

## **Phytochemicals**

I don't know about you, but lately I've been hearing a lot about the health benefits of phytochemicals. My first thought was; "What in the world is that? Sounds like something out of a hazardous materials course." In reality, phytochemicals are pretty cool little chemicals to have around. In Greek, the word "phyto" means "plant". Therefore, phyto-chemcials basically means "plant chemicals". These chemicals are responsible for giving plants their signature properties of color and smell. For example, the vivid bright oranges and yellows of some bell peppers come from phytochemicals known as 'carotenoids'. These are considered to be 'anti-oxidants', which may prevent oxygen from damaging our cells during metabolic processes. A phytochemical in garlic known as Allicin, is responsible for garlic's signature odor. Research has shown that this phytochemical may protect our bodies from cancer through stimulation of the body's immune system or even inactivating certain carcinogens! Fruits and vegetables that are red, blue or purple in color (berries, purple grapes, onions) contain phytochemicals known as 'flavonoids', which also have been shown to be powerful anti-oxidants. We've all heard the phrase: "An apple a day keeps the doctor away." This statement may be more accurate than we ever realized, as apples contain a phytochemical known as 'Quercetin'. This plant chemical has been shown to provide a variety of health benefits such as providing anti-inflammatory and antiallergy properties.

So what does it all mean? To me, it means: "Eat more fruits and vegetables, being sure to include a variety of COLOR!" And no!, colorful man-made items such as fruit roll-ups don't count. ©

Contributed by: Heidi Heavner, Fire Rescue Training Specialist, ACE Fire Service Peer Fitness Trainer

Got a nutrition related question? Email Heidi at <a href="mailto:heavner@ncdoi.gov">heidi.heavner@ncdoi.gov</a> .

## **Works Cited**

Mary B. Grosvenor, L. S. (2010). *Visualizing Nutrition: Everyday Choices.* Hoboken, New Jersey: John Wiley & Sons, Inc.