# Your Hormone Detox Pathways: Why They Matter

# **Support Hormone Balance by Optimizing Liver & Gut Function**

## **How the Liver Metabolizes Hormones**

Your body must **detoxify and eliminate hormones** like estrogen, testosterone, and cortisol after they've done their job. The **liver** plays a key role in this process, breaking down hormones in two phases:

- **Phase I:** Converts hormones into intermediate forms (sometimes more reactive).
- Phase II: Neutralizes those intermediates so they can be safely excreted.
- From there, they're sent to the **gut** for final elimination via stool or urine. If these phases are sluggish or overloaded, hormones can **re-circulate**, leading to imbalance.

# **Signs Your Hormone Detox is Sluggish**

If your body isn't clearing hormones efficiently, you might notice:

- PMS or heavy periods
- Breast tenderness or bloating
- Hormonal acne (jawline, chin)
- Irritability or anxiety, especially pre-period
- Poor stress tolerance
- Constipation or irregular bowel movements
- Fatigue or brain fog

# **Foods & Supplements That Support Healthy Hormone Clearance**

## **Liver-supportive nutrients:**

- Cruciferous veggies (broccoli, cauliflower, arugula, cabbage)
- Leafy greens, beets, and carrots

• Garlic, turmeric, and green tea

#### Fiber:

• Soluble and insoluble fiber bind hormones in the gut and support daily elimination.

### **Key supplements:**

- **DIM & Calcium-D-Glucarate:** support estrogen detox pathways
- B Vitamins (especially B6, B12, folate): essential for methylation
- Magnesium: supports Phase II detox and stress response
- Glutathione or NAC: powerful antioxidant liver support

# **Gut Health & Estrogen Reabsorption**

Your gut microbiome—specifically the estrobolome—helps regulate how much estrogen is reabsorbed vs. excreted.

If the gut is inflamed, constipated, or overgrown with bad bacteria:

- → Enzymes like beta-glucuronidase increase
- → Estrogen is reabsorbed into circulation
- → This leads to estrogen dominance symptoms

## Solution:

- Balance your microbiome
- Optimize daily bowel movements
- Reduce alcohol, sugar, and antibiotics

#### **Bottom Line**

You don't just make hormones—you need to clear them. A sluggish detox system can leave you stuck in a cycle of imbalance, inflammation, and unwanted symptoms.

"Detox isn't a juice cleanse—it's a daily hormone-balancing necessity."