

Why Green is a Good Color to Eat: Learning about Antioxidants and Phytochemicals

Mother Earth is covered in color. Sometimes, we hear that the green leaves are her hair, the soil beneath our feet is her brown breast that nourishes us with many different types of foods. How many different colors of food can you think of? Is color good to eat? Why is the sweet red strawberry so good for you? What makes the green color in your round little peas?

Leaves, grass, and peas are green because they contain a chemical compound called *Chlorophyll*. The chemical compound chlorophyll is what changes sunlight into energy or sugars for the plants. This special process allows most plants to grow and become trees or even a single blade of grass or the little pea on your plate.

The green color called *chlorophyll* is full of nutrition for us, too, just like the vitamins (like Vitamin C) and minerals (like potassium) that are also in plants. Vitamin C keeps our immune system strong against infection. Potassium keeps our muscles healthy and blood pressure down. There are other colors too, like the yellow in corn, orange in winter squashes, blue in blueberries, white and brown in potatoes, red in tomatoes and many more. Can you name more colors of fruit and vegetables? **What do the colors in plants do?**



[View Rainbow_2.png Clipart - Free Nutrition and Healthy Food Clipart \(foodandhealth.com\)](https://www.foodandhealth.com/)

Why All Colors of Plant Foods are Good to Eat: Learning about Antioxidants and Phytochemicals

These beautiful colors of plant foods come from *Phytochemicals* or *Phytonutrients*. *Phyto* means plant in Latin, a language once popular in Europe when the study of science was busy giving names to our many relatives on Mother Earth. Therefore, *phytochemical* means *plant chemicals* and *phytonutrients* means *plant nutrients*.

Phytochemicals / phytonutrients / plant chemicals / (all mean the same thing) do something very important. They provide us with *Antioxidants*. What does that mean? In a way, antioxidants from phytochemicals that make the plant colors, keep us from rusting inside. Have you ever seen a rusty piece of iron, maybe on a car or an old tool? When iron sits outside exposed to oxygen in the air, the oxygen begins to break down the iron, causing it to *rust*. This process is called *Oxidation* which means there is lots of oxygen. Oxidation or lots of oxygen helps iron go back to Mother Earth, when it is no longer being used.

What if you paint the iron? This will stop the oxidation or rusting from happening. The paint can be thought of as an *Antioxidant* or something that keeps the oxygen away. The colors in fruits and vegetables are phytochemicals. Some of these phytochemicals are like the paint we put on iron to prevent the iron from rusting. When we eat plant foods, the antioxidants in the plant colors stop the extra oxygen from building up inside us. If we get too much oxygen inside us, we too, begin to rust. But no worries, eating fruits and vegetables provide us with plenty of antioxidants from their phytochemicals, which we can see in the many colors of produce. (Photo Credits 2838 Tomato, 2848 Produce)



Basket of Plant Colors ²⁸³⁸



Grocery Store Produce full of Phytochemicals ²⁸⁴⁸

Why Red Tomatoes are Good for us to Eat

Now that we have talked about phytochemicals and antioxidants, can you tell us why a juicy, ripe, **red** tomato is a healthy choice for a meal or a snack?

1. Which of the following does the **red color** in a tomato provide?

taste

texture

seeds

juice

antioxidants

2. In the picture, which of the following gives the tomato its beautiful **red** color and the other vegetables their **green** and **white** colors?

vitamins

phytochemicals

oxygen

minerals

antioxidants



Yummy Tomato Salad ²⁸³⁹

Answers: 1. Antioxidants 2. Phytochemicals