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Chapter 8: Vitamin A and Colorful Carotenoids—Internet Activity

You've probably been hearing about vitamins for a long time, but what about phytochemicals? These lesser-known substances have been working right alongside vitamins in the wholesome foods you eat. It's only been in recent years that scientists have begun to identify some of the many phytochemicals in foods and to better understand what these amazing compounds can do to help protect health.

One group of phytochemicals is called carotenoids (kuh-RAH-tuh-noids).

Does the word carotenoid remind you of any particular vegetable...say...carrots? The orange color of carrots is produced by a carotenoid called beta-carotene. Carotenoids are present in certain fruits and vegetables, giving them colors that range from yellow to red. Some carotenoids are found in dark green vegetables.

Besides beta-carotene, carotenoids include alpha-carotene, gamma-carotene, lycopene, lutein, beta-cryptoxanthin, zeaxanthin, and astaxanthin. To learn more about carotenoids, use the link below and read the information on the site. Then answer the questions that follow.

<http://ods.od.nih.gov/factsheets/vitamina>

Activity Questions:

1. What connection do some carotenoids have to vitamin A?

2. Are carotenoids found in plant or animal foods? Give examples of some provitamin A carotenoids.

3. Some carotenoids are considered to function as antioxidants. What does this mean?

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4. What percent of carotenoids can be made into vitamin A in the body?

5. What are some examples of foods that contain carotenoids?

6. No recommendations have yet been established on what amount of carotenoids the body needs. What should a person do to include them appropriately in the diet?