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## Is green tea reduce the fat?

**Dr. Sanjay Choudhary**

### Abstract

When you think of the term “Green Tea,” exercise and body building probably aren’t the first images that spring to mind. But after learning about some of the improvements that can come from adding green tea extract to your regimen, you may have a different opinion. The health benefits of green tea extract are almost too numerous to list, and they extend well beyond the walls of the exercise room. Not only has green tea extract been shown to promote fat loss to give you a lean and ripped body, it has also been noted as an immune system booster, helping you fend off colds. Further, it can potentially reduce your risk of developing certain cancers, such as prostate cancer, and green tea extract has the ability to lower your cholesterol levels. Tea is the second most commonly consumed beverage worldwide. And, with good reason, tea is a calorie free beverage boosting with natural benefits. If you get bored with water, brew a cup of tea and toast to good health. Each of the four types of tea, green, black, white and oolong, are made from the leaves of the *Camellia Sinensis* plant. The differences in color and taste among each kind of tea are due to differences in processing of the tea leaves. Both black and green tea has been researched for their health benefits, its green tea that is of most interest to scientists. This is because green tea contains significantly higher levels of naturally occurring powerful antioxidants called ‘flavonoids’. There are many different types of flavonoids in the plant kingdom; in green tea however, the main flavonoids are ‘catechins’ of which four are present in high concentrations.

- Epigallocatechin-3-gallate (EGCG) – approximately 59% of the total of catechin content.
- Epigallocatechin (EGC) – approximately 19% of total.
- Epicatechin-3-gallate (ECG) – approximately 13% of total.
- Epicatechin (EC) – approximately 6.4% of total.

**Keywords:** Green Tea, *camellia sinensis* plant, reduce fat

### Introduction

Green tea extract also contains a small amount of caffeine, providing you with an added boost of energy and focus as you go about your daily work or exercise routine. Be aware that if you suffer from high-blood pressure, high stress levels, or any other symptoms that may be compounded with caffeine intake, green tea extract may not be advisable for you. Sports Nutrition carries the best green tea formulas, always delicious and certain to give you the benefits you need. If you’re looking for a way to burn fat, increase muscle mass and promote your overall health, don’t hesitate another minute-purchase some green tea extract today! The discovery of green tea may have occurred about 4,000 years ago, but its popularity has recently peaked in the bodybuilding community. This intensely studied compound is a staple in the formulas of top fat-burning supplements - and with good reason.

Let's start at the root of this green tea phenomenon. Green tea, along with black and oolong, comes from the tea plant *Camellia sinensis*. This plant is an evergreen shrub that is native to mainland South and Southeast Asia, but can now be found across the world in tropical and subtropical regions. Green, black and oolong tea may all come from the same plant, but the difference stems from the way each is prepared. Green tea, unlike black and oolong tea, is not fermented, so the active constituents are unaltered in the herb. These incredible polyphenols are more commonly known in the scientific community as flavanols or catechins 2.

The main catechins in green tea are epicatechin, epicatechin-3-gallate, epigallocatechin and, the one with the highest concentration, epigallocatechin-3-gallate or EGCG. A lot of the studies done on green tea have focused on the highly concentrated EGCG catechin, but there are also plenty of studies on catechins in general. The results of these studies are vital for every bodybuilder trying to get ripped.

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### Connections between Green Tea and Weight Loss

Green tea has emerged as a popular method for weight reduction. Whether utilized as a supplement, integrated into diet pills, or consumed as a beverage, green tea demonstrates efficacy in aiding weight loss efforts. Its ability to enhance metabolism results in increased calorie burning and the targeting of stored fat reserves. The metabolic impact of green tea can be attributed to a synergistic blend of antioxidants and caffeine, facilitating optimal bodily function.

Additionally, green tea reduces the synthesis of body fat. Triglycerides, formed from the digestion of fats and sugars, serve as vital energy sources. However, excessive intake of fats or sugars can lead to fat accumulation. Green tea's polyphenols, specifically catechins, play a crucial role in breaking down triglycerides. Furthermore, green tea consumption has been associated with improved exercise endurance 3.

1. Green Tea causes carbohydrates to be released slowly, preventing rises in blood sugar levels and this causes your body to burn fat.
  2. Green Tea prevents you from gaining weight by stopping the movement of sugar into your fat cells. Evidence shows that drinking green tea is related to reductions in body fat.
  3. In a test where 10 men were given Green Tea, caffeine, or a placebo with breakfast, lunch, and dinner. The men who took green tea burned more fat than the placebo and caffeine groups.
  4. Research shows you can burn 35-to-43% more fat during the day when you drink 3-to- 5 cups of Green Tea
  5. The International Journal of Obesity states that Green Tea contains polyphenols which causes your body to produce heat that burns off your body fat.
  6. The University of Chicago's Tang Center for Herbal Medical Research shows Green Tea reduces the fat deposits under your skin and the fat in your belly area.
  7. Studies show that when you drink Green Tea every day for 3 months you'll lose more body fat than those who drink regular tea.
  8. Lots of Green Tea weight loss studies prove green tea lowers blood sugar. A lower blood sugar reduces making you not eat as much so you won't gain any weight.
  9. Several studies on obesity have concluded that people who've been drinking Green Tea for more than 10 years showed lower body fat percentages compared with those who don't drink green tea regularly. That's a proven fact! Several studies suggest green tea may promote weight loss by stimulating the body to burn abdominal fat. Green tea contains catechins, a type of phytochemical that may briefly affect the metabolism. To get the most benefit, you may need to drink green tea several times a day.
- Green tea, a popular beverage worldwide, is often touted for its potential health benefits, including weight loss and fat reduction. Numerous studies and anecdotal evidence suggest that green tea may indeed play a role in reducing body fat. This essay explores how green tea can contribute to fat reduction, supported by scientific research and understanding of its mechanisms 4.

### Active Compounds in Green Tea

The primary active compounds in green tea that contribute to fat reduction are catechins, particularly epigallocatechin gallate (EGCG), and caffeine. These components have been shown to have several physiological effects that can promote fat loss.

**Catechins:** EGCG is a powerful antioxidant that enhances metabolism. It helps in the breakdown of fat by increasing the activity of norepinephrine, a hormone that promotes fat breakdown. EGCG also inhibits an enzyme that breaks down norepinephrine, prolonging its fat-burning effects.

**Caffeine:** Although present in lower quantities compared to coffee, the caffeine in green tea works synergistically with catechins. Caffeine stimulates the central nervous system, increasing metabolism and promoting the release of fatty acids from fat tissues, making them available for energy use.

### Mechanisms of Fat Reduction

#### Green tea influences fat reduction through several mechanisms

**Boosting Metabolism:** Research indicates that green tea can boost metabolic rate. A study published in the American Journal of Clinical Nutrition found that green tea extract increased energy expenditure by 4% over a 24-hour period. This increase in metabolism helps burn more calories, contributing to fat loss 5.

**Enhancing Fat Oxidation:** Green tea has been shown to enhance fat oxidation, particularly during exercise. The same study mentioned above noted a 17% increase in fat oxidation in those who consumed green tea extract. This means that green tea can help the body use fat as a primary energy source, especially during physical activity.

**Reducing Appetite:** Some studies suggest that green tea can help reduce appetite, leading to lower calorie intake. While the effects on appetite suppression are less conclusive than those on metabolism and fat oxidation, they still contribute to overall fat reduction.

### Scientific Evidence

#### Several studies support the fat-reducing properties of green tea

**Weight Loss Studies:** A review of 11 studies published in the International Journal of Obesity concluded that green tea catechins significantly reduced body weight and maintained weight loss. The studies showed an average weight loss of around 1.3 kg (2.9 lbs) more than control groups over a 12-week period.

**Visceral Fat Reduction:** Green tea has been shown to target visceral fat, the harmful fat stored around abdominal organs. A study published in Obesity (Silver Spring) found that individuals who consumed green tea extract experienced significant reductions in visceral fat 6.

### Practical Considerations

While green tea can aid in fat reduction, it is essential to combine its consumption with a balanced diet and regular exercise for optimal results. Drinking 2-3 cups of green tea per day is generally considered safe and effective. Green tea supplements are also available, but it is advisable to consult with a healthcare provider before starting any new supplement regimen

### Dosing considerations for Green Tea

The following doses have been studied in scientific research: Doses of green tea vary significantly, but usually range between 1-10 cups daily. The commonly used dose of green tea is based on the amount typically consumed in Asian countries, which is about 3 cups per day, providing 240-320

mg of the active ingredients, polyphenols. To make tea, people typically use 1 teaspoon of tea leaves in 8 ounces boiling water 7.

- a) **For headache or restoring mental alertness:** tea providing is up to 250 mg of caffeine per day, or approximately 3 cups of tea per day.
- b) **For improving thinking:** tea providing 60 mg of caffeine, or approximately one cup.
- c) **For reducing cholesterol:** drinking 10 or more cups per day has been associated with decreased cholesterol levels. Theaflavin-enriched green tea extract, 375 mg daily for 12 weeks, has also been used for lowering cholesterol. Green tea has been used for thousands of years and has many benefits. One of them is green tea's thermo-genic properties. This means the green tea causes our metabolism to heat up, or consume fuel at a faster rate. The faster our metabolism, the more fuel it needs. We store fat as fuel for our body. Your metabolism, consuming fat at a faster rate, causes you to lose fat weight. Green tea also creates the feeling of fullness, making it a very effective appetite suppressant. When your body is no longer constantly craving foods, you can concentrate on healthier eating habits. A proponent in green tea called EGCG reduces the amount of lipids (fat) you absorb when you eat. This benefits your cholesterol level, causes weight loss and is very healthy for your heart.

### Then read on for some important tips

Replace your morning coffee with some green tea. Green tea has caffeine, so it can give you a boost when starting off your mornings, but it can also kick-start your metabolism into action so that you burn more calories all day long. Try to not add too much filler to the tea, however – things like sugar, honey and milk add calories that can counteract with the green tea's weight-loss properties. You can use green tea as a supplement to meals, as well. Drink a cup before or right after eating, so that you don't eat too much. Do be aware that since green tea contains a diuretic, you may also be visiting the restroom more frequently – but that's not necessarily a bad thing! Water weight counts on the scale, too.

When you drink green tea regularly (Think every day for several months as opposed to having off and on weeks) you experience extra weight loss benefits. The more you stick to it, the more it trains your body to absorb less fat in the long run. This is a good reason to keep drinking, even if you haven't noticed a lot of benefits in the first couple of days. Some things simply take time, but are worth waiting for learning how to lose weight with green tea opens the doors to other good habits. Because green tea is such an effective appetite suppressant, your cravings for snacks and bad foods will be stopped. No longer controlled by food, you can control what foods you eat. Use this time to learn new and healthier ways of eating. Begin to replace foods high in fat and 2calories with foods that are better for you reduce your caloric intake by just 500 calories a day, you will lose one pound a week! Your body will begin to feel more vigorous with smarter choices in balanced, healthy foods 8.

Green tea does more than kick-start your metabolism. Green tea contains an amino L-theanine. This amino increases your brain wave activity, leading to a more focused, yet calm, piece of mind. Take advantage of this energy by taking a simple walk before starting your day. A simple walk every day can lose up to three pounds per month! That is over thirty pounds in one year. Walking is good cardiovascular exercise

and burns calories. Exercise also releases endorphins, making you feel great! Green tea keeps your arteries around your heart open and flexible, making it a good addition to a heart-healthy diet.

When choosing green tea as a component in a weight loss program, a quality product from a reputable source is the first step. Next, it's going to take old-fashioned diet and exercise to get the best results. No matter how hard people try to get that instant solution, losing weight takes work. Eating a calorie-reduced diet with plenty of produce, lean proteins, and whole grains will provide the body with the proper fuel. Staying hydrated with eight to ten glasses of water is a must. Add daily exercise and green tea as a body booster to shed pounds. Always remember to talk to your doctor before taking any dietary supplement 9.

Now that you have learned how to lose weight with green tea, tell others what you know!

Obesity is reaching epidemic proportions. Almost one in three people are overweight or obese. Losing weight with green tea may change someone's life.

### References

1. Lewis M. Moneyball: The art of winning an unfair game. New York: WW Norton & Company; c2004.
2. Reep C, Benjamin B. Skill and chance in association football. *J R Stat Soc Ser A Gen.* 1968;131(4):581-585.
3. Waldmann E. Quantile regression: A short story on how and why. *Stat Modelling.* 2018;18(3-4):203-218.
4. Bridges KA, Madlem MS. Yoga, Physical Education, and Self-Esteem: Off the Court and Onto the Mat for Mental Health. *Calif J Health Promot.* 2007;5(2):13-17.
5. Coatsworth JD, Conroy DE. Enhancing the Self-Esteem of Youth Swimmers through Coach Training: Gender and Age Effects. *Psychol Sport Exerc.* 2006;7(2):173-192.
6. Frost J, McKelvie SJ. The Relationship of Self-Esteem and Body Satisfaction to Exercise Activity for Male and Female Elementary School, High School, and University Students. *Athl Insight.* 2005;7(4):36-49.
7. Hein V, Hagger MS. Global Self-Esteem, Goal Achievement Orientations, and Self-Determined Behavioral Regulations in a Physical Education Setting. *J Sports Sci.* 2007;25(2):149-159.
8. Pedersen S, Seidam E. Team Sports Achievement and Self-Esteem Development among Urban Adolescent Girls. *Psychol Women Q.* 2004;28:412-422.
9. Tracy AJ, Erkut S. Gender and Race Patterns in the Pathways from Sport Participation to Self-Esteem. *Sociol Perspect.* 2002;45(4):445-466.