Objective: Introduce students to healthy and nutritious food and beverage alternatives via a blind taste test. Additionally, students should develop and use sampling and observation skills in an inquiry-based approach to determine differences among the samples.

Pre-lab

Supplies must be purchased and a power point must be made prior to the lab. Supplies should include one regular and one alternative item listed below in supplies, and make sure enough is purchased so that each student will receive a small sample. The power point needs to have what sample 1 and 2 were, and basic nutrition information for one serving size of each. Any additional relevant information on the sampled products can be added to the power point (e.g. dangers of pesticides or allergies).

Supplies

Sampling cups: approximately 300 small paper Dixie cups
Foods and beverages: one traditional and one alternative food or beverage. These can include cow milk and soymilk, conventional and organic fruits/vegetables, regular and low-fat cheese, bottled and tap water, regular and diet soda, regular and sugar free cookies or ice cream, etc.
Numbers noting sample 1 and sample 2 for each sampling station
Additional: Hand sanitizer or gloves, knife for cutting foods, and plenty of paper towels for spills

Procedure:

Organize however many stations as needed, and begin dishing out small samples into each cup. Make sure to separate the regular and alternative items at each station and make a sheet cheat sheet listing which is which that only the instructor can see. Additionally, each sample must be what was described in the power point that was previously created. Students cannot know what the differences are between the samples, only that the two are different. Divide students into groups and have them rotate to each station. Students should use all of their senses to describe each sample, and record their observations and thoughts such as what the two samples were, which was healthier, and what the differences were between the two. After students have finished sampling they return to their seats and discuss within their groups their observations and make further guesses about the samples. Then the instructor goes through the power point and reveals what each sample was, and the significance behind the differences of the two. Time should be spent discussing the nutrition information as this can be used as an introduction to the nutrition unit.
Tommy Patterson, GK-12 Resident Scientist

Photos from spring 2014 Taste-test lab
Tommy Patterson, GK-12 Resident Scientist