

## **EIRO's Effect on Antioxidant Activity and Cellular Health**

### **Study Overview**

A PILOT CLINICAL TRIAL TO EVALUATE THE EFFECTS OF A FRUIT JUICE BEVERAGE ON ANTIOXIDANT ACTIVITY AND CELLULAR HEALTH IN HEALTHY ADULTS

### **Researchers**

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### **Methods**

The study was a randomized, crossover, open-label pilot trial conducted to determine the effects of a fruit juice beverage on antioxidant activity and cellular health.

Twelve healthy non-smoking males and females, age 18 to 55, were enrolled into the trial. Subjects were provided the juice beverage at one test visit and an equal quantity of water at the other, in random order. Blood was collected four times over a two-hour test period so that effects on blood markers of antioxidant activity and cellular health could be determined.

### **Results**

Although there were no significant findings for some of the blood markers, superoxide dismutase (SOD) rose after consumption of the fruit juice beverage. Between the fruit juice beverage and water, the positive findings on SOD were highly statistically significant at the 60 minute mark (increase of  $0.24 \pm 0.214$ ;  $p=0.006$ ).

### **Discussion**

Superoxide dismutase is important in the body's oxidant defense system. SOD is an enzyme that neutralizes the superoxide radical, one of the most prevalent free radicals in the human body. SOD levels decrease with age and play an important role in protecting cells and DNA from damage caused by oxidative stress. Because of SOD's importance in the body's defense system, further study is recommended.