

Estro Matrix

An evidence-based blend of Calcium-D-Glucarate, DIM, I-3-C and Sulforaphane to support proper estrogen metabolism through liver and digestive detoxification.

Each capsule contains:

DIM	33.3mg
Indole-3-Carbinol	66.7mg
BroccoPhane® (sprouts, <i>Brassica oleracea</i> var. <i>italica</i>)	33.3mg
Calcium D-Glucarate (calcium saccharate)	500mg

90 vegetable capsules

GMO, gluten, soy and dairy free.



The human body is designed with intricate detoxification systems to eliminate unnecessary compounds such as food waste byproducts, physically inert metals and everyday chemicals. However, our detoxification systems are also needed to regulate steroid hormones such as estrogen. Suboptimal liver and digestive tract function, in combination with excessive exposure to xenoestrogens, can lead to enterohepatic recirculation of estrogens and ultimately create an estrogen-dominant state with negative health implications for the body. Thankfully, a number of natural compounds have been identified to promote proper estrogen detoxification and healthy hormone metabolism.

Indole-3-carbinol (I-3-C) is naturally found in cruciferous vegetables such as broccoli and cauliflower and it is well-known for its ability to support healthy estrogen metabolism. I-3-C upregulates the production of 2-OHE1,

the protective form of estrogen that acts as an estrogen antagonist. 16-OHE1, on the other hand, has potent estrogenic and proliferative effects that oppose the action of 2-OHE1. Research has repeatedly shown that a higher ratio of 2-OHE1 to 16-OHE1 is protective against disease and desirable for improving symptoms in estrogen dominant conditions. I-3-C improves this ratio of estrogen metabolites.

Numerous trials have shown that this positive shift in estrogen metabolites, as a result of I-3-C supplementation, is advantageous for health outcomes. For example, I-3-C has been shown to improve estrogen ratios and health outcomes in women with cervical disease. Animal studies have also found that I-3-C can prevent unhealthy cellular differentiation in breast tissue. Not only does I-3-C promote a positive estrogen metabolite ratio, but it additionally influences the expression of multiple genes, such as tumor-suppressing

Key points

- Indicated for the proper metabolism of estrogen, symptomatic control in estrogen-dominant health conditions and healthy cellular differentiation of breast and cervical tissues, through improved xenobiotic detoxification and supported liver function
- Calcium-D-glucarate acts as a Beta-glucuronidase inhibitor to prevent the enterohepatic recirculation of estrogens
- I-3-C and DIM promote the production of 2-OHE1, the protective form of estrogen that acts as an estrogen antagonist within the body
- Sulforaphane glucosinolate powerfully upregulates phase 2 detoxification enzymes and supports the removal of xenobiotics and various carcinogens

gene p53 and BRCA1, that collectively support the healthy differentiation of hormonally sensitive tissues.

I-3-C is naturally metabolized in the body to provide multiple active compounds, including the predominant metabolite **diindolylmethane (DIM)**. Although debate exists regarding whether DIM or I-3-C is most beneficial as a health supplement, each compound has its advantages. I-3-C provides the body with many active metabolites, while DIM appears to be a primary metabolite with a potent detoxification activity. Both compounds are well-researched and effective treatments for the proper regulation of estrogens in the body.

D-glucarate, or glucaric acid, is another natural compound found naturally in oranges, carrots, apples and broccoli, and it promotes the detoxification

of excess hormones, various toxins and carcinogens by deactivating B-glucuronidase. B-glucuronidase is an enzyme produced by colonic microflora that can 'reactivate' compounds that had previously been neutralized by the liver, preventing the recirculation of these toxins in the body. Animal studies have found that large doses of **calcium-D-glucarate** can reduce estrogen levels in the blood by up to 23% and also favorably impact lipid balance. Quite simply, **calcium-D-glucarate** is one of the best known natural B-glucuronidase inhibitors and the best studied form to safely deliver D-glucarate.

Finally, **sulphoraphane glucosinolate (SGS)** is a naturally occurring compound that, like I-3-C and DIM, is also found in broccoli and cruciferous vegetables. Numerous clinical trials support its use in promoting healthy cellular

differentiation through the removal of xenobiotics and powerful induction of phase 2 detoxification enzymes in the liver. For example, SGS has been shown to reduce the carcinogenic effects of aflatoxin exposure on liver tissue. SGS also has anti-inflammatory actions through the inhibition of nuclear factor kappaB (NFkB), prostaglandin E2 and tumor necrosis factor-alpha (TNF-a), it can reduce estrogen receptor expression in breast tissue and it has antimicrobial activity against pathogens such as *H. pylori*, *S. pyogenes* and *S. aureus*.

At three capsules per day, Cyto Matrix's **Estro Matrix** contains 200mg of I-3-C, 100mg of DIM, 1500mg of Calcium-D-Glucarate and 100mg of sulforaphane. Collectively, Estro Matrix provides evidence-based dosages of synergistic ingredients to offer targeted and ongoing hormonal support through the proper metabolism of estrogens.

Related products

Bio-B6

Cyto B Complex

DT Matrix

Fem Matrix

I-3-C

NAC+

Prenatal Formula

Progest Matrix

Women's Multi

Non-Medicinal Ingredients: Vegetable-grade magnesium stearate, microcrystalline cellulose. Capsule: hypromellose.

Indications: Helps to promote healthy estrogen balance and reduce the severity and duration of symptoms associated with recurrent breast pain. Provides antioxidants that help protect against cell damage caused by free radicals.

Directions: Adults - Take 2 capsules, once per day or as directed by a healthcare professional.

Warnings: Do not use if safety seal is broken. Consult a healthcare professional prior to use, especially if you are taking other medications or natural health products and to exclude the diagnosis of a serious cause of hormonal imbalance. Consult a healthcare professional if you are attempting to conceive, have a liver disorder or symptoms of low estrogen (such as joint pain, mood changes, changes in libido, hot flashes, night sweats, vaginal dryness or irregular menstruations) or if you develop liver-related symptoms (e.g. yellowing of the eyes and/or skin, dark urine, abdominal pain, jaundice) or symptoms of low estrogen. If recurrent breast pain persists or worsens, consult a healthcare professional.

Contraindications: Do not use if you are pregnant or breastfeeding.