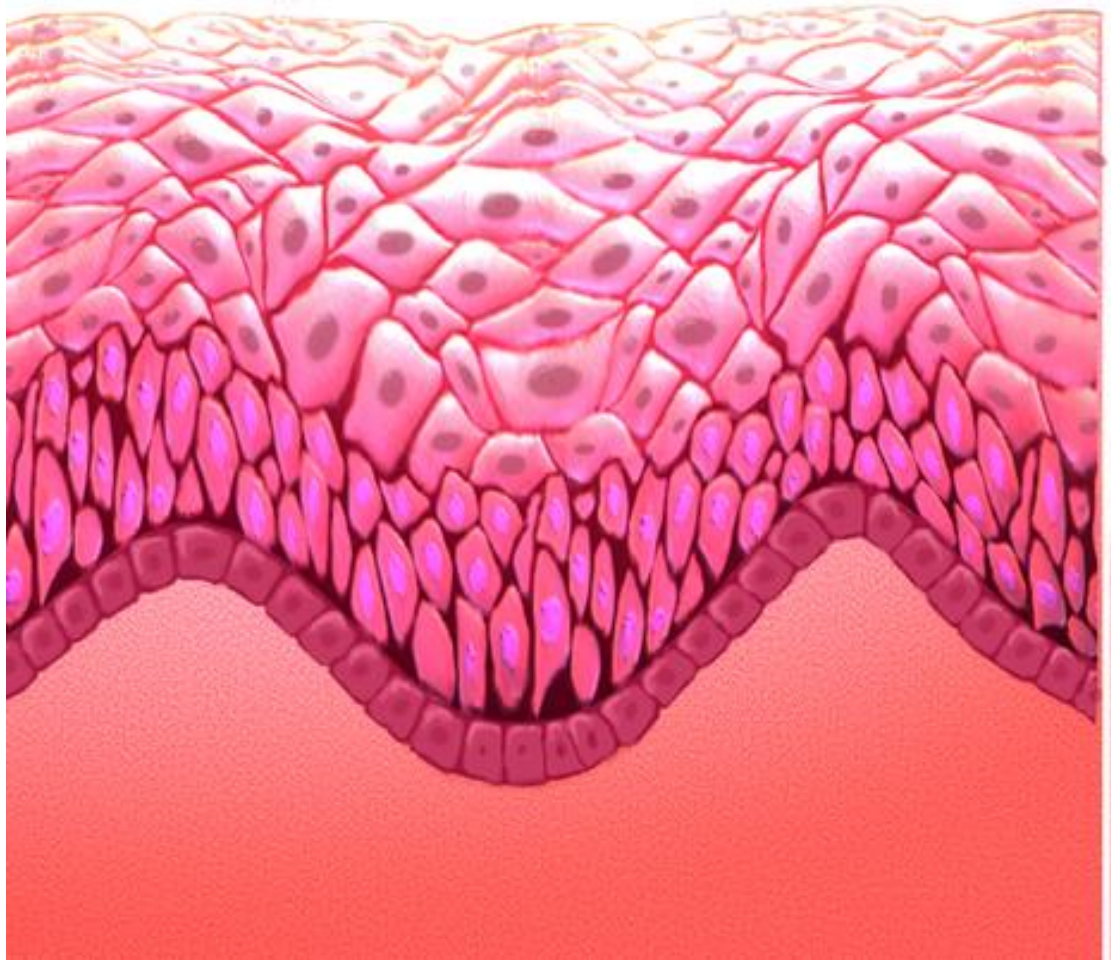
- **HRT** - effectively helps prevent bone loss – not good for established osteoporosis
- **SERMs** – selective estrogen receptor modulator, Osphena, Duavee, Evista
- **Fosamax**
- **Supplements** – Vit. D, Calcium, Vit. K, Magnesium
- **Lifestyle changes** – weight bearing exercise, nutrition changes

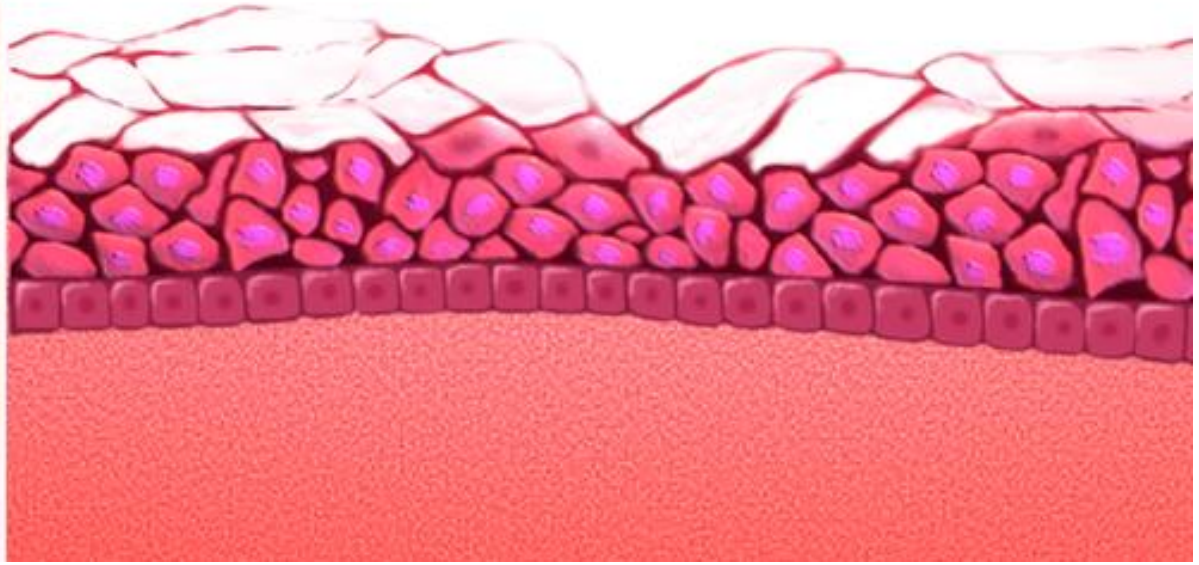
GSM

Genitourinary Syndrome of Menopause effects greater than 50% of menopausal women. It is a chronic and progressive problem that is unlikely to improve without treatment.

UTIs – major cause of morbidity and mortality for older women

- Vaginal estrogen – safe for everyone, estradiol cream, tab (Vagifem) suppository (Imvexxy), Ring (Estring)
- Osphena (SERM)
- Intrarosa (Intravaginal DHEA)
- Lubricants/topical lidocaine – these will do nothing to improve or reverse the tissue changes





CAN I HAVE SOME OF THAT?

Most healthy women without clear contraindications to estrogen can take HRT.

The Menopause Society formally known as NAMS issued an updated position on hormone therapy in 2022:

“For healthy people born female younger than 60, and within 10 years of menopause onset, the benefits of hormone therapy outweigh the risks”

HORMONES

ESTROGENS

- Estadiol – ovary, most potent, disappears after menopause
- Estriol - placental
- Estrone – weakest, adrenals can convert fat into estrone
- Ethinyl estradiol – synthetic, combination contraception pills or ring dose is 3X higher

PROGESTOGENS

- Progesterone – bioidentical form
- Progestogin – synthetic form
- Pts with a uterus must take est + prog
- Micronized progesterone – Prometrium (bioidentical form)
- Levonorgestral IUDs - synthetic

ANDROGENS

- Testosterone
- DHEA
- Androstendione
- There no testosterone formulas made for women
- Androgel is made for men and must be dosed at 1/10th the dose
- Compounding option

CONTRAINDICATIONS FOR HRT

- Prior stroke or life-threatening clot – PE
- Prior hormone induced clots (pregnancy induced DVT, clot from prior HRT
- Unexplained vaginal bleeding
- High risk endometrial cancer or some ovarian cancers
- Prior myocardial infarction
- Active liver disease
- Estrogen receptor positive cancer

NOT ABSOLUTE CONTRAINDICATIONS

Best to use transdermal forms of estrogen

Non gynecologic cancers	Migraines – use twice weekly patch over the weekly patch	Hypertension – control and then start patch	Factor V Leiden (heterozygous)
Thyroid disorders	High Risk Breast disease (BRCA ½, DCIS, ADH)	Genetic mutations at high risk for cancer	Hypercholesterolemia (control first)
TIA – without residual effects	Smoking – encourage cessation, smokers still benefit from HRT but benefits are reduced	History of DVT – Traumatic (not hormone induced but from trauma, post op)	Previously on HRT but now off for more than 10 years. Use similarly to new initiators. Review health changes and risks

HORMONE TREATMENT OPTIONS

With Intact Uterus

1. Estradiol + Levonorgestrel (ClimaraPro patch)
2. Estradiol + Norethindrone (1 tab Qhs – Activella, Mimvey
3. Estradiol/Bazedoxiphene (Duavee) CEE + SERM
4. Estadiol (17 beta-estradiol tab or patch + Levonorgestrel releasing IUD
5. Conjugated Equine Estrogen plus Medoxyprogesterone Acetate (Prempro)
6. Estradiol (patch or oral) with cycled days of progesterone (days 1-12 of month) or continuous micronized progesterone (Prometrium)

HORMONE THERAPY FOR PTS WITHOUT UTERUS

- Biweekly or weekly estradiol patch (17 Beta-estradiol)
- Daily oral estradiol
- Gel, Cream, Spray
- Can add progesterone and testosterone if patient wants for symptom relief

VAGINAL ESTROGEN TREATMENTS

Estrace/Premarin vaginal cream: start 2 g nightly for two weeks and then 0.5-1 g twice weekly

Vagifem/Uvefem tablet: Insert nightly for two weeks and then twice weekly

Estring: Place one ring intravaginally and change every 3 months

Prasterone (Vaginal DHEA) known as Intrarosa: Insert one suppository at night

Imvexxy: Estradiol vaginal insert – insert one dose nightly for two weeks and then twice weekly

Osphena – SERM once daily oral pill for GSM

TREATMENT GOALS

- 70-80% improvement in symptoms with the least amount of side effects
- Ideally no bleeding, no breast tenderness or other adverse effects
- Estradiol levels – 40-70 for patients with natural menopause
- Estradiol levels – 70-120 for patients with premature and early menopause
- Feel clear and confident in their choices of therapy

Other lab levels that are good targets to follow:

- **FSH level >35, checked several times if perimenopausal**
- **Testosterone - <45 if on treatment, may vary**

BENEFITS AND RISKS OF HRT

BENEFITS

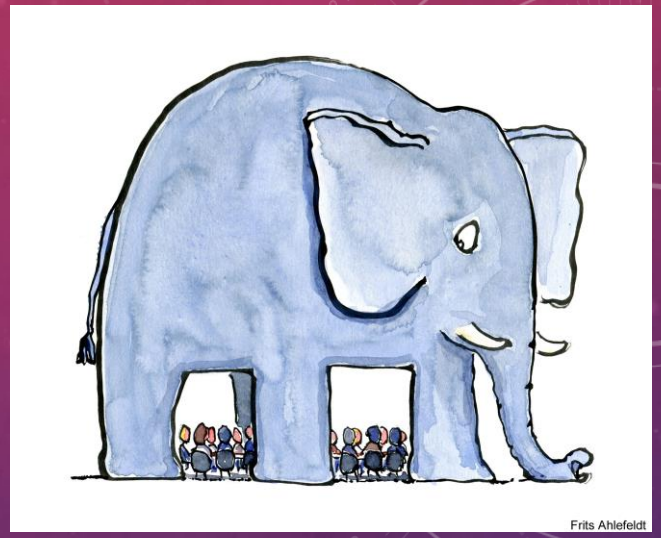
- Improvement of symptoms
- Most women report feeling more like themselves again, more energy, less irritability and improved sleep.
- 3-6 months to become effective.
- Long term benefits with good data have been shown to less likely to develop osteoporosis, reduce risk of cardiovascular disease, less risk of stroke and dementia, less risk of Type 2 DM, osteoarthritis, bowel cancer and depression.

RISKS

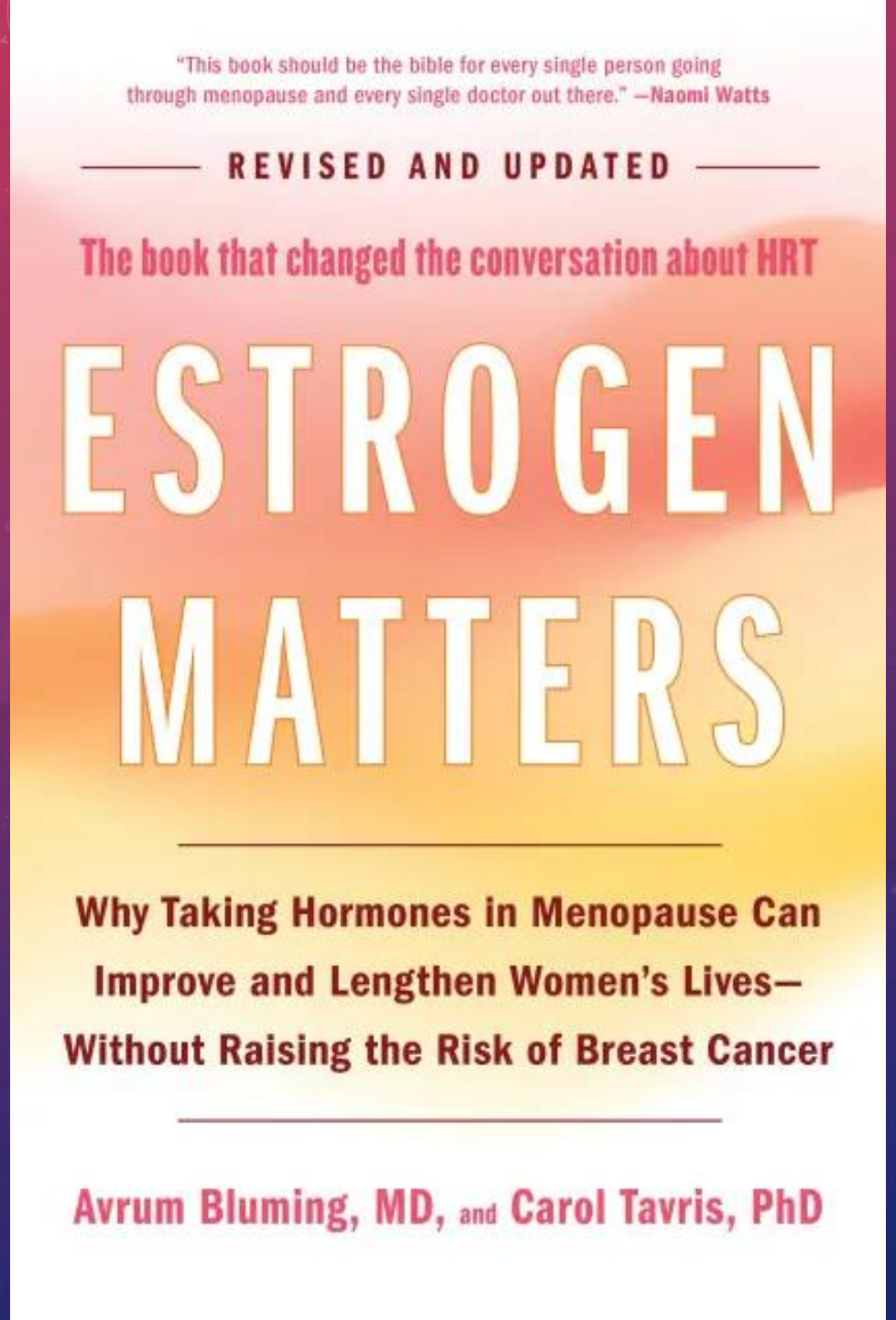
- **Breast cancer** – Data are changing and actually support reducing risk of breast cancer in many cases
- **WHI Study** – taking combined HRT (CEE + MPA – may be associated with a small risk of developing breast cancer)
- Other studies show risk is reduced if using micronized progesterone
- Risk of breast cancer for women using any type of HRT is low (1/1000 absolute risk). For comparison, the risk of breast cancer is greater in a women who is obese or uses moderate alcohol
- Risk of developing a blood clot – In women with history of blood clot, liver disease, migraine - small risk if taking oral estrogen. Transdermal estrogen has not been shown to increase risks

THE ELEPHANT IN THE ROOM

THE WHI STUDY 2002



Women's Health Initiative – A major clinical trial of the risks and benefits of combined estrogen and progestin in healthy menopausal women that was stopped early due to the increased risk of breast cancer using data that was misinterpreted and reported widely after a media press release. None of the claims about breast cancer were statistically or medically significant. Millions of women and health care providers were frightened and hormone prescriptions dropped by 70%.


"This book should be the bible for every single person going through menopause and every single doctor out there." —Naomi Watts
REVISED AND UPDATED
The book that changed the conversation about HRT
ESTROGEN MATTERS
Why Taking Hormones in Menopause Can Improve and Lengthen Women's Lives—Without Raising the Risk of Breast Cancer
Avrum Bluming, MD, and Carol Tavris, PhD

SIDE EFFECTS OF HRT

Breast tenderness

Vaginal bleeding or spotting

Headaches

Irritability

Bloating

Usually these occur in the first few months of taking replacement and subside as the body adjusts

WHEN IS THE BEST TIME TO START HRT?

- **Most effective** to start in perimenopause and before official menopause date
- **Most recommendations** support start HRT within 10 years of menopause
- **Timing or Healthy Cell Hypothesis** – Critical therapeutic window. Most of the health benefits are seen in women who start HRT in this time frame
- **Women over 60 or more than 10 years past menopause can still take HRT** – consideration of current health risks (Coronary calcium score, history of dementia/Alzheimer's, cancer

THERE IS NO MAXIMUM LENGTH OF TIME

- It does not delay menopause or slow the aging of the ovaries. Long term use is safe, and patients should be checked **yearly** for any changes or adjustments needed.
- Untreated menopause means living with long term hormone deficiency
- The benefits must be weighed and balanced against any risks, taking into account each individual's circumstances.

BEST PRACTICES FOR EVERY MENOPAUSAL WOMAN

MOVEMENT – Strength training, balance, flexibility, cardio

NUTRITION – Adequate protein, limit added sugars to 25 g/day, fiber >25 g/day

STRESS REDUCTION – sunshine, nature, activities to reduce stress

SLEEP OPTIMIZATION – good sleep hygiene

PHARMACOLOGY AND SUPPLEMENTS – HRT if appropriate, other pharmacology, supplements

RECENT UPDATES

- **Vaginal estrogen in breast cancer survivors – March 2025 issue of the American Journal of OB/Gyn** Metanalysis of 6 articles (24,000 patients) that traced the use of VE in patients with a hx of breast CA. VE was not associated with "an increased risk of breast cancer recurrence, breast cancer-specific mortality or overall mortality"

- **American Society of Clinical Oncology meeting May 2025** – Researchers reporting that breast CA survivors who used VE for 7 years or more were not at any risk of recurrence or death from breast CA.

THE TAKEAWAY: VE significantly improved women's GSM without compromising their survival from breast cancer.

THE AMERICAN HEART ASSOCIATION

In 2020, the AHA published **“Menopause Transition and Cardiovascular Disease Risk: Implications for Timing of Early Prevention”**

- Acknowledged the accelerated increase in cardiovascular risk brought about by the menopause transition and emphasized the importance of early intervention strategies.
- Findings noted that those on HRT along with lifestyle/nutrition approach have lower CV risks and less likelihood of negative outcomes
- The leading cause of death in women is CV disease. Heart disease kills more women than breast cancer. Menopause increases CV risks. Treating with HRT decreases CV risk

American Heart Association®

American Urological Association Guidelines released April 2025

Clinicians should offer the option of local low dose VE to patients with GSM to reduce the risk of future UTIs, improve vulvo-vaginal dryness and improve dyspareunia

Data: 11 million women with recurrent UTI placed on VE: 73% less mortality, 51% less sepsis, 22% less hospitalizations

www.auanet.org/guidelines-and-quality/genitourinary-syndrome-of-menonpause

American Urological Association

MENOPAUSE IS HOT!!

- Not every woman **needs** HRT but every woman **deserves the conversion**
- We must **HONOR** our patient's healthcare concerns during the menopause transition and beyond with both medical evidence and allowing for women's autonomy in their choices.

My hope is that this transition will lead to the best years of our lives. We as health care professionals have a duty to educate ourselves, talk about menopause, continue to bring awareness to our patients, and provide up-to-date evidence-based medicine and supportive care as menopause effects all aspects of our health and well-being

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