**Testing Your Taste**

Background: *We spend much of our lives eating, and most of us view our sense of taste primarily as a source of pleasure—and perhaps a lamentable temptation to excess. Taste is much more than that, however, as the rare person who has lost that sense can testify. It is a vigilant gatekeeper of the body, evolved to reject what is harmful and encourage eating what is beneﬁcial. So important is this role that our sensory system for taste and its multiple pathways to the brain have evolved a unique redundancy and resiliency. As scientists debunk longstanding myths about taste and discover new ways that it affects us, it is becoming clear our ﬁfth sense is more complex, inﬂuential, and tied into our well-being than we imagined.   -* [Beverly J. Cowart](http://www.dana.org/news/author.aspx?id=786), From Taste, Our Body’s Gustatory Gatekeeper

**In this lab we will be exploring various aspects of taste, an often over-looked sense.**

Procedure: - One person in group to perform each test (groups of three)

**Dry Mouth Test**

1. Dry your mouth with a piece of paper towel
2. When your tongue is dry taste the four samples (pretzel, chocolate chip, apple, summer sausage), rinsing and drying the tongue between each tasting.
3. Write down your observations on your data table.
4. Repeat each test with a wet tongue.

**Tongue Taste Test**

1. Designate one person as a tester and one as a recorder
2. Grab a cup of each of the 3 different tasting solutions . Also grab 25 toothpicks.
3. Dip the toothpick in one of the solutions and touch it lightly on the tip of the tongue. Write down and observations. Rinse out the mouth of the taster with tap water and carefully spit into sink.
4. Repeat, testing both sides, the middle and back part of tongue.
5. Repeat with other 3 solutions, writing down observations

**The Nose Knows**

1. Designate one person to be the taster
2. Cover the taster’s eyes so they can’t see.
3. Collect one of each of the three foods to be tested
4. Have the taster plug their nose and try to identify each of the foods by taste only. Write down the results in your data table.
5. Repeat the experiment while having them sniff a small cup of garlic powder.
6. Repeat the experiment without the taster having their nose plugged or smelling the garlic powder.

Questions and Analysis: (Individually in lab notebook – may discuss as a group)

1. Based on the data you collected, how did the moisture level on your tongue affect the taste of the food? Cite specific results from your lab in you answer.
2. For each of the tastes tested with the toothpick, was there a specific spot on your tongue where one taste was more sensitive than the others? Explain for each of the five taste citing data from your lab.
3. Does the smell present in a taster’s nose affect their ability to taste? Cite specific results from your lab in you answer.
4. What are two factors besides taste and sight that can be used to find the identity of a food?