

# ESTROGEN

## (INSUFFICIENCY OR DEFICIENCY)

Low estrogen can manifest in symptoms such as hot flashes, missing periods, vaginal dryness, joint pain, mood changes, potentially impacting fertility, heart and bone health.

### POSSIBLE CONTRIBUTING FACTORS



- Age-related hormonal changes (late perimenopause or menopause)
- Full hysterectomy or ovarian surgery
- Eating disorders like anorexia and being underweight
- Low cholesterol (possibly due to liver dysfunction, vegan diet, adrenal/thyroid hyperfunction)
- Extreme anything (chronic stress, exercise, dieting) or HPA axis dysfunction
- Premature ovarian failure or primary ovarian insufficiency
- Brain problems / pituitary or hypothalamic issues
- Slow blood flow around ovaries (such as from abdominal surgery)
- Breastfeeding
- Hypothyroidism
- PCOS
- Regular use of opioid medication
- Chemotherapy or radiation

### LIFESTYLE & DIETARY RECOMMENDATIONS



- Focus on a whole foods VPF diet with quality proteins, vegetables & healthy fats
- Avoid vegetable oils (canola/rapeseed, corn, soybean, sunflower, safflower), fried foods, hydrogenated fats/oils, and alcohol
- Consider seed cycling; 1-2 Tbsp crushed flax seeds & pumpkin seeds on day 1 to ovulation, then sesame & sunflower seeds from ovulation until day 1 of period.
- If postmenopausal, consider intermittent fasting
- Hydrate with sole or electrolytes away from meals
- Regular sun exposure, especially upon rising to help reset circadian rhythm
- Stress reduction measures: grounding, meditation, Epsom salt bath, gratitude journaling, yoga, etc
- Prioritize sleep hygiene
- Acupuncture & abdominal body work to help improve blood flow to the ovaries
- Consider 1 tsp to 2 Tbsp gelatinized maca root

### SUPPLEMENT CONSIDERATIONS



- Brain and adrenal glandular support
- DHEA (if warranted)
- Bio-identical hormone replacement therapy
- Black cohosh, maca, red clover, shatavari, dong quai, and isoflavones