

Health & Physiology

A cup of green tea can solve many problems!

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ABSTRACT

Tea is the second most consumed beverage world-wide. Apart from its delicious taste, it has many benefits on human health. A recent study suggests green tea extracts as a useful therapy for patients with colorectal cancer.



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Green tea, like many other teas, is brewed from the dried leaves of the *Camellia sinensis* bush. It originates from China, but nowadays it is grown and produced all over the world. Green tea is typically green, yellow or light brown in color, and its flavor depends on the cultivation practices and processing method.

This refreshing beverage has been used for thousands of years in traditional Chinese medicine to help people control bleeding, heal wounds, aid digestion or regulate body temperature. Later on, the rest of the world also noticed the astonishing health benefits that drinking green tea can have on the human body.

What is behind the medicinal properties of green tea? Most probably, it is a mixture of many

components. However, it is believed that the most important active compounds are a group of plant molecules called catechins. Different types of catechins are also present in many other plants and plant products like red wine, beer and cocoa. Most of the catechins in green tea are of a particular kind, called epigallocatechin gallate. This compound, epigallocatechin gallate, interacts with various molecules inside a cell, and these interactions affect how the cell behaves.

One of the first indications suggesting that green tea could be a cancer-fighting agent came from a study on cancer incidence in the world population during the 20th century. It clearly showed lower incidence of prostate cancer in countries with high tea consumption, especially China and Japan. Since then, scientists all over the world have investigated the

possible cancer-preventing properties of green tea. Experiments in animal models gave very encouraging conclusions, but clinical trials on humans have produced inconsistent results so far.

Recently, a clinical trial was held to identify the preventive properties of green tea in patients with colorectal cancer. The study included one hundred and seventy-six patients who had each undergone a complete removal of colorectal cancer. After the surgery, patients were randomly divided into two groups. The experimental group drank green tea extracts daily, while the control group did not. Importantly, there was no significant difference between two groups in terms of age, gender, and body mass index. Then, the doctors monitored patients for a period of twelve months, assessing their green tea consumption, diet or potential adverse effects.

After twelve months, doctors evaluated the health condition of the patients, such as the incidence of

potential pre-cancerous lesions (polyps) by colonoscopy. Interestingly, “green tea drinkers” had approximately two times less occurrence of polyps compared to the “non-green tea drinkers”! All the other examined health conditions, such as body mass index, dietary intakes, or levels of liver enzymes did not differ between the groups. This is a very promising result favoring green tea as a medical agent for patients with colorectal carcinoma.

Taken all together, this study showed that long-term green tea extract supplementation might have positive effects as a follow-up therapy for patients with colorectal cancer. Scientists still do not completely agree on how exactly green tea impacts human health, and further research is needed in this field. However, the benefits of drinking green tea are evident from many different studies.

Therefore, when you can, drink a cup of tea and relax. It makes a difference!