

Does Green Tea Boost Cell Health?

A small but amazing study¹ was published in the *Journal of Clinical Oncology* late last month. The study did not get much media attention, but I was blown away by the results. A total of 33 patients with a history of abnormal cellular growth of the white cells/lymphocytes were treated with varying doses of the green tea extract called epigallocatechin gallate (EGCG). Previously, researchers noted that EGCG was effective in inhibiting abnormal cellular growth in lab dishes. Dr. Shanafelt, from the Mayo Clinic, decided to try this on a group of humans suffering with abnormal cellular growth of the white cells.

As noted, 33 patients participated in this study. They received doses of EGCG ranging from 400 mg to 2,000 mg twice a day. Fifteen of these patients showed a 20% or greater reduction in their white cell counts, which lasted for at least two months in eleven of these patients. The highest dose seemed to be the most effective, with 76% of those patients taking 1,200 mg to 2,000 mg twice a day, showing a biological response compared to only two out of twelve patients (17%) who were taking 400 mg to a 1,000 mg twice a day. Dr. Shanafelt and his colleagues indicated that EGCG appeared to help stabilize the early stage of abnormal cellular growth in the white cells. Another study using 2,000 mg twice a day is currently underway. This result is rather significant. Although one frequently reads about the potential benefits of various herbs and nutrients being able to have positive effects on abnormal cellular growth, EGCG appears to work, although, obviously the results are still quite preliminary.

In the June 8, 2009 edition of the *Archives of Internal Medicine*, researchers reported on a study² using a diet referred to as the "Eco-Atkins diet" consisting of 26% carbohydrate, 31% vegetable protein and 43% vegetable oil. This diet was compared to a more traditional diet utilizing 58% carbohydrates, 16% protein and 25% fat. Both diets were administered at 60% of the caloric requirement. A total of 47 overweight subjects with poor cholesterol levels were randomly assigned to receive one of these two diets for a total of four weeks. At the end of the short study, both groups lost approximately 1.8 pounds, however, the "Eco-Atkins diet" decreased LDL cholesterol (bad cholesterol) and also helped promote healthy blood pressure compared to the other diet. The researchers cautioned that it was still premature to recommend the "Eco-Atkins diet" as a weight loss of choice without confirmation of its efficacy in larger studies in more diverse and higher risk individuals.

Numerous prior studies have proven the Atkins low-carb diet is quite effective to promote healthy weight. Clearly most people consume far too many simple sugar carbs and will benefit from a healthier balance by reducing simple carbs/sugars and increasing healthy fats, fiber and proteins. There are studies indicating fish oil omega-3 fatty acids promote healthy weight and overall good health as one example. Extra virgin olive oil is another healthy fat with powerful antioxidant benefits. Whey and soy proteins have numerous proven health benefits and promote healthy weight. Studies showing increased consumption of nuts benefits blood pressure and promotes a healthy blood sugar and BMI.

There were two interesting studies published within the last week regarding the benefits of

multi-vitamins in pregnancy. The first study³, published in the *American Journal of Epidemiology*, noted that normal weight women who utilize multi-vitamins around the time of conception were less likely to develop a complication of pregnancy manifested by unhealthy blood pressure and other factors which can be serious in the later stages of a pregnancy. It was found that those women who had a normal BMI and had used multi-vitamins for the twelve weeks during and after conception, reduced their risk of developing this complication by 20% compared to those women who did not use multi-vitamins. For some unknown reason, the multi-vitamin did not seem to influence risk of this complication in heavier women.

The second study⁴, a meta-analysis, was just published in the journal *CMAJ*. It was found in the study that those pregnant women who took a multi-vitamin and mineral supplement were much less likely to give birth to a low weight infant (weighing less than 5.5 pounds). Dr. Shah and his colleagues at the Mt. Sinai Hospital in Toronto reviewed thirteen published studies performed throughout the world. Women in these studies took anywhere from 8 to 28 micro-nutrients. Compared to women who consumed a placebo, those pregnant women who took a multi-nutrient product reduced their risk of delivering a low birth weight baby by 19%. By applying this worldwide, if every pregnant woman was to take a multi-nutrient product, there would be about 1½ million fewer babies born at lower birth weight every year. And, of course, you realize that babies born with lower birth weight are more vulnerable to develop medical and developmental problems, and actually have an increased risk of developing elevated blood sugar and unhealthy blood pressure as adults.

A great week of articles, if I do say so myself. Nutraceutical Sciences Institute® (NSI®) offers a tremendous selection of standardized green tea extract products with high levels of EGCG. One of our best selling green tea products is simply known as NSI Green Tea Extract. Each capsule contains 500 mg of standardized green tea, including standardization to 45% EGCG. A 300 capsule bottle costs less than \$25. Each capsule contains EGCG levels that would require about five cups of green tea to equal. Some of the reviews of this product have been quite nice with people talking about improvement in energy levels and raving the value of the product. We also offer green tea in combination with resveratrol, vitamin C and grape complex.

There is another product called NSI GreenSelect containing a high potency tea formula. And, of course, we include standardized green tea extract in basically all of our Synergy products. One of our most popular is Synergy 3000 Version 11. It contains 500 mg of standardized green tea. Try and find another multi-vitamin with green tea, not to mention 500 mg of a high standardization for EGCG. Why standardized? Many companies choose to use cheap non-standardized herbal supplements. With non-standardized nutrients, you have no idea what the level of the active ingredient such as EGCG are or even if you have any. In terms of vitamins for pregnancy, we have a product called Pre-natal Plus which contains an incredible assortment of various vitamins, minerals (including effective levels of calcium, magnesium and a very special gentle on the stomach better absorbed chelated iron), along broccoli, wild blueberry extract, DHA and many other helpful antioxidants. The review on it average five star out of five stars.

Finally, if you're looking for things low-carb, you've certainly come to the right place. We have an excellent selection of Atkins products along with Walker Diet™ low-carb shakes. And, don't forget Best of All™, offering a healthy selection of fruits, vegetables, nuts and seeds, many of which are organic and qualify as healthy low-carb, high protein and high fiber foods.

Dr. Allen S. Josephs