As you walk down the grocery store isle, looking at the various food labels, you will see a variety of ways they try to get you to purchase their product. Often they use terms to draw individuals who are trying to make healthier choices – "High in Antioxidants", "Beta Carotene Dense" or "Rich in Omega-3 Fatty Acids". Navigating these compound terms can be a challenge, but knowing what they mean can prove helpful to your healthy eating goal.

All of the compounds listed above, and many more, fall under the canopy of compounds found in **functional foods**. This designation refers to foods with health-promoting characteristics that have a positive impact on a person's health beyond their basic nutritional value.

In a special report included in the June, 2014 May Clinic Health Letter, information about function foods, their role in our health, and potential sources was discussed. The following information is derived from that source.

The report stated that functional foods are foods that may be either processed or natural or may be foods that have additives. Other functional foods include whole grain products with dietary fibers or fish that contains high levels of omega-3 fatty acids. There are estimated tens of thousands of compounds that have been discovered, while only a small number of them have undergone scientific research. The compounds, called phytochemicals, are found naturally in common plant foods – vegetables, fruits, and whole grains. They are likely already a part of you food intake.

Being aware of what they are and how they boost physical health will give you a better understanding of why they are being so heavily promoted. As with any significant dietary change you are considering, you should always consult with your doctor to ensure your dietary plan will maintain and/or improve your health. As noted above, not all marketing claims have research that proves the effectiveness they claim for the product.

Here are some of the more common functional foods that have been explored:

Antioxidants – These slow down oxidation in the body. Oxidation is a natural process that leads to tissue and/or cell damage. This impacts our aging process and also contributes to some diseases. Consuming foods that are naturally high in antioxidants is more effective in the body that getting them from supplements.

Omega-3 Fatty Acids – The physical benefits of this phytochemical includes promoting normal growth and contributing to good vision and cognitive development. Omega-3 fatty acids have also been found to help reduce the risk of heart disease.

Soybeans, walnuts, ground flaxseed, and canola oil are good plant sources for alphalinoleic acid (ALA) which once in the body, can be converted partially in the body to omega-3 fatty acids.

Flavonoids – Fruits and vegetables serve as the primary source of flavonoids in the human diet, although they are also acquired through tea and wine. There are thousands of flavonoids that have been identified. Diets high in flavonoid-rich foods have indicated a reduced risk of chronic diseases.

Enriched Foods – When foods are processed, it is common that they lose some of their natural nutrients. An enriched food is one that has nutrients added back to them after they were processed. For example, during the processing of wheat to make flour, some vitamins are lost. That's why some bread has "enriched" as one of the descriptors on the label.

Carotenoids – There are over 600 different forms of carotenoids found in plant based foods which lead to a wide variety of health benefits. It is believed that many of them act as antioxidants. Some carotenoids are used by your body to produce Vitamin A – which contributes to good vision and eye health. Others, such as beta-carotene, have been linked to a risk reduction for disease. Consuming foods rich in carotenoids is a better alternative than using supplements for that purpose. The Mayo report states "In fact, the risk of lung cancer may actually increase in smokers who use beta carotene supplements."

Prebiotics and Probiotics – The Academy of Nutrition and Dietetics calls this the "Dynamic Duo". These compounds are naturally found in foods and work to improve the overall health of our body. Consuming them as part of our natural diet increases their absorption and digestion. Prebiotics promote the growth of "good" bacteria in our body while probiotics are the "good" bacteria themselves. The two compounds work together to promote gastrointestinal health. Good sources of these functional compounds include: bananas, onions, garlic, asparagus, soybeans and whole-wheat foods.

Whole Foods – Foods that are in their least-altered form provide a rich sources for vitamins, minerals, and phytochemicals that naturally occur in food. The less amount of processed food (especially vegetables, fruits, and grains) we consumer, the better it is for our body and our health.

Some of the power-packed functional foods that contribute to our health include such fruits as oranges, pineapple, blueberries, and kiwi. Some valuable vegetables include asparagus, green beans, green peppers, spinach and onions. Whole grains that are

provide a higher level of functional compounds include bran cereals, oats, and wheat germ. Don't overlook nuts and seeds! Almonds and walnuts, in moderation, are a great way to add ALA and "good fats" such as monounsaturated and polyunsaturated fats to your diet.

In order for these functional foods to do their best work in our bodies, our bodies must have adequate amounts of water each day. Water helps in the absorption and digestion of the nutrients we consume through our daily food intake. It also helps us maintain our energy and reduces the chance of health conditions such as kidney stones or urinary tract infections.

For more information about functional foods and healthy food choices, feel free to contact me at the Geary County Extension office 785-238-4161. Until next time, keep living resourcefully!