

TEA (CAMELIA THEA): BOON OR CURSE FOR HUMAN BEING

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Received: 18/2/2002

Accepted: 16/7/2001

ABSTRACT: *Drinking some types of tea and other caffaeinated drink is a part of our culture and everyday life. It is contained from the leaves and seeds of evergreen plant (Camelia thea). It is caffeine contained in so many drinks which really plays havoc with our body and mind. It is only when man exceeds they tea drinking that he experiences the ill effects. When taken in limited quantity tea is indeed very good for health.*

HISTORICAL ASPECTS:

The history of the tea (camellia thea) which belongs to the family comelliaceae is nearly 5000 years old and was discovered as legend has it in 2737 B.C. by the Chinese Emperor when some tea leaves accidently blow into a pot of boiling water. In the 1600s tea become popular throughout Europe and the American Colonies.

PHARMACOGNOSY & HABITAT

An evergreen shrub or tree 9-15 mtrs. Inheight; leavessimple, alternate, elliptic, ovate or lanceolate with serrate margins, usually glabrous, leathery; flowers white, fragrant solitary or 2-4 together; fruits depressed capsules 3-cornered, 3-seeded.

True 'teas' are made from dried leaves of camellia, the tea plant which was first cultivated in china and found growing wild in India. Chinese monk and European traders introduced it to Japan, Srilanka and other countries. Today there are more than 3000 varieties of tea, each having its own distinct charcter and named for the destricts in which it is grown. Green tea is produced by stemming fresh picked leaves before heat

drying. Black tea is produced by allowing picked tea leaves to completely ferment before firing. Oolong teas are only partially fermented.

Ayurvedic Description: As described in Shaligram Nighantu:-

Rasa - kashaya

Guan - Tikshna, laghu

Virya - Usna

Vipaka- Usna

Actions: Deepan, pachan, kapha pitta samak, slightly aggravates vata.

CHEMICAL COMPOSITION:

Leaves contain alkaloid caffeine, Pigments-epitheafragallin, epitheafragallin -3-0-gallate and theafragallin, flavonoid glycosides-camelliania A and B, tannin, acids, kaempferol, quarcetin, theophylline, theobromine, xanthine, hypoxanthine, adenine, gums, dextrans and inosital, yield

essential oil containing two linalool epoxides. Nutshell contains caffeine and theophylline. Seeds contain theasapogenol B and yields saponin composed of four sapogenols A,B,C & D.

**Caffeine containing drinks and food
Average amount/150ml. cup or as stated
(mg)]**

Ground Coffee	:	60-180
Instant coffee	:	30-120
Tea	:	20-60
Cocoa	:	2-20
Drinking chocolate	:	2-5
Dark chocolate	:	70-90
Milk chocolate	:	4-60
Pain killer	:	30-130

BENEFICIAL EFFECTS

Tea contain active ingredients called antioxidants. These helps to prevent and repair the damage caused to our cells by substances called free radicals.

Free radicals are found in the food we eat and the air we breath and are even manufactured by our bodies as a byproduct of other process. They are highly reactive substance and have been implicated in slow chain reaction of damage leading to heart disease and cancer. The best known antioxidants are vitamin C,E, and Betacarotene found in fruits, vegetables, cereals and vegetable oils, Antioxidant compounds are also found in green and black tea and there is a growing body of evidence that these can help protect us against cancer and heart diseases.

There is an increasing body of experimental and epidemiological research which suggest that the antioxidant content of tea helps to reduce the incidence of certain cancers.

The natural antioxidant substances in tea may also help to combat the risk of developing heart disease. Studies are beginning to provide evidence that antioxidants called flavanoids in tea have a positive cholesterol and lipid lowering effect. Research has concentrated on a polyphonic compound called epigallocatechin gallate (EG CG) which is found in both green and black tea.

Both green and black tea have been shown to inhibit lungtumorigenesis in laboratory animal experiments. Green tree inhibited N. Nitrosodiethylamine induced long tumour incidence and multiplicity in female A/J mice when tea was given either during the carcinogen treatment period or during the post carcinogen treatment period. In a separate tumerigenesis model, both decaffeinated black tea and decaffeinated green tea inhibited 4(methyl nitrosamino) 1-(3-pyridyl) 1-butanone (NNK) induced lug tumour formation. Studies in which tea was administered during different time period in relation of the NNK suggest that tea can inhibit lung tumorigenesis at both the intitation and promotion stages. The antiproliferative effects of tea may be responsible for these anticarcinogenic actions.

Green tea has a high content of vitamins and minerals. It contains ascorbic acid (Vit.C) in amounts comparable to a lemon,. Green tea also contains B vitamins which are water soluble and quickly released with a cup of tea. Five cups of green tea a day will provide 5-10% of daily requirement of riboflavin niacin, folic acid and pantothenic acid. The same amount of tea also provides 5% of daily required magnesium, 25% of potassium and 45% of required manganese. It also provides fluoride. A cup of tea provides 0.1mg.of fluoride, which is higher than influroinated water. Scientific studied

have shown strong evidence that green tea may help to reduce the risk of strokes and heart diseases.

HARMFUL EFFECTS

Addiction-Caffeine of tea is habit forming and addictive substance although it is not technically classified as an addictive drug as every body dose not become a slave to it But certainly many people depent on it and suffer significant withdrawal symptoms, This is because as the initial stimulating effect of caffeine wears out, the person craves for another cup to experience the same lift. People taking more than 4 cups a day becomes normally dependent on it and are likely to suffer damaging withdrawal symptoms.

- It drains energy – Although intake of tea gives initial lift to the mind but soon it is followed by a let down and person feels more drained of energy. Symptoms of fatigue, tiredness and irritability are often found in tea addicts.
- It hinders assimilation of food in intenzyme – with the excessive use of tea the inner side of intenzines gets coated and stained that hindess the proper participation of the intenzines in the digestive process. Other digestive problems such as colics and piles can also be aggravated by caffeine of the tea.
- It increases acidity-Caffeine of the tea stimulated the production of acid in stomach. This can cause heartburn, indigesion and aggravates, ulcers. If the tea is taken during stressful state of mind the acidity increases because during stress response stomach reduces it

emptying times so the caffeine content will remain for longer time in the stomach and exerts its harmful effects.

- Sleep disturbances – Tea alters normal sleep patterns. Tea addicts are more easily aroused by sudden noises and they are generally a lot less settled during sleep and do not feel fresh after waking up. It is though that caffeine affects the quality of REM sleep (dreaming sleep) without adequate REM sleep we become fretful, irritable, tense and less able to concentrate.
- Headache, irritability, anxiety – Caffeine of tea victims often complain of headache as an after effect and generally show irritability, anxiety, depression. Infact coffee and tea have been listed among migraine triggers.
- Effect on liver and kidney-Since liver & kidneys have to overwork in the body of caffeine victim, so these may suffer after sometimes. This is why people with liver and kidney disorders are advised to refrain from coffee and tea.
- It aggravates diabetes – Since caffeine raises the blood sugar level so it can aggravate the existing diabetes problem.

CONCLUSION

So Tea or Tea like any other drink taken in moderation has its own advantages (as boon). But anything in excess is harmful and the same applies to tea (as curse) for human being.

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