

SUPPLEMENTARY MATERIAL 2

Psy210: Discussion Of COVID-19 Supertaster Data

Below are data collected from Barham et al., where taster status and COVID-19 contraction, symptom severity, and hospitalization length was measured (Table 1). **You will turn in this filled out document by 5/4. This is worth 4% of your grade.**

Part 1: Data Comparison (individually)

Answer the following questions about each study:

1. Which kind of taster (non, taster, supertaster) was **most common**?
 - a. Our data:
 - b. Barham et al.:

2. Which sex/gender (different studies measured different things) was **most likely** to be supertasters?
 - a. Our data:
 - b. Barham et al.:

3. Which kind of taster was **least likely** to have contracted COVID-19?
 - a. Our data:
 - b. Barham et al.:

Table 1: (Barham et al. 2021): to access this data please click [here](#) and go to Table 1. Classification of Participants.

Table 2 (our data)

Characteristic	Overall, No (%)	Nontaster, No (%)	Taster, No (%)	Supertaster, No (%)
No. (%)	24	10/24 (42%)	10/24 (42%)	4/24 (18%)
Age, mean (SD), y	19.34 (.93)	19 (.81)	19.8 (.92)	19 (1)
Sex				
Male	2/24 (8%)	2/10 (20%)	0/10 (0%)	0/4 (0%)
Female	22/24 (92%)	8/10 (80%)	10/10 (100%)	4/4 (100%)
Outcomes				
Positive SARS-CoV-2 test result	9/24 (38%)	6/10 (60%)	2/10 (20%)	1/4 (25%)
Vaccination Status				
Currently vaccinated	21/24 (88%)	8/10 (80%)	9/10 (90%)	4/10 (100%)
Vaccinated at time of getting COVID-19	4/9 (44%)	3/6 (50%)	1/2 (50%)	0/1 (0%)
Smoker Status				
yes	3/24 (13%)	1/10 (10%)	2/10 (20%)	0/4 (0%)

Part 2: Interpreting our Data and Caveats (in groups)

4. What aspects of our data are similar to those of Barham et al.,? In other words, what aspects are in the same direction? What aspects of the data are in a different direction?

5. In Barham et al., 0% of the subjects were vaccinated (this data was collected prior to the vaccines being approved). What % of our subjects were vaccinated? How might having a higher % of vaccinated subjects in our study explain discrepancies in our data versus Barham et al.,?

6. **In our study only:** do you think smoker status played a role in COVID-19 susceptibility?

7. In Barham et al., which kind of taster had the most severe COVID-19 infection? Explain why their taster status might have influenced COVID-19 infection.
 - a. You should explain at least 2 possible reasons, being sure to explain at the **cellular level** (e.g, which cells) **where in the body** taster status will likely play the largest roles in potentially fighting off COVID-19 infection.

8. Focusing only on Barham et al.'s study, how could knowing the relationship between someone's taste status and COVID-19 infection be useful?

References:

Barham, H. P., M. A. Taha, S. T. Broyles, M. M. Stevenson, B. A. Zito and C. A. Hall (2021). "Association Between Bitter Taste Receptor Phenotype and Clinical Outcomes Among Patients With COVID-19." *JAMA Network Open* **4**(5): e2111410-e2111410.