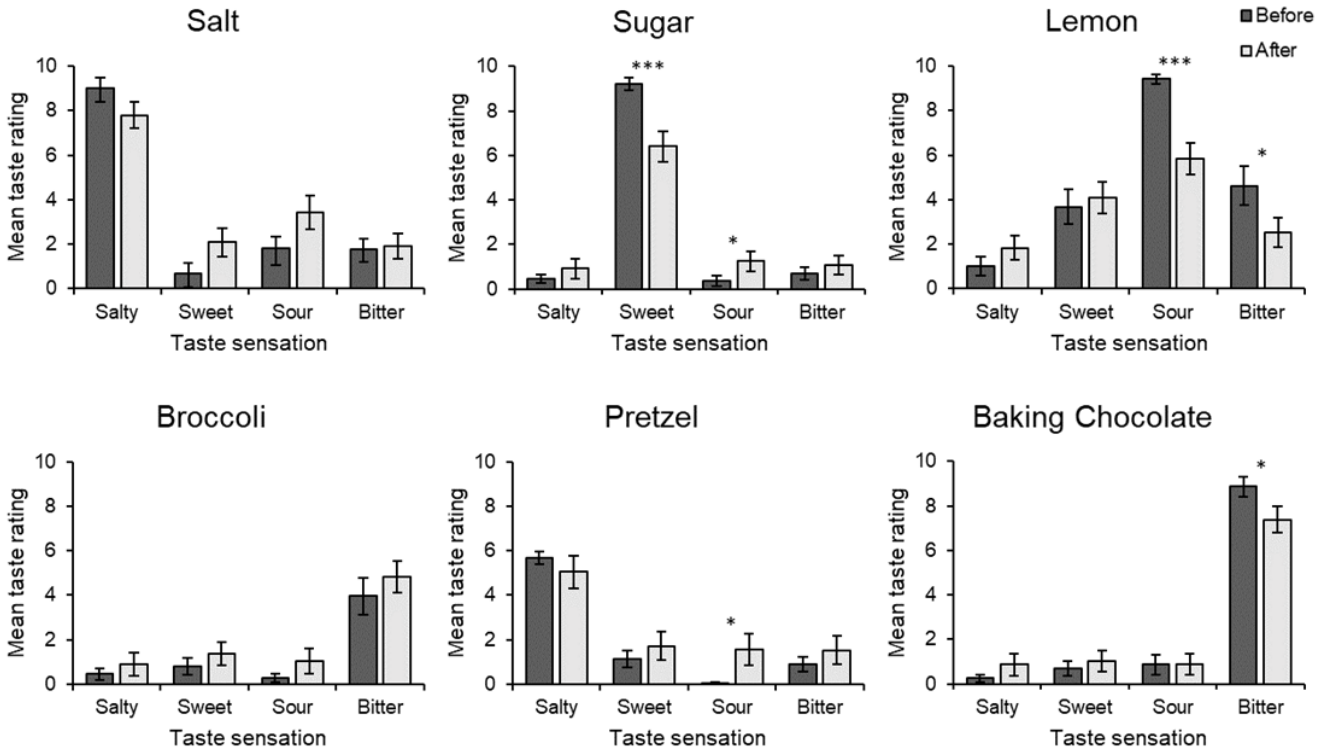
Supplementary Results

Without a Bonferroni correction, there were significant differences in the following taste perceptions, in addition to the two mentioned in the main article: 1) an increase in sour for sugar ($t(23) = 2.48$, $p < .05$), 2) a decrease in bitter for lemon ($t(20) = 2.75$, $p < .05$), 3) an increase in sour for pretzels ($t(20) = 2.09$, $p < .05$) and 4) a decrease in bitter for baking chocolate ($t(23) = 2.20$, $p < .05$). All other comparisons were, once again, not significant (see Supplementary Figure S1).



Supplementary Figure 1. Mean (±SEM) taste ratings for salt, sugar, lemons, broccoli, pretzel, and baking chocolate before and after exposure to the buzz button. Students (n = 26) were asked to rate each food item for sweet, sour, salt and bitter on a scale of 0 (no sensation) to 10 (very intense). * = $p < .05$, *** = $p < .001$; all other comparisons were not significant (these analyses do not include a Bonferroni correction for multiple comparisons).

Evaluation Sheet: Before Consuming Buzz Buttons

Food	Taste Intensity Ratings
Salt	0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Salty Very Salty 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sweet Very Sweet 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sour Very Sour 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Bitter Very Bitter
Sugar	0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Salty Very Salty 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sweet Very Sweet 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sour Very Sour 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Bitter Very Bitter
Lemon	0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Salty Very Salty 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sweet Very Sweet 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sour Very Sour 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Bitter Very Bitter
Broccoli	0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Salty Very Salty 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sweet Very Sweet 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sour Very Sour 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Bitter Very Bitter
Pretzels	0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Salty Very Salty 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sweet Very Sweet 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sour Very Sour 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Bitter Very Bitter
Baking Chocolate	0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Salty Very Salty 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sweet Very Sweet 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sour Very Sour 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Bitter Very Bitter

Evaluation Sheet: After Consuming Buzz Buttons

Food	Taste Intensity Ratings
Salt	0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Salty Very Salty 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sweet Very Sweet 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sour Very Sour 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Bitter Very Bitter
Sugar	0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Salty Very Salty 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sweet Very Sweet 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sour Very Sour 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Bitter Very Bitter
Lemon	0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Salty Very Salty 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sweet Very Sweet 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sour Very Sour 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Bitter Very Bitter
Broccoli	0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Salty Very Salty 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sweet Very Sweet 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sour Very Sour 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Bitter Very Bitter
Pretzels	0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Salty Very Salty 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sweet Very Sweet 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sour Very Sour 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Bitter Very Bitter
Baking Chocolate	0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Salty Very Salty 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sweet Very Sweet 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Sour Very Sour 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not Bitter Very Bitter

Post-Activity Survey Questions

1. What sensations did you experience when you tasted the buzz button?

2. Tell me one thing about how your perception of the food items changed after eating the buzz button?

3. What is one thing that you learned from this activity?

4. How interested were you in the Buzz Button Activity?

5 (very interested) 4 3 (neutral) 2 1 (not at all interested)

5. How much did you enjoy the Buzz Button Activity?

5 (a lot of enjoyment) 4 3 (neutral) 2 1 (no enjoyment)

6. If I took this course again I would want to do the Buzz Button Activity:

5 (strongly agree) 4 3 (neutral) 2 1 (strongly disagree)

Post-Activity Class Discussion Questions

- Think about individual differences in taste perceptions and discuss with your groups the following questions:
  - Did people have different perceptions of the food items before eating the buzz buttons?
  - Did people have different perceptions of the food items after eating the buzz buttons?
  - Why might there be individual differences in the perception of the food items?

- Based on your perceptions of how the buzz button altered your taste, please describe what taste and/or touch receptors you think were active during this demonstration and how you think they worked?