# **PCOS**

## (POLYCYSTIC OVARIAN SYNDROME)

Characterized by irregular menstrual cycles, elevated androgen levels, and ovarian cysts. Common symptoms include irregular periods, hirsutism, weight gain, fertility challenges, and potential risks of insulin resistance and cardiovascular issues.

### POSSIBLE CONTRIBUTING FACTORS



- Hormone imbalances:
  - Estrogen excess coupled with excess testosterone and/or progesterone insufficiency
  - Thyroid hypofunction secondary to pituitary hypofunction and/or adrenal hyperfunction
- Insulin resistance / high insulin drives excess testosterone and DHEA. Optimal fasting insulin: 5-6 mIU/L
- · Injuries or surgeries affecting the ovaries or the pituitary gland (which regulates hormone production)
- · Diets high in refined carbohydrates and processed foods often resulting in metabolic syndrome
- Exposure to endocrine-disrupting chemicals (EDCs)
- · Chronic stress (physical, physiological and/or perceived) affecting insulin and hormonal balance
- · lodine deficiency
- Obesity: higher body fat increases estrogen

#### LIFESTYLE & DIETARY RECOMMENDATIONS



- Low glycemic diet; sugar-free, grain-free for 3-6 months:
  - Focus on a whole foods VPF diet with quality proteins, vegetables & healthy fats
  - Limit starchy carbs to  $\frac{1}{2}$  cup cooked grains and 1 cup root vegetables daily, and 1-2 whole fruits per day. Avoid sugar and anything made from flour
  - · Avoid caffeine and alcohol
- Eliminate processed & refined foods, fried foods, vegetable oils, and hydrogenated/trans fats
- Consider consuming 1/4 1/2 tsp kelp granules or increase iodine-rich foods like seaweed, nori, seafood
- Consume 1 cup cruciferous veggies daily to help with estrogen detox
- 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.
- Reduce xenoestrogenic chemicals in personal hygiene and beauty products. Select brands with toxicity score of 2 or less on EWG.org for daily-use products
- Reduce stress: meditate, deep breathing, journal, delegate/do less, more nature/grounding, Epsom salt baths
- Focus on sleep hygiene

### SUPPLEMENT CONSIDERATIONS



- Vitex (restores ovulation & stimulates progesterone secretion) 500-1000mg/day in the luteal phase
- Inositol (restores ovulation & improves insulin sensitivity) 2.5-3g/day for therapeutic effect
- Indol-3-carbinol (I3C) or DIM (improves phase 1 detox) no more than 100mg/day and ramp slowly
- Methylated B Complex for detox support
- Blood sugar support formula: chromium, biotin, alpha lipoic acid, B vitamins
- Berberine (if HbA1c 5.6%+) for a few months
- Magnesium glycinate if insulin resistant or magnesium citrate if there's constipation
- Omega-3 1.5 to 3g per day (higher in EPA)

