



Facts About DIM and Women's Health

What is DIM?

Diindolylmethane (DIM, in short) is the principal breakdown product of indole 3-carbinol (I3C), the phytochemical found in cruciferous vegetables like cabbage, cauliflower, broccoli, brussel sprouts, kale, collards, mustard greens, radishes, watercress, and turnips. DIM, has been shown in scientific studies to reduce the risk of breast, cervical and other estrogen-driven cancers by helping the body to make a better balance of the “good estrogen” (2-hydroxy-estrone) compared to the “bad estrogen” (16-alpha-hydroxy-estrone).

What makes optimal estrogen metabolism so important for women?

Optimal estrogen metabolism in women is defined by the ample production of “good” estrogen metabolites. These metabolites help lower the risk of cancer and decrease the symptoms of estrogen over-stimulation, or dominance - symptoms of which include breast tenderness, rapidly growing uterine fibroid tumors, uterine cervix problems (as seen with abnormal PAP smears) and endometriosis, a painful condition caused by persistent uterine tissue growing in abnormal locations within the abdomen.

Anti-oxidant properties of “good estrogen” metabolites.

Finally, the “good” estrogen metabolites have important anti-oxidant activity exceeding the potency of Vitamin E. The antioxidant activity of the “good” estrogen metabolites may explain why estrogen in women can slow the course of some age-related diseases. These include heart disease, arthritis, and cancer.

“Good estrogen” metabolites don’t just effect metabolism and libido.

Having higher levels of the “good” estrogen metabolites is also important for sustaining an active fat-burning metabolism. “Good” metabolites help fat cells release stored fat. They are important in preserving the activity of the small amount of testosterone present in all women. This provides additional support fat utilization, as well as support for mood and libido. Healthy levels of testosterone in women may also help to reduce the symptoms of premenstrual syndrome.

How does proper hormonal balance help with weight loss?

The “good” estrogen metabolites along with increased free testosterone promoted by DIM increased fat mobilization and a fat-burning metabolism. The effects of free testosterone in women and men are similar. In each case, testosterone promotes the building of new protein. When hormonal balance shifts to favor building new proteins, metabolite rate is increased and fat metabolism is promoted. Part of the protein-building effect of testosterone is to gear up the cellular enzymes needed to burn fat. Fat contains the stored energy needed to support formation of new proteins as well as the fuel for sustained aerobic exercise. Together with exercise, DIM provides the best hormonal balance to create the protein machinery for active fat utilization.

The good estrogen metabolites also directly facilitate the release of stored fat in several ways. First, these metabolites assist the specific fat-burning hormones called catecholamines that are produced during exercise to release stored fat. These released fatty acids circulate in the blood stream as a primary energy source. Second, the “good” estrogen metabolites can increase the number of protein receptors for the catecholamines that appear on the surface of fat cells. As circulating catecholamines released during exercise occupy these receptors, stored fat is more actively released from fat cells. DIM and a hormonal balance favoring the “good” estrogen metabolites assist catecholamines in supporting a more active fat-burning metabolism.