

CALCIUM D-GLUCARATE SUPPORTS HEALTHY DETOXICATION*

Calcium D-Glucarate is a form of D-glucaric acid complexed with calcium. Calcium D-Glucarate has been shown in research to support healthy Phase 2 detoxication and estrogen metabolism.*

- Supports healthy immune system function and estrogen metabolism*
- Inhibits beta-glucuronidase*
- Easy-to-swallow vegetarian capsule
- Well-tolerated, even at high doses



wheat free



gluten free



corn free



soy free



dairy free



vegetarian



CALCIUM D-GLUCARATE

Calcium D-glucarate is the calcium salt of D-glucaric acid. Naturally occurring both in the human body and in certain plant sources, supplementation with calcium D-glucarate has been shown to raise blood levels of D-glucaro-1,4-lactone and subsequently to inhibit beta-glucuronidase, an enzyme that deconjugates glucuronidated estrogen and other metabolites in the intestine.*These effects support healthy metabolism of estrogen and other metabolites of Phase 2 liver detoxication.*^{1,8}

Calcium D-glucarate supports glucuronidation, a conjugation process that occurs in the liver to metabolize hormones such as estrogen, and toxins, by binding them to glucuronic acid and then excreting the compound in bile.* This process can be disrupted by beta-glucuronidase, an enzyme produced by intestinal bacteria. Beta-glucuronidase breaks the chemical bonds established between glucuronic acid and the conjugated hormones or toxins. As a result, the hormone or toxin can be liberated and reabsorbed via the enterohepatic recirculation, instead of being excreted. Beta-glucuronidase activity has been the subject of basic science studies regarding immune and hormone metabolism.^{2,3}

Calcium-D-glucarate also inhibits protein tyrosine kinase-C activity and induces transformation growth factor beta.*⁴ Calcium D-glucarate continues to be a promising compound in clinical studies.⁵⁻⁸

In an animal model, a calcium D-glucarate supplemented diet was administered after treatment with a toxin. Supplementation was found to substantially lower beta-glucuronidase levels and increase excretion of the toxin.*⁹

In a six-week clinical trial in humans, participants received an escalating dose of calcium D-glucarate, beginning with 1.5 g and increasing to 9 g per day. The level of D-glucaric acid was measured at baseline and at study completion. All groups experienced a significant rise in serum D-glucaric acid over the course of the study.* Serum levels of beta-glucuronidase were also measured and found to decrease significantly as the dosage of calcium D-glucarate increased, an indication of the beneficial role of calcium D-glucarate supplementation.*¹⁰ Furthermore, calcium D-glucarate was found to be well-tolerated, even at the highest dosage.

Supplement Facts

Serving Size 3 capsules		Servings per container 30
Amount per 3 capsules		%DV
Total Carbohydrate	1 g	<1%†
Calcium (as calcium D-glucarate)	180 mg	18%
Calcium D-Glucarate	1.5 g	**

†Percent Daily Values (DV) are based on a 2,000 calorie diet.

**Daily Value not established.

Other ingredients: vegetable capsule (modified cellulose), cellulose, modified cellulose gum, magnesium stearate.

Recommendations: Take 1 to 3 capsules three times daily with meals, or as recommended by your healthcare professional.

If pregnant, nursing, or taking prescription drugs, consult your healthcare professional prior to use.

Contains No: Sugar, salt, yeast, wheat, gluten, corn, soy, dairy products, artificial colors, flavors, preservatives or ingredients of animal origin.

Integrative Therapeutics 90 CT - 146006

Each 500 mg capsule of calcium D-glucarate contains approximately 60 mg of elemental calcium.

References

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*THIS STATEMENT HAS NOT BEEN EVALUATED BY THE FOOD AND DRUG ADMINISTRATION. THIS PRODUCT IS NOT INTENDED TO DIAGNOSE, TREAT, CURE, OR PREVENT ANY DISEASE.