INDOLPLEX® PROVIDES DIINDOLYL METHANE (DIM®) TO SUPPORT HEALTHY ESTROGEN METABOLISM.*

Indolplex® and Indolplex with DIM® are dietary supplements that contain a patented, bioavailable form of diindolylmethane (DIM®), a dietary indole found in cruciferous vegetables. Research shows DIM promotes healthy estrogen metabolism by increasing the production of 2-hydroxyestrone estrogen metabolites over the undesirable 16-hydroxyestrone estrogen metabolites.* DIM does not promote 4-hydroxy estrogen metabolites.* Indolplex and Indolplex with DIM feature a patented form of DIM that is 10 times more potent than its precursor, indol-3 carbinol (I3C).

- Enhanced absorption and bioavailability
- Supports both men and women hormone health*
- Well tolerated

*THESE STATEMENTS HAVE NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THESE PRODUCTS ARE NOT INTENDED TO DIAGNOSE, TREAT, CURE, OR PREVENT ANY DISEASE.
**INDOLPLEX® AND INDOLPLEX® WITH DIM®**

Indolplex® and Indolplex with DIM® contain the key ingredient diindolylmethane (DIM®). DIM is naturally present in cruciferous vegetables such as cabbage, broccoli, Brussels sprouts, and cauliflower. One serving of Indolplex or Indolplex with DIM contains the same amount of DIM found in approximately two pounds of broccoli. The main role of DIM in the body is to support healthy balance and metabolism of estrogens, which is important for both women and men.* These Indolplex formulas utilize a patented technology that enhances the absorption and bioavailability of DIM. DIM is formed from Indole-3 carbinol (I3C) after enzymes in the vegetable, such as myrosinase, are released by crushing or chewing. DIM can also be formed directly from I3C, without enzymes, in an acidic environment such as in the stomach, when I3C is taken as a dietary supplement.¹,²

I3C is available as a supplement; however, DIM is better tolerated and safer than I3C.

Long-term exposure to estrogens, in the form of hormone replacement therapy or xenoestrogens (estrogen mimics), can have an impact on health.³,⁴ The ratio of estrogen metabolites (e.g., 2-hydroxyestrone over 16-hydroxyestrone) is an established proposed indicator of hormonal balance in women and men, influencing the health of the breast, endometrium, uterus, cervix, prostate, and other tissues.⁵⁻¹⁰ Effective estrogen clearance is a growing concern among health care practitioners, and its implications for gynecologic health and healthy cell development are potentially significant.¹¹⁻¹⁵ Both I3C and DIM have been shown to increase the production of 2-hydroxyestrogen.¹¹ DIM is the inducer of 2-hydroxylase, the enzyme responsible for this beneficial shift in estrogen metabolites.¹¹⁶ DIM induces 2-hydroxyestrone (2OHE¹) and 2-hydroxyestradiol (2-OHE²) in diverse tissues, leading to net inhibition of excessive estrogen stimulation.* Once present in the circulation, 2-OHE¹ and 2-OHE² are metabolized by catechol-O-methyl transferase (COMT), resulting in 2-methoxyestrone and 2-methoxyestradiol.¹¹⁷ These metabolites have been subjects of interest for researchers.¹¹⁻²⁸

In a study published in 2011, DIM’s effect on estrogen metabolism was investigated.²⁹ Seven female participants between the ages of 39-56 years were administered a 300 mg product of DIM (75 mg x 4) daily for 14 days. Blood and urine samples were collected prior to administration and at the end of the 14-day period, blood, urine, and also thyroid tissue samples were collected. After DIM administration, five out of seven of the participants had increased urinary levels of 2-hydroxyestrone (2-OHE¹)(p < 0.05 and p < 0.01), while all seven participants had decreased urinary 16-hydroxyestrone (16-OHE¹) levels, with four decreases having statistical significance (p < 0.05).* All participants were observed to have an increase in overall urinary 2/16-hydroxyestrone (2/16-OHE¹) ratio.* The authors concluded that DIM successfully regulated estrogen metabolism.* The 300 mg product in this study contained 75 mg of DIM, while Indolplex® and Indolplex with DIM® contain 60 mg of DIM in every 240 mg serving.

Healthy androgen receptor (AR) expression is an important indicator of prostate health.³⁰ A 2016 study investigated DIM’s effect in male patients (n=36).³⁰ Participants were administered 225 mg of DIM (75 mg x 3) orally, twice daily, with a median length of use being 19 days (range 4-104 days). Serum and prostate tissue DIM levels, and AR immunohistochemical staining and were measured prior to and at twelve hours after DIM administration. Of the 28 individuals evaluable at the end of the study, 26 (92.9%) had measurable DIM levels in the prostate tissue, with the average level being 14.2 ng/g,(SD: 6.9 ng/g, 90% CI). Twenty-six participants qualified for AR staining. Presence of AR was assessed by a staining score (equal to the staining intensity multiplied by percent of positively stained cells). Prior to treatment the mean AR staining score of the 26 participants was 278 (90% CI) and post treatment the mean AR staining score was 245(90% CI), indicating a balanced expression of AR in response to DIM administration.* All 26 evaluable patients exhibited AR nuclear exclusion, even in the presence of testosterone.* The authors conclude that oral administration of DIM at 225 mg, twice per day is effective at supporting biologically active levels of DIM in prostate tissue and at modulating nuclear translocation of the androgen receptor.* The 225 mg DIM product used in this study contained 56.25 mg of DIM. Indolplex® and Indolplex with DIM® contain 60 mg of DIM per 240 mg serving.

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Indolplex®

Other ingredients: cellulose, hydroxypropyl methylcellulose (vegetable capsule), silicon dioxide, modified food starch, magnesium stearate

Contains soy.

Recommendations: Take 2 capsules daily with food. If less support is needed, take 1 capsule daily with food, or as recommended by your healthcare professional.

WARNING: Do not use this product if pregnant, nursing or attempting to become pregnant. A harmless but noticeable change in urine color may occur during usage of this product. If taking prescription drugs, consult your healthcare professional prior to use.

Contains No: sugar, salt, yeast, wheat, gluten, dairy products, artificial colors, flavors, preservatives or ingredients of animal origin.

Supplement Facts

<table>
<thead>
<tr>
<th>Amount per 2 capsules</th>
<th>%DV*</th>
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<tbody>
<tr>
<td>Total Carbohydrate</td>
<td>1 g</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>&lt;1 g</td>
</tr>
<tr>
<td>Indolplex® Complex</td>
<td>240 mg</td>
</tr>
<tr>
<td>modified food starch, 25% diindolylmethane (DIM®), Tocopherol, phosphatidylcholine and silicon dioxide</td>
<td>**</td>
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*Percent Daily Values (DV) are based on a 2,000 calorie diet.

**Daily Value not established.

Indolplex® and DIM® are registered trademarks of and are licensed from BioResponse, L.L.C. U.S. patent 6,086,915.
References

5. Bulun SE, Simpson ER. Competitive reverse transcription-polymerase chain reaction analysis indicates that levels of aromatase cytochrome P450 transcripts in adipose tissue of buttocks, thighs, and abdomen of women increase with advancing age. J Clin Endocrinol Metab. 1994;78:428–32.