On the Hunt for Free Radicals With a Blue Light Reaction

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The study analyzed the antioxidant content in teas, coffees, red wines, and various fruits. The biological effect of antoxidants includes antibacterial, antiviral, anti-inflammatory, antiallergic, antithrombotic and vasodilatory properties. The antioxidant capacity was determined using the scientifically recognized Briggs-Rauscher reaction and quantified in mg DPPH equivalents based on a calibration curve. The results showed that tea has a higher antioxidant content than coffee, while pomegranate and lime have the highest antioxidant content, especially if their peels are also eaten. It was also possible to prove that a glass of red wine contains many antioxidants and that they owe their existence only to the alcohol. The simulation of chemical stress in an in vitro experiment confirmed that the antioxidants found in fruits are effective in neutralizing free radicals. These findings suggest that antioxidants from natural sources have potentially positive beneficial effects on oxidative stress and are a good anti-aging therapy.

Awards Won: