Hydroxycitric Acid

Supplement Forms/Alternate Names :

Garcinia cambogia; Gorikapuli; HCA; Hydroxycitrate; Malabar Tamarind

Principal Proposed Uses

None

Other Proposed Uses

Weight Loss

Hydroxycitric acid (HCA), a derivative of citric acid, is found primarily in a small, sweet, purple fruit called the Malabar tamarind or, as it is most commonly called, *Garcinia cambogia* . Test tube and animal research suggests that HCA may be helpful in weight loss because of its effects on metabolism. However, studies in humans have found mixed results.

Sources

HCA is not an essential nutrient. The Malabar tamarind is the only practical source of this supplement.

Therapeutic Dosages

A typical dosage of HCA is 250 to 1,000 mg 3 times daily. Supplements are available in many forms, including tablets, capsules, powders, and even snack bars. Products are often labeled *Garcinia cambogia* and standardized to contain a fixed percentage of HCA. Various proprietary forms of HCA are also available, often claimed by their promoters to be more effective.

Therapeutic Uses

Although animal and test tube studies as well as two human trials suggest that HCA might encourage weight loss , other studies have found no benefit. [1-14,20,21]

What Is the Scientific Evidence for Hydroxycitric Acid?

It remains unclear whether HCA offers any weight-loss benefits.

In an 8-week double-blind, placebo-controlled trial of 60 overweight individuals, use of HCA at a dose of 440 mg 3 times daily produced significant weight loss as compared to placebo. [15]

In contrast, a 12-week, double-blind, placebo-controlled trial of 135 overweight individuals, who were given either placebo or 500 mg of HCA (as *Garcinia cambogia* extract standardized to contain 50% HCA) 3 times daily, found no effect on body weight or fat mass. [16] However, this study has been criticized for using a high-fiber diet, which is thought to impair HCA absorption. [17]

A 12-week double-blind trial of 89 individuals found that HCA had no effect on appetite. [18] Another study tested HCA to see if it could cause weight loss by altering metabolism, but no effects on metabolism were found. [19]

Safety Issues

The Malabar tamarind (from which HCA is extracted) is a traditional food and flavoring in Southeast Asia. No serious side effects have been reported from animal or human studies involving either fruit extracts or the concentrated chemical. A proprietary calcium-potassium salt of HCA appears to have undergone considerable formal safety study, without evidence of toxicity appearing. [20] However, maximum safe doses have not been established, especially for pregnant or nursing women, young children, or people with severe liver or kidney disease.

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