Kelsey Piper  
Junior Division Chemistry  

*Going Bananas: Does The Vitamin C Concentration Of A Banana Vary With Ripeness?*

I studied the Vitamin C concentration of bananas and measured variation over time. I used Vitamin C titration, a method of measuring Vitamin C content of solutions. Vitamin C titration works because of a chemical reaction between an iodine solution and Vitamin C. I measured Vitamin C concentration through titration every two days through thirteen days, and found that the Vitamin C concentration does in fact change as the fruit ripens. Bananas have a very significant amount of Vitamin C when they are unripe, and that Vitamin C content decreases sharply as the bananas become moderately ripe. By the time the bananas were at the ripeness they are usually eaten, they had lost two-thirds of their original Vitamin C content. I feel these results are important because getting enough Vitamin C is a concern for some people, mainly people who do not eat much fruit or vegetables. Most people do not think of bananas as significant sources of Vitamin C, mainly because Vitamin C is an acidic compound and is generally found in fruits with an acidic taste. However, my results seem to suggest that bananas are in fact a significant source of Vitamin C - and offer much more Vitamin C when they are unripe.