EstroDIM

Product #630

Supplement Facts

<table>
<thead>
<tr>
<th>Serving Size: 1 Capsule</th>
<th>Servings Per Container: 30</th>
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</thead>
<tbody>
<tr>
<td>1 capsule contains</td>
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<tr>
<td>Vitamin E (as dl-alpha Tocopherol Succinate)</td>
<td>100 IU 333%</td>
</tr>
<tr>
<td>Folic Acid</td>
<td>3 mg 750%</td>
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<tr>
<td>I3C (Indole 3 Carbinol)</td>
<td>200 mg *</td>
</tr>
<tr>
<td>DIM (Diindolylmethane)</td>
<td>100 mg *</td>
</tr>
<tr>
<td>* % Daily Value not established</td>
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Dose Form:
Two-piece vegetable capsule

Other Ingredients:
Other Ingredients: Natural Vegetable Capsules. This product may contain one or more of the following: Calcium Silicate, Magnesium Stearate, Microcrystalline Cellulose and Silicon Dioxide.

Product Rationale:
This product is intended for those wanting the benefit of both preformed DIM as well as the precursor I3C for estrogen modulation and breast and prostate health.

Research Findings:
Indole-3-carbinol (I3C) is a naturally occurring compound within numerous cruciferous vegetables (broccoli, cabbage etc.). After ingestions I3C converts to several different metabolites, one of which is diindolylmethane (DIM). Both of these compounds, as well as other I3C metabolites, have been shown to cause metabolic shifts and cellular activities that inhibit carcinogenesis. General uses include improved phase I and phase II detoxification and antioxidant support.

In vitro and mechanisms:

Several different mechanisms have been attributed to I3C, DIM and other metabolites. Primary among them are:
- Change in Cytochrome P450 metabolism of estrogens to promote 2-hydroxyestriol in place of the more estrogenic (carcinogenic) 16-hydroxyestrogen.
- Direct effects on estrogen receptors which down regulate response
- Down regulation of poor health promoting signaling molecules

Clinical Trials:
- Women with SLE were given 375 mg/day of I3C for 3 months. 2/16 hydroxyestriol ratio shifted significantly upward.4
- Dose range placebo controlled trial determined that 300 mg/day of I3C is optimal for shifting 2/16 hydroxyestriol levels.11,12

Prostate Health14-18
Numerous research papers show I3C and/or DIM to be effective for prostate health.

Formula Synergy:
By providing the stable DIM metabolite, considered to be one of the main functional metabolite, along with I3C (which will convert to DIM or other active metabolites) we ensure an active product. Currently, while most researchers consider DIM to be the main active metabolite, only I3C has been used in published clinical trials.

Dose:
1-2 capsules per day taken with 8 oz. of water during meals. (This ensures a slightly higher pH- less acidic- which is preferential for I3C conversion to anti-carcinogenic metabolites)

Contraindications, Adverse or Other Reactions:
- As this product alters estrogen metabolism through the cytochrome P450 pathways, this product should not be consumed by women who are pregnant or who are trying to become pregnant, or women on oral contraceptives.
- Individuals on prescription medication which are metabolized via P450 enzymes may have reduced effectiveness of those drugs.
- Individuals on antacids or H2 blockers may limit the conversion of I3C if the stomach pH rises too much.
DIM vs I3C

There is much debate about whether it is better to use I3C or DIM or DIM that has been modified for increased absorption. Most published trials to date use oral I3C. DIM is more stable but has reduced absorption. Much talk has been made of BioResponse DIM, an improved absorption form of DIM. In rats give I3C and BioResponse DIM, the I3C was capable of inducing CYP1A1 enzymes, responsible for the 2/16 ratio, while the BioResponse DIM was not.

REFERENCES: