**Water Taste Test Family Challenge**
Step up and take the water taste test!

**Materials**
5–6 glasses or cups of different enhanced water beverages • unsalted crackers to cleanse your palate between tastings

**Procedure**
1. Look closely at each water sample. In the data table below, use a few words or phrases to describe the appearance of each sample.
2. Smell each water sample. In the data table, describe the odor.
3. Sip each water sample. In the data table, describe the taste. It is okay to retaste the samples. You may want to eat a piece of unsalted cracker between tasting samples to cleanse your palate.
4. Use your own opinions regarding taste to rank the samples from best tasting to worst tasting, with 1 being the best. Retaste each sample if necessary. Record the ranks in the data table.
5. From the general list of brands provided, guess the identity of each sample and enter your guesses in the data table.
6. From the setup person, find out each water sample identity and price per unit volume. Fill in the last two columns of the data table.

<table>
<thead>
<tr>
<th>Enhanced Water Sample</th>
<th>Appearance (step 1)</th>
<th>Odor (step 2)</th>
<th>Taste (step 3)</th>
<th>Rank (step 4)</th>
<th>Guess the Brand (step 5)</th>
<th>Brand Identity (step 6)</th>
<th>Price per Unit Volume (step 6)</th>
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</table>
What is it about the taste that caused you to rank a beverage as best tasting?

How many brands did you correctly guess in step 5? What observations allowed you to correctly identify these?

What, if any, results of the taste test are surprising?

How do the prices of enhanced waters compare to their ranks in testing? Are more expensive waters better tasting? Why would you or other consumers buy or not buy enhanced waters?

Explanation

In recent years, different types of water beverages have appeared on the market that contain fruit flavors, vitamins, sugars, herbs, and other nutrients. Sometimes called “enhanced” or “fitness” water, these products are becoming increasingly popular. In this activity, you tasted unidentified enhanced water beverages, ranked them according to taste, and attempted to identify them based on their appearance and taste alone.

According to a survey conducted by the International Bottled Water Association, taste is the number one reason people select bottled water. Enhanced water is marketed for active people who would normally drink plain water during workouts, but find the taste of plain water bland. Manufacturers add flavorings in an effort to make the taste more appealing. Many brands of enhanced waters also add small amounts of vitamins and herbal supplements.

Taste preference varies from person to person. A majority of people may agree on which enhanced water is the worst tasting, but probably will not agree on which enhanced water tastes the best. Some people prefer enhanced water to have a slightly sweet taste, while others prefer no sweetness at all. Some brands of enhanced water, such as Propel, contain natural sugar (sucrose). Fruit-O®, on the other hand, uses a nonnutritive sweetener called sucralose. Those who don’t like diet soft drinks may find the taste of this artificial sweetener unappealing. Temperature can also play a role in perceived taste. Beverages that ranked low when at room temperature may rank higher when chilled.

Try at Home

Try the taste test using regular bottled water brands, such as Aquafina®, Dasani®, Evian®, Perrier®, or others, and compare them to plain tap water. You will need a setup person who prepares the samples and does not participate in the actual tasting.

Do the results surprise you? Many blind taste-testing studies reveal that a significant number of people rank plain tap water higher than some expensive brands of bottled water.

Try including both a chilled sample and a room-temperature sample for each brand in the taste test. The setup person should not reveal which chilled sample goes with which room-temperature sample. What conclusions can you make about how temperature affects the rankings?