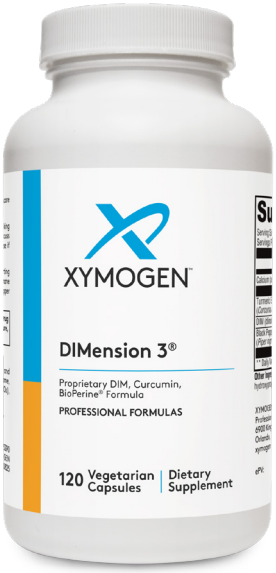
DIMension 3®

Proprietary DIM, Curcumin, BioPerine® Formula



Available in 120 and 240 capsules

Clinical Applications

- Supports Healthy Estrogen Metabolism in Females and Males*
- Supports Detoxification of Xenoestrogens*
- Provides Support for Antioxidant Mechanisms*

DIMension 3® *represents a 3-dimensional approach to supporting healthy estrogen metabolism. Research suggests that diindolylmethane (DIM), curcumin (from turmeric extract), and the patented black pepper extract BioPerine® support balanced estrogen metabolism.**

Discussion

DIM (3,3'-diindolylmethane) is the stable, bioactive metabolite formed when stomach acid breaks down indole-3-carbinol (I3C), a sulfur-containing glucosinolate present in cruciferous vegetables.[1] Supplementation with DIM is preferred over I3C due to I3C's undesirable breakdown products, including the dioxin-like molecule indolo[3,2-b]carbazole (ICZ). [2] DIM has been found to support hormone metabolism and immune activity, and stimulate antioxidant and detoxification systems.[3] Curcumin and BioPerine® provide complementary support for DIM's role in healthy cell function.*

Support of Hormone Metabolism

Healthy metabolism of exogenous and endogenous estrogens can be pivotal for hormonal balance.[4] DIM promotes metabolism of estrogen into the favorable and protective 2-hydroxyestrone (2-OHE) metabolite versus production of 4-hydroxyestrone (4-OHE) and 16-alpha-hydroxyestrone (16-alpha-OHE) metabolites.[5] DIM's influence on 2-OHE production creates a more desirable ratio of 2-OHE to 16-alpha-OHE. Assessment of 2:16-alpha-OHE ratio appears to be useful in evaluating breast health.[6] DIM has been studied for its role in supporting prostate health as well, by reducing dihydrotestosterone binding to androgen receptors.*[7,8]

Support of Cell Function and Metabolism

Orchestration of metabolism by the thyroid gland is dependent on hormone balance. DIM was found to target proteolytic enzymes (MMP-2 and MMP-9), thus supporting the normal function and activity of thyroid cells in vitro.[9] Ongoing research reveals DIM's positive role in regulation of gene expression, protein production, and cell function. Downregulation of certain proteins (survivin, Bcl-2, and cdc25A) and upregulation of protective proteins (NRF2 and cyclin-dependent kinase inhibitor p21waf1) promoted healthy cell growth.*[10,11]

Antioxidant and Detoxification Support

DIMension 3 provides support for both antioxidant and detoxification systems which, in turn, support cellular function and integrity. Antioxidant activity is crucial to counteracting oxidative molecules normally produced during phase I detoxification. Research on DIM suggests that it plays an important role in activating detoxification enzymes in human hepatocytes, further supporting biotransformation at a primary site in the body.*[12]

Curcumin As the major curcuminoid found in turmeric, curcumin is valued for its promotion of antioxidant activity, support of metabolic detoxification, and modulation of cytokine production.[13] Research studying genotoxic estrogen metabolites suggests that curcumin's inhibitory effect on anchorage-independent growth and on CYP enzymes following dioxin exposure helps support healthy cell-life regulation in human embryonic kidney cells and normal prostate cells.*[14]

BioPerine is a patented form of piperine, the main alkaloid from black and long pepper plants that has been found to effectively support the absorption of nutrients. After a dose of 2 g of curcumin, human serum levels of curcumin were either undetectable or very low. When the same dose was given along with 20 mg of piperine (4:1 ratio), there was a 2000% increase in the bioavailability of the curcumin without adverse effects.*[15]

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

DIMension 3® Supplement Facts

Serving Size: 2 Capsules

	Amount Per Serving	%Daily Value
Calcium (as dicalcium phosphate)	62 mg	5%
Turmeric Extract (*Curcuma longa*)(rhizome)(95% curcuminoids)	250 mg	**
DIM (diindolylmethane)	150 mg	**
Black Pepper Extract (*Piper nigrum*)(fruit)(93% piperine)[S1]	2.5 mg	**

** Daily Value not established.

Other Ingredients: Capsule (hypromellose and water), magnesium stearate, hydroxypropyl cellulose, and silica.

DIRECTIONS: Take 2 capsules daily, or as directed by your healthcare professional.

Consult your healthcare professional prior to use. Individuals taking medication, especially blood thinners or cancer treatment, should discuss potential interactions with their healthcare professional. Do not use if tamper seal is damaged.

STORAGE: Keep closed in a cool, dry place out of reach of children.

FORMULATED TO EXCLUDE: Wheat, gluten, corn, yeast, soy, animal and dairy products, fish, shellfish, peanuts, tree nuts, egg, sesame, ingredients derived from genetically modified organisms (GMOs), artificial colors, and artificial sweeteners.

S1. BioPerine is a registered trademark of Sabinsa Corp.

VEGETARIAN CAPS

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All XYMOGEN® Formulas Meet or Exceed cGMP Quality Standards.

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DRS-158
Rev. 06/19/25