



Available in 120 vegetarian capsules

- Provides a source of antioxidants to support good health

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 p21 waf1) 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]

DIMension 3®

Medicinal Ingredients (per vegetarian capsule)

Turmeric Extract (<i>Curcuma longa</i>)(rhizome)(95% curcuminoids)	125 mg
DIM (3,3-diindolylmethane)	75 mg
Black Pepper Extract (<i>Piper nigrum</i>)(fruit)(BioPerine®)(50:1, 62.5 mg)(standardized to 93% piperine).....	1.25 mg

Non-Medicinal Ingredients

HPMC (capsule), dicalcium phosphate, magnesium stearate, hydroxypropyl cellulose, and silica.

Directions for Use:

Adults: Take two capsules daily, or as directed by your healthcare practitioner. Consult a healthcare practitioner for use beyond 12 weeks.

CAUTION: Do not use if you are pregnant or breastfeeding. Consult a healthcare practitioner prior to use if you are taking antiplatelet medication, blood thinners or any other medications or natural health products; have gallstones or a bile duct obstruction, have stomach ulcers or excess stomach acid. Do not use if tamper seal is damaged.

Storage: Keep out of reach of children. Store in a cool dry place.

BioPerine is a registered trademark of Sabinsa Corp. BioPerine is protected by US patents 5,536,506; 5,744,161; 5,972,382; and 6,054,585.



References

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Additional references available upon request

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