



# Green Coffee Extract

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The past ten years have seen a significant increase in the search for nutraceuticals that can help with both weight loss and diabetes. Recently, Dr. Oz reported on a trial of green coffee extract (GCE) for weight loss, bringing about a certain hysteria over this supplement. Of course most of you know that I rarely consider the advice from TV MDs to be of much value, however they definitely do stir the pot. There are certainly articles in public forums bashing green coffee extract as well. So let's give a truly fair and balanced, dare we say "middle path", approach to this supplement.

Coffee has been reviewed by us in the past and has long been understood to help with weight loss and blood sugar control. Two key ingredients play a role: caffeine and chlorogenic acids. The idea of providing a supplement to mimic the health benefits of coffee appeals to those who don't like to either drink coffee or cannot tolerate caffeine. Three other double-blind placebo-controlled randomized clinical trials (DBPCRCTs) predate the one that has stirred controversy due to its multiple methodological flaws. Every trial so far shows significant benefits with regard to both total weight loss and reduction in percent body fat. The trial published in January of this year involved only 16 participants in a 22 week study documenting an overall 16% reduction in body fat, but was plagued by innumerable inconsistencies.

Still, what we do know is that chlorogenic acids are well absorbed, have many antioxidant properties, and decrease liver glucose formation, with one of its key mechanisms being controlling blood sugar. So green coffee extract has plausible mechanisms of action, epidemiologically consistent effects on weight loss, DBPCRCT consistent effects on weight loss, all tied to a substance with thousands of years of documented safety and health-promoting abilities – coffee.

So what's the rub? Most GCEs have dramatically reduced caffeine content to appeal to a base of people who are either intolerant of the effects of caffeine or have been taught to fear this substance. Clearly many of the health benefits from coffee, including weight loss, come partially from caffeine. So how much is lost when we decaffeinate? The answer is some but not all, as documented by four DBPCRCTs since 2007. However, if I were to take a GCE, and had no adverse reaction to caffeine, I would take the GCEs with caffeine as it is a more natural substance with better long-term data. The usual dosage is GCE 500 mg twice per day (standardized to 40-50% chlorogenic acids).

The clear, proven benefit of this nutraceutical is to support weight loss and blood sugar control in people who are overweight, with or without glucose intolerance or diabetes. I am making no wild claims about this substance, but be very clear that no

drug being sold to you (prescription or non-prescription) has better safety or efficacy data than this one. The treatment effect is that of supporting a one pound per week weight loss in people who don't attempt to modify diet or exercise patterns in any way. Adding green coffee extract to a program following "Paleo" principles and interval training will support your goal of finding optimal metabolism.

Your Journey to Health and Healing,  
Gary E. Foresman, MD

#### References:

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3. Chlorogenic Acids from Green Coffee Extract are Highly Bioavailable in Humans. Farah, A et al. J Nutr. 2008 Dec; 138(12) 2309-15.

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