

Week 4: Eat the Rainbow

About the Event: The purpose of this week's tabling event is to promote the benefits of phytochemicals. What are phytochemicals you might ask? Phytochemicals are bioactive compounds found in plants (fruits, vegetables, wine, tea, etc.). Plants use phytochemicals for protection, and when we consume them, they can provide similar benefits! Research suggests that consumption of a wide variety of phytochemicals may be associated with decreased risk in various chronic diseases partly due to their antioxidant properties. It is important to note that phytochemicals are **not** essential nutrients like certain vitamins/minerals (don't worry we will cover those later on).

Phytochemicals help give plants their distinctive pigments, smells, and tastes. Each phytochemical is generally associated with a certain color group. Therefore, we suggest that our students "eat the rainbow" so that they can reap the benefits from each color. Attached is a friendly table that will help guide you through the different colors, phytochemicals, and the food sources associated with them.

Good luck!

Color	Phytochemical	Benefits	Food Sources
Red	Lycopene Anthocyanins Carotenoids Flavonoids	Strong antioxidants, promotes healthy skin/aging, urinary tract health, heart health	Tomatoes, beets, red pepper, strawberries, raspberries, pomegranates, watermelon, cranberries
White	Anthoxanthins Flavonoids Allyl sulfides Allicin	Maintain healthy cholesterol levels, promote heart health, lower blood pressure, inhibit tumor growth	Garlic, chives, onions, jicama, turnips, mushrooms, turnips
Blue/Purple	Anthocyanins Flavonoids Polyphenols	Antioxidant, healthy aging/skin, promotes better memory, inhibit tumor growth	Blueberries, blackberries, plums, concord grapes, purple cabbage, prunes
Green	Indoles Lutein Glucosinolates	Antioxidant, promote eye health (prevent cataracts/macular degeneration), protect against some cancers	Avocados, honeydew, kiwi, artichoke, kale, broccoli, leeks, lettuce, spinach, celery, green beans, peas
Yellow/Orange	Beta carotene Carotenoids Bioflavonoids	Antioxidant, promote eye health (prevent cataracts/macular degeneration), immune system function, heart health	Lemon, mangoes, oranges, pineapples, butternut squash, carrots, pumpkin, corn

## **Additional Resources:**

http://extensionpublications.unl.edu/assets/pdf/g1606.pdf

http://www.nutritionmd.org/nutrition\_tips/nutrition\_tips\_understand\_foods/phytochemic\_als\_found.html

http://gentleworld.org/phytochemicals-eating-from-the-rainbow/ - Health Benefits of: Green Fruits and Veggies

http://extension.missouri.edu/hesfn/phytochemicals/colorwheeltable.htm

https://www1.villanova.edu/content/dam/villanova/studentlife/documents/healthpromoti on/Phytochemicals%20-%20Final.pdf

