

Antioxidant Activity of Fruits

Presenters Anzley Irons, Chemistry major; and Garrett Womack, Biology major

Mentored by Dr. Victoria Geisler

There has been growing interest in the health benefits of foods containing antioxidants. In this experiment, 1,1-diphenyl-2-picrylhydrazyl (DPPH) was utilized to determine the amount of antioxidants found in fruits. DPPH is a stable free radical that displays a purple color. Once DPPH interacts with an antioxidant that can donate an electron, the free radical will be reduced and the color will change from purple to yellow. The IC₅₀ (the concentration at which 50 % inhibition of free radical activity can be observed), were determined in a variety of samples that include blueberries, strawberries, raspberries, cherries, grapes and oranges. The results of this investigation will be presented.