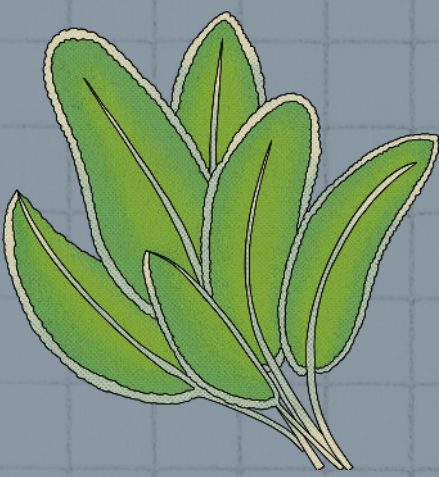




# Properties of Green Tea

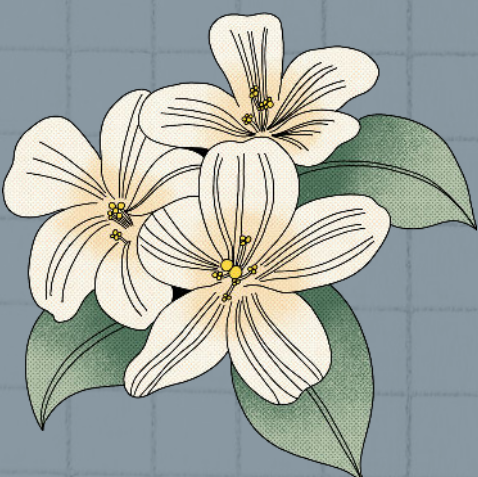


## What is Green Tea?

- Made from the leaves of the *Camellia sinensis* plant, green tea is renowned for its numerous health benefits and properties.
- Epigallocatechin Gallate (EGCG) is one of the most powerful compounds in green tea.

## Rich in Bioactive Compounds:

- Polyphenols like flavonoids and catechins function as powerful antioxidants.
- These substances can reduce the formation of free radicals in the body, protecting cells and molecules from damage.

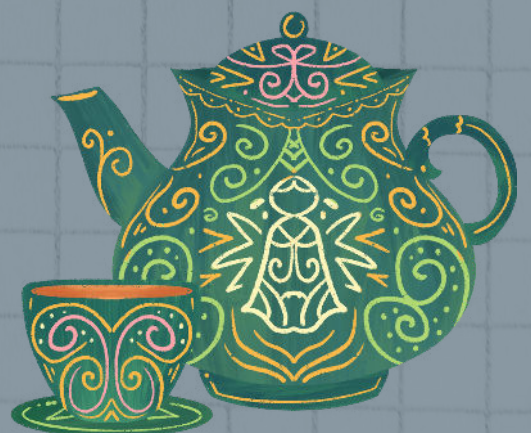


## I-CARE Protocol:

- 500-1000 mg daily
- Blocks infection by interfering with the receptor binding domain (RBD) of the viral spikes to angiotensin-converting enzyme 2 (ACE2) receptor of the host cells.
- Omicron subvariants were effectively inactivated by green tea, Matcha, and black tea.

## Antioxidant Properties:

- Protect against oxidative stress.
- Reduce the risk of various types of cancer (like breast, prostate, and colorectal cancer), although more research is needed for conclusive evidence.





# Benefits of Green Tea



## Cardiovascular Health:

- Improves some of the main risk factors for cardiovascular diseases, including improving total cholesterol and LDL (bad) cholesterol levels.
- Increases the antioxidant capability of the blood, which protects the LDL particles from oxidation.



## Brain Health:

- Contains less caffeine than coffee, improves brain function by blocking an inhibitory neurotransmitter called adenosine, thereby increasing the firing of neurons and the concentration of neurotransmitters like dopamine and norepinephrine.
- Amino Acid L-Theanine increases the activity of the inhibitory neurotransmitter GABA, which has anti-anxiety effects.
- Increases dopamine and the production of alpha waves in the brain, leading to improved brain function.



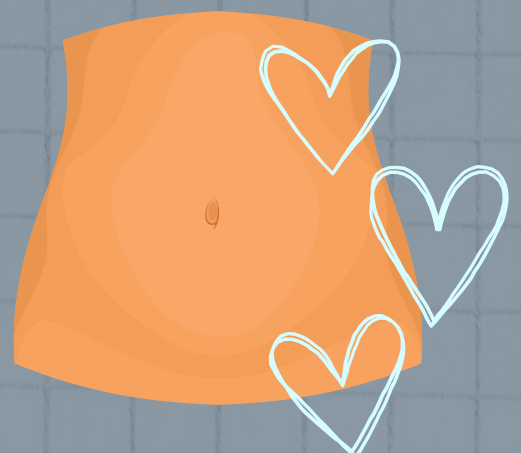
## Fat Burning and Physical Performance:

- Shown to increase fat burning and boost metabolic rate in human controlled trials, although the effect may vary with individuals.
- May improve physical performance by mobilizing fatty acids from fat tissue and making them available for use as energy.



## Weight Loss:

- Studies suggest that green tea can help with weight loss.
- Reduces harmful abdominal fat.





# Benefits of Green Tea



## Diabetes Prevention and Management:

- Can improve insulin sensitivity.
- Reduces blood sugar levels.

## Dental Health:

- Catechins in green tea also have biological effects on the teeth and gums
- Some studies show that they can kill bacteria and inhibit viruses like the influenza virus and COVID-19, potentially lowering your risk of infections and improving dental health.



## Antimicrobial & Antiviral Properties:

- Found to have antibacterial and antiviral properties.
- This is beneficial for overall health.

## Skin Health:

- Topical application and oral consumption of green tea may contribute to skin health.
- Reduces sun damage and improves hydration, elasticity, and skin thickness.



## Longevity:

- Reduces the risk of cardiovascular disease.
- Has anti-cancer properties.
- Increases life span.

# Matcha vs Green Tea



## Green Tea

- **Preparation and Form:** The leaves are steamed or pan-fired to prevent oxidation, giving green tea its characteristic color and flavor.



## Matcha

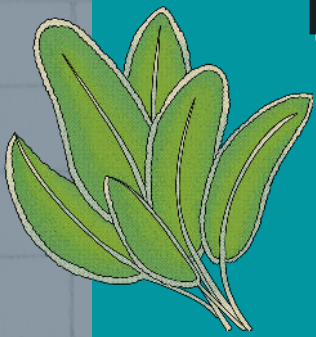
- **Preparation and Form:** Matcha is a type of powdered green tea. The plants are grown in shade for several weeks before harvest, which increases chlorophyll levels and boosts amino acid content. The leaves are then ground into a fine powder.



## Key Differences

- **Form and Consumption:** Regular green tea is consumed as a brewed beverage, and matcha as a dissolved powder.
- **Concentration of Compounds:** Matcha is a more concentrated source of green tea's active ingredients compared to the brewed tea.
- **Caffeine Content:** Matcha generally has more caffeine than regular green tea.
- **Health Impact:** While both can offer health benefits due to antioxidants, the concentration is higher in matcha.
- **Experience and Flavor:** The experience of drinking green tea vs matcha differs significantly in terms of preparation, taste, and cultural practices... try both!





# L-Theanine vs Green Tea Supplements



## L-Theanine

### Primary Benefits:

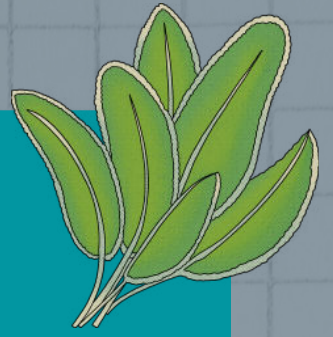
- **Mental Relaxation and Stress Reduction:** Promotes relaxation without drowsiness. It's commonly used for stress and anxiety relief.
- **Improves Focus and Brain Function:** When combined with caffeine (as found naturally in tea), L-theanine can improve focus and attention.
- **Sleep Quality Improvement:** It may help in improving the quality of sleep, not by acting as a sedative, but by lowering anxiety and promoting relaxation.
- **Potential Neuroprotective Effects:** Some studies suggest it may have neuroprotective and cognitive-enhancing capabilities.
- **Dosage and Consumption:** L-theanine supplements are usually taken in pill or capsule form. The dosage can vary but typically ranges from 100 to 400 mg per day, depending on the intended use.



### L-theanine compared to Green Tea:

- **Active Ingredients:** L-theanine supplements focus solely on the amino acid L-theanine, while green tea supplements offer a range of compounds including catechins, EGCG, and caffeine.
- **Effects:** L-theanine is primarily known for its relaxing and mood-enhancing effects, whereas green tea supplements are sought for their antioxidant properties, metabolic benefits, and stimulant effects due to caffeine.
- **Safety and Side Effects:** L-theanine is generally considered safe and does not have the stimulating effects of caffeine. Green tea supplements, however, can cause side effects related to their caffeine content, like jitteriness, rapid heartbeat, or sleep disturbances, and in high doses, may impact liver health.
- **Usage Goals:** The choice between the two depends on individual health goals: L-theanine for relaxation and mental focus, green tea supplements for antioxidant benefits and metabolic enhancement.





# Dr. Carman's Favorite Brands

## Teas:

### Green Tea:

- [Green Sencha Tea](#)
- [Jasmine Green Tea](#)
- [Rishi Green Tea](#)

### Matcha:

- [Matcha Tea Powder](#)
- [Fine Match Powder](#)
- [Naoki Matcha](#)



## Supplements:

### Green Tea:

- [Life Extension Green Tea Supplement](#)
- [Gaia Herbs Green Tea](#)
- [Zenwise Green Tea](#)

### L-Theanine:

- [Pure Encapsulations L-Theanine](#)
- [Integrative Therapeutics](#)
- [Everyday Stress Relief](#)

