



▶ INTERNET SEARCHES
RETURN OVER 3.5 MILLION
HITS FOR "GREEN COFFEE" (1)



▶ GAINED POPULARITY AFTER
FEATURE ON THE DR. OZ SHOW



▶ PRODUCTS INCLUDE
CAPSULES, DROPS, CHEWS,
AND TEAS

Green Coffee

Worth the hype?

overview

- Green coffee extract is a weight loss product made from unroasted coffee beans (1)
- Popular products include Svetol® or GCA® (2)
- It is thought to promote weight loss, by reducing postprandial glucose absorption (3)
- GCE contains chlorogenic acids, which are phenolic compounds that inhibit the glucose-6-phosphatase enzyme system *in vitro*. Glucose-6-phosphatase catalyzes the formation of glucose from the liver (3)

research

- Some early research indicated that green coffee may be effective for weight loss (1)
- A 22-week crossover study of 16 overweight adults found significant reductions in BMI when given green coffee for six weeks, independent of diet (4)
- However, a meta-analysis concluded that the early research indicating that green coffee is effective was of poor methodological quality (5)

dosage

- The recommended dosage is 400 mg, three times a day (2)

safety

- Coffee consumption is linked with increased blood pressure, and both caffeine and chlorogenic acid are linked with greater plasma homocysteine (3)
- However, many GCE products are decaffeinated, thus reducing the potential for purported caffeine-related side effects (3)

interactions

- GCE contains ferulic acid, which has a hypotensive effect. Thus Green coffee may interact with antihypertensive agents (3)
- Coffee compounds have antidiabetic effects, and caffeine has hypoglycemic effects. Thus green coffee may potentially interact with antidiabetic agents (3)
- Several coffee constituents possess anti-inflammatory effects, so coffee may interact with anti-inflammatory agents (3)
- Concurrent use of beta-blocking agents with coffee can result in antagonism of the desired effect of either agent (3)
- Chlorogenic acids are potent inhibitors of iron absorption (3)



References

1. Marcason W. What is green coffee extract? *J Acad Nutr Diet* 2013;113(2):364.
2. Dr. Oz Show. Fact Sheet: Green Coffee Bean. 2012. (<http://www.doctoroz.com/videos/fact-sheet-green-coffee-bean>). (Accessed 8/2/2013).
3. Natural Standard. Green coffee, 2013. (<http://www.naturalstandard.com.offcampus.lib.washington.edu/databases/herbssupplements/greencoffee.asp?>). (Accessed 8/2/2013).
4. Vinson JA, Burnham BR, Nagendran MV. Randomized, double-blind, placebo-controlled, linear dose, crossover study to evaluate the efficacy and safety of a green coffee bean extract in overweight subjects. *Diabetes Metab Syndr Obes* 2012;5:21-7.
5. Onakpoya I, Terry R, Ernst E. The use of green coffee extract as a weight loss supplement: a systematic review and meta-analysis of randomised clinical trials. *Gastroenterol Res Pract* 2011.