

SOURCE



NATURALS

Strategies for Wellness™

CALCIUM D-GLUCARATE

Estrogen Detoxification



From the womb to the tomb, we are subject to the effects of estrogen, the potent female hormone that shapes our lives.

Variations in estrogen levels can have a dramatic effect on our cellular development.

Source Naturals is proud to introduce a nutrient that may help the body remove

excess estrogen, thereby giving relief to estrogen-sensitive tissues. Calcium

D-glucarate is currently the subject of numerous clinical studies. It is proving to have great potential for addressing health

concerns closest to our heart.



One of life's most delicate balancing acts is found in the ebb and flow of *hormones* that is constantly taking place in the human body. These messenger chemicals are fundamental to the process of life. Produced by endocrine glands, hormones travel throughout the body, communicating with each other as they direct cellular activity. For example, the hypothalamus gland monitors hormone levels in the body. It signals the pituitary gland, advising it to send messages to the ovaries to either produce or stop producing *estrogen*.

Estrogen is an extremely powerful hormone whose activity can be measured in parts per trillion. Therefore, it doesn't take much to create an imbalance. Like all hormones, estrogen communicates with a cell by docking to a particular receptor site on that cell's membrane. If there is an excess of these estrogen-sensitive receptors, or an excess of circulating estrogen in the bloodstream, normal cellular metabolism can be altered. Another problem is that estrogen receptors are not very particular; they will accept many chemicals – both natural and synthetic – other than estrogen.

How the body removes excess estrogen

One of the processes by which estrogen and estrogenic compounds are metabolized and broken down is through *glucuronidation*. In the liver, they're bound to glucuronic acid and then excreted in the urine or feces. This process can be disrupted by an enzyme called *beta-glucuronidase*, which is found in the gastro-intestinal tract. It frees the bound-up estrogen or estrogenic compound, releasing it to be reabsorbed back into the bloodstream – to again affect cells.

Obviously estrogen is needed by the body; however, too much can lead to cellular disruption. Since it can be very difficult to avoid the estrogenic chemicals rampant in our environment, another strategy is needed, and that is to reduce their negative effects by supporting the body's natural ability to remove excess estrogen and other hormones and toxins.

Calcium D-glucarate and hormone metabolism

The removal of excess estrogen can be increased by a natural substance called *Calcium D-glucarate (CDG)*, because it inhibits beta-glucuronidase activity in the body. This means that estrogen bound for excretion stays bound, and the total estrogen load on the body is reduced.

In clinical trials, tissues that are sensitive to excess hormones – such as breast, liver, and lung – have been shown to respond favorably to CDG. In addition to estrogen and estrogenic compounds, CDG helps promote excretion of other hormone metabolites as well as cellular toxins and steroids.

CDG is made naturally in small quantities in the body; it is also found in a variety of fruits and vegetables: oranges, broccoli, carrots, spinach, and apples. Vitamin A has been shown to have a synergistic effect with CDG. One 500 mg tablet of Source Naturals CALCIUM D-GLUCARATE is equivalent to the phytonutrient activity found in 82 pounds of fresh fruits and vegetables. The suggested use for preventative health maintenance is 3 to 4.5 grams per day. No toxicity has been found with its usage.

Phytonutrients also help reduce estrogen exposure

Another strategy to reduce the effects of excess estrogen is to increase the intake of plant estrogens. This helps for two reasons. First, by occupying estrogen receptor sites, these natural estrogenic compounds block synthetic estrogens from attaching to these sites. Second, phytoestrogens only mildly activate receptors.

One of the best phytoestrogens is *genistein*, the isoflavone in soybeans responsible for soy's beneficial influence on the human body. Increased intake of genistein and/or soy is being recommended by many health professionals, especially for post-menopausal women. Please see Source Naturals product literature on GENISTEIN as well as MENO BALANCE, our nutritional menopause formula with genistein and black cohosh. Both are part of our advanced line of nutritional support for women.

As new research sheds light on the importance of proper hormone balance to our health, it's vital to protect ourselves from the increased burden of estrogen that we are encountering today. Source Naturals CALCIUM D-GLUCARATE is a timely nutrient that can make a real difference in our lives.

References

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