NutriDyn®

I-3-C Plus

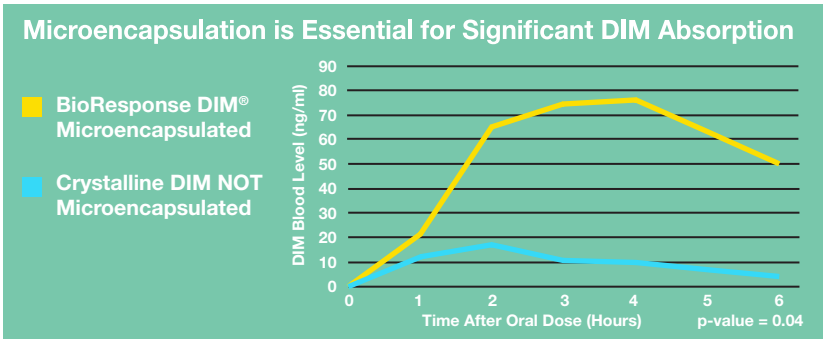
Indole-3-Carbinol and DIM

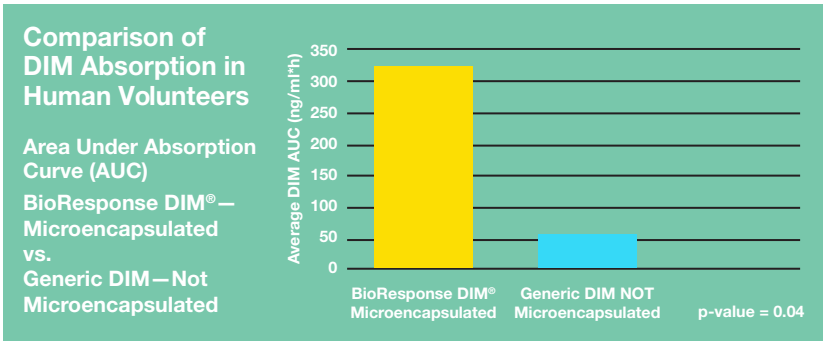
Supports Estrogen Metabolism♦

I-3-C Plus is a potent blend of naturally occurring compounds that support healthy estrogen metabolism and promote healthy hormonal balance.♦ The new and upgraded I-3-C Plus formula contains indole-3-carbinol (I-3-C) and diindolylmethane (DIM), both abundantly found in cruciferous vegetables. What makes the I-3-C Plus formula new and unique is that it now utilizes the clinically proven absorption of microencapsulated BioResponse DIM® Complex.♦

How I-3-C Plus Works

The BioResponse DIM® Complex in the new I-3-C Plus is the only bioavailable, microencapsulated DIM formula for extended release and increased absorption. In its crystalline form, DIM is poorly absorbed. With patented BioResponse DIM® Complex, there is a statistically significant advantage of gastrointestinal absorption with microencapsulated DIM over the more commonly found crystalline DIM as shown in these graphical representations of results from clinical trials.♦[1,2,3,4]





Clinical research has shown that both I-3-C and DIM act on enzymes in the body that mediate estrogen production for both women and men.♦[5,6] I-3-C comes from the breakdown of a compound found in cruciferous vegetables called glucobrassicin—a type of glucosinolate. When ingested, the body breaks down I-3-C to DIM,

Form: 60 Capsules

Serving Size: 1 Capsule

Ingredients	Amount	%DV
Indole-3-Carbinol	150 mg	*
Diindolylmethane (DIM) (BioResponse DIM® Complex) [starch, diindolylmethane, vitamin E (as tocophersolan), phosphatidyl choline, silica.]	50 mg	*

Other Ingredients:

Hypromellose, microcrystalline cellulose, tricalcium phosphate, vegetable magnesium stearate, silica.

BioResponse DIM® is a proprietary, enhanced bioavailability complex containing diindolylmethane licensed from BioResponse, L.L.C., Boulder, Colorado.

Directions:

Take one capsule up to three times daily as a dietary supplement, or as directed by your healthcare practitioner.

Caution: If you are pregnant, nursing, or taking medication, consult your healthcare practitioner before use. Keep out of reach of children.

GLUTEN-FREE DAIRY-FREE VEGETARIAN

NON-GMO PRODUCED IN A cGMP FACILITY

♦ 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.

References

For more information, visit: ***www.nutridyn.com***

ND239 Rev. 6/21 ©2021 NutriDyn

both of which influence estrogen metabolism by acting on certain enzymes. In particular, I-3-C and DIM work by inhibiting the actions of histone deacetylase enzymes and inducing cytochrome P450 enzymes.[5,6]

Both of these enzyme families are crucial for proper estrogen balance in the body. Specifically, I-3-C has been shown to induce an enzyme called CYP1A1, which aids in the metabolism of xenobiotics that can disrupt estrogen balance in the body.[7] Absorbable BioResponse DIM® Complex works to activate histone deacetylase inhibitors, which research suggests modifies estrogen receptor binding to promote healthy estrogen metabolism and hormonal balance.♦[7,8,9,10]

Given this, both I-3-C and DIM appear to have significant effects on supporting healthy estrogen metabolism and promoting healthy hormonal balance.♦ Clinical research also shows the proven bioavailability of BioResponse DIM® Complex to optimize the ratio of estrogen metabolites to support breast, uterine, cervical, and prostrate health.♦[1,2,3,4]

I-3-C Plus Supplementation

The ingredients in I-3-C Plus are dosed in a manner that is congruous with what research suggests to be effective and safe, particularly for supporting healthy estrogen metabolism and promoting healthy hormonal balance.♦

Clinical evidence and research cited herein shows that the ingredients in I-3-C Plus may:

- Support healthy estrogen metabolism♦
- Promote healthy hormonal balance♦
- Promote balanced mood and well-being♦

References:

1. Zeligs, M. A., Brownston, P. K., Sharp, M. E., Westerling, K. C., Wilson, S. M., & Johs, S. M. (2005). Managing cyclical mastalgia with absorbable diindolylmethane: A randomized, placebo-controlled trial. *Journal of the American Nutraceutical Association, 8*(1), 5-15.
2. Zeligs, M. A., Fulfs, J. C., Peterson, R., Wilson, S. M., McIntyre, L., Sepkovic, D. W., & Bradlow, H. L. (2003). In vivo, uterine-protective activity of absorption-enhanced diindolylmethane: Animal and preliminary human use in combination with Tamoxi-fen. *Proceedings of the American Association of Cancer Research, 44*, 1268.
3. Zeligs, M. A., Sepkovic, D. W., Manrique, C., Macsalka, M., Williams, D. E., & Bradlow, H. L. (2002). Absorption-enhanced 3,3'-diindolylmethane: Human use in HPV-related, benign and pre-cancerous conditions. *Proceedings of the American Association of Cancer Research, 43*, 3198.
4. Teas, J., Cunningham, J. E., Fowke, J. H., Nitcheva, D., Kanwat, C. P., Boulware, R. J., Sepkovic, D. W., Hurley, T. G., & Hebert, J. R. (2005). Urinary estrogen metabolites, prostate specific antigen, and body mass index among African-American men in South Carolina. *Cancer Detection and Prevention, 29*(6), 494-500.
5. Michnovicz, J. J., Adlercreutz, H., & Bradlow, H. L. (1997). Changes in levels of urinary estrogen metabolites after oral indole-3-carbinol treatment in humans. *Journal of the National Cancer Institute, 89*(10), 718-723.
6. Chen, I., McDougal, A., Wang, F., & Safe, S. (1998). Aryl hydrocarbon receptor-mediated antiestrogenic and antitumorigenic activity of diindolylmethane. *Carcinogenesis, 19*(9), 1631-1639.
7. Aggarwal, B. B., & Ichikawa, H. (2005). Molecular targets and anticancer potential of indole-3-carbinol and its derivatives. *Cell Cycle, 4*(9), 1201-1215.
8. Leong, H., Riby, J. E., Firestone, G. L., & Bjeldanes, L. F. (2004). Potent ligand-independent estrogen receptor activation by 3,3'-diindolylmethane is mediated by cross talk between the protein kinase A and mitogen-activated protein kinase signaling pathways. *Molecular Endocrinology, 18*(2), 291-302.
9. Dalessandri, K. M., Firestone, G. L., Fitch, M. D., Bradlow, H. L., & Bjeldanes, L. F. (2004). Pilot study: Effect of 3,3'-diindolylmethane supplements on urinary hormone metabolites in postmenopausal women with a history of early-stage breast cancer. *Nutrition and Cancer, 50*(2), 161-167.
10. Bradlow, H. L., Telang, N. T., Sepkovic, D. W., & Osborne, M. P. (1996). 2-hydroxyestrone: the 'good' estrogen. *Journal of Endocrinology, 150*(S2), 59-65.