



Important Cs of Life: Cup, Cure and Cancer

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ABSTRACT: Number of various types of diseases like cancer, diabetes and asthma, is rapidly increasing these days mainly due to imbalance between the functioning of genetic factors and responses to the environmental stress. Scientists have found out that, food supplements can benefit us in our daily life by reducing this kind of imbalance by harmonizing the level of oxidants and antioxidant in the system. Tea (*Camellia sinensis*) is one of the best and popular food supplements throughout the world. It consists of many valuable and beneficial phyto-chemicals which include: polyphenols and alkaloids etc. The major polyphenolic constituent of tea is Epigallocatechin Gallate (EGCG) an ester of Epigallocatechin and Gallic acid. One cup (240 mL) of brewed tea contains up to 200 mg EGCG. Research by the U.S. Department of Agriculture has suggested that the levels of antioxidants in green and black teas do not differ greatly, as green tea has an oxygen radical absorbance capacity (ORAC) of 1253 and black tea an ORAC of 1128 (measured in $\mu\text{mol TE}/100\text{ g}$). The EGCG have substantial free radical scavenging activity and may protect cells from DNA damage caused by reactive oxygen species. Tea polyphenols have also been show to inhibit tumor cell proliferation and induce apoptosis in laboratory and animal studies. The present review discusses the importance of Tea in balancing the daily life stress to prevent the occurrence of cancer. © 2014 iGlobal Research and Publishing Foundation. All rights reserved.

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