

Experiment 1:

*Miracle berry, written hypothesis, data gathering/analysis and conclusion*



Given knowledge of the underlying brain mechanism of miraculin action on receptors for glucose, sucrose and other chemicals perceived as “sweet” (including its action in differing pH environments), develop a written hypothesis concerning which foods might be altered in terms of both sweet and sour taste perception.

Test foods (including lime and lemon slices, sour patch candy, vinegar, cherry tomatoes, dark chocolate, potato chips, peanuts; all provided in class), and record the subjective ratings of your perceptual responses for sweetness and sourness on a 1 – 8 numerical scale, both before and after exposure to miraculin...

Rate sweetness:

Not sweet    1    2    3    4    5    6    7    8    SWEET!

Rate sourness:

Not sour    1    2    3    4    5    6    7    8    SOUR!

As a class we will collect and average individual student data and identify changes, graph the results, and discuss results in terms of your hypotheses.