

Cancer Education Project Abstracts



Antioxidants and Cancer

In this series of activities students consider the relationships among antioxidants, free radicals, and cancer. They perform a laboratory experiment to analyze the antioxidant concentrations in several types of beverages. Then they read an advertisement for a nutritional supplement and design a large scale research study to test the claim that this supplement prevents cancer.

- **Part 1: Eat Your Fruits and Vegetables!**

Students explore the relationships among antioxidants, free radicals, and cancer by reading an article and answering questions.

- **Part 2: Comparing Antioxidant Properties of Beverages**

Students perform a laboratory activity in which they use known concentrations of antioxidants to prepare a standard curve graph for tests to measure antioxidant concentration. They then determine and compare the antioxidant concentration in five different beverages provided by the teacher.

- **Part 3: Evaluating Claims for Antioxidant Supplements**

Students read an advertisement for a nutritional supplement containing antioxidants. They design a large-scale research study to test the claim that this supplement prevents cancer.

- **Part 4: Antioxidant Inquiry**

Students apply their understanding of antioxidant testing to design, conduct, and report on an experiment to answer a research question about antioxidant concentrations posed by their team or by the teacher.