

## DIM® Enhanced

With Curcumin, Green Tea and Wasabia

### DESCRIPTION

DIM® Enhanced, provided by Douglas Laboratories, is a microencapsulated form of diindolylmethane, with curcumin, green tea, and wasabia designed to support healthy hormone balance and immune health. Microencapsulated DIM by BioResponse® is a patented, absorption-enhancing formulation to ensure proper assimilation by the body.

### FUNCTIONS

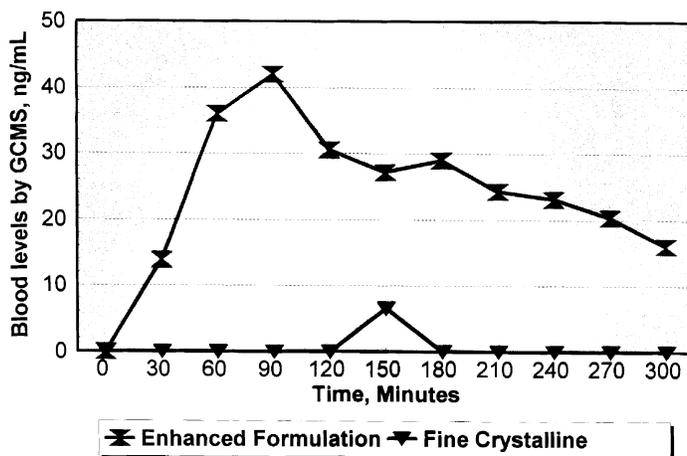
Diindolylmethane

During the body’s natural detoxification processes, potentially detrimental molecules such as hormone metabolites, alcohol, drugs and air pollutants are removed from the blood stream via the liver. Healthy hormone detoxification is a crucial part of the normal functioning of the immune system.

Diindolylmethane (DIM) is one molecule known for the supportive role it plays in stimulating natural detoxification enzymes and supporting normal hormone metabolism. As a natural component derived from indole-3-carbinole and cruciferous vegetables, DIM has shown in studies to support the 2-hydroxylation instead of 16-hydroxylation of certain estrogen metabolites. This favors the production of 2-hydroxysterone over the more deleterious 16-hydroxyestrone. Other studies indicate that diindolylmethane may play important roles in inducing apoptosis and supporting the body’s normal angiogenic balance, especially in regards to healthy breast, cervical and prostate cells.

Microencapsulated DIM® is the only diindolylmethane with proven absorption and activity demonstrated in independently performed clinical studies. BioResponse DIM® contains pure DIM, microencapsulated in particles complexed with a vitamin E derivative and phospholipids to aid absorption from our intestinal tract. The patented formulation process for making BioResponse DIM® creates microparticles of DIM, emulsifies the DIM with vitamin E and phospholipids, and captures these complexes through a drying process in larger particles of pure food starch. The result is a sustained-release, dry powder which re-dissolves easily after oral consumption. The graph below shows greater absorption of microencapsulated DIM® compared to fine crystalline DIM.

**DIM Absorption in Humans**  
*1 mg/Kg, Average of Three Patients*



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#### Green Tea

Scientists have identified numerous phytochemicals including polyphenols, methylxanthines, flavonoids, and triterpenoid saponins in green tea. The polyphenols contained in tea, specifically the catechins, appear to provide the primary health promoting benefits associated with green tea consumption. Catechin, epicatechin, epigallocatechin (EGC), and most notably EGCG, epigallocatechin gallate act as antioxidants and support immune function and liver detoxification. Additionally, in vitro, these nutrients have been shown to support healthy cell growth and division.

#### MERIVA® Curcumin

Studies have shown that curcumin, a naturally occurring biologically active group of compounds from *Curcuma longa* (turmeric), can function as efficient antioxidants and can help regulate the body's normal response to inflammatory processes. Curcumin can also play an important role in maintaining healthy angiogenic balance and help to support the body's detoxification processes. † Since curcumin exhibits poor oral absorption in the body, Douglas Labs has chosen a highly bioavailable curcumin called MERIVA®. Pharmacokinetic comparison studies have shown MERIVA® to have up to a 20-fold improvement in bioavailability versus the standard 95% turmeric extracts due to proprietary PHYTOSOME technology which increases hydrolytic stability.

#### Wasabia Japonica

Wasabia, a member of the cruciferous vegetable family, contains long chain isothiocyanates (ITCs). These ITCs are believed to be 10-25 times more potent in the detoxification process than most ITCs found in cruciferous vegetables. These long chain ITCs are unique to wasabia and are not commonly found in other cruciferous vegetables.

### INDICATIONS

DIM® Enhanced may be a useful dietary supplement for individuals wishing to support healthy estrogen detoxification, hormone balance and immune support.

### FORMULA (#201208)

1 vegetarian capsule contains:

MERIVA® Curcumin Phytosome .....	125 mg
(Curcuma longa extract, rhizome/Phosphatidylcholine (soy) complex)	
Green tea extract (leaf) .....	200 mg
(standardized to 95% polyphenols and 45% EGCG)	
BioResponse DIM® complex .....	125 mg
(complex of starch, diindolymethane, d-alpha tocopheryl succinate, phosphatidylcholine [soy] and silica), (standardized to contain 25% diindolymethane)	
Wasabia japonica (rhizome) .....	50 mg
(containing at least 1,200 mcg of isothiocyanates as allyl ITC, 3-butenyl ITC, and 4-pentyl ITC)	

BioResponse DIM® is a trademark of BioResponse, L.L.C., Boulder, CO. U.S. Patent 6,086,915.

Meriva® is a registered trademark of Indena S.p.A, Milano

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#### **SUGGESTED USE**

Adults take 1- 2 capsules daily with food, in divided doses, or as directed by your healthcare professional.

Avoid this product if pregnant or lactating. If taking prescription blood thinners such as Coumadin (warfarin) consult your physician prior to use.

#### **MICROENCAPSULATED DIM® DOSING GUIDELINES**

Women: 100-200 mg BioResponse DIM® (25-50 mg DIM)

Men: 200-400 mg BioResponse DIM® (50-100 mg DIM)

#### **SIDE EFFECTS**

Harmless changes in urine color may occur if less than recommended daily water intake is consumed.

#### **STORAGE**

Store in a cool, dry place, away from direct light. Keep out of reach of children.

#### **REFERENCES**

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**For more information on DIM® Enhanced, visit [douglaslabs.ca](http://douglaslabs.ca)**

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