

1- Name

- Scientific name: *Camellia sinensis* L. Kuntze Family: Theaceae [1]
- Common English name: Green tea [1], Chinese tea [2]
- Common Arabic name: شاي أخضر [3]

2- Morphology and histology

- It is an evergreen branched shrub.
- The leaves are glossy dark green, alternate, lanceolate and roughly serrate.
- The plant is cultivated world wide and was originally cultivated in china. [4]



Organ used for medicinal purposes: Dried leaves [4]

3- Method of administration [4]

- Oral Infusion
- Oral capsules

4- Active chemical constituents

- Alkaloids: Caffeine, Theobromine and Theophylline [5,6]
- Catechins: Epicatechin, epigallocatechin [7,8]
- Amino acids: L-Theanine [8]
- Flavonoids: Quercetin-3-D-galactoside and kaempferol-3-glucoside [8]

5- Pharmacological activities (Uses)

- CNS stimulant [4]
- Diuretic [4]
- Antidepressive effect [4]
- For relief of fatigue and sensation of weakness [9]
- Weight reduction [1]

6- Side effects [2,10]

- Anxiety
- Insomnia
- Nervousness
- Increased blood pressure
- Palpitations

Consuming more than 5 cups can cause restlessness and tremors. [9]

7- Drug interactions [10]

- MAOIs: if used in high concentrations with green tea it can lead to hypertensive crisis
- Ephedra: It can increase the CNS stimulation if concurrently administered with green tea
- Dairy products (Milk & cheese): The therapeutic effects of green tea may be reduced by consuming dairy products.
- Iron: Green tea can reduce the absorption of iron.

8- Lab results [10]

Green tea may alter the lab results of:

- Urine creatine
- Glucose

9- Contraindications [9,10]

The use of green tea is contraindicated for the patients suffering from

- Hypersensitivity to active substances and to other plants of the same family.
- Peptic and duodenal ulcers
- Cardiovascular disorders including hypertension and arrhythmia
- Insomnia
- Increased intraocular pressure

10- Market products



11- References

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- [3] Egyptian Herbal Monograph 2022
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- [6] Chacko, S. M., Thambi, P. T, Kuttan, R. and Nishigaki, I. (2010). Beneficial effects of green tea: a literature review. *Chin. Med.*, 6(5): 13. doi: 10.1186/1749-8546-5-13.
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