

Using Google Docs and Zoom Breakouts for student Engagement



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NUTR 320: Science and Methods of Food Preparation

- My challenge:
 - Getting students to understand how specific ingredients affect recipe outcomes without the normal lab setting.
 - Helping students meet each other and have conversations in a remote teaching, Zoom environment.
- My response:
 - Use shared Google Docs and Zoom breakouts
 - Created “get students to think about a concept question”
 - Created videos of recipe preparation, took photographs of the outcomes, then created Google Docs where students worked to answer questions.

Example #1: Getting the conversation going

 Week 1 Food Selection activity ☆ 📁 ☑️

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 Background Layout Theme Transition

Food Selection Activity

Instructions:

- In your groups of 2 or 3, choose one of the slides below and answer the questions below:
 - Describe this selection criteria in one to two sentences
 - Write down 2 examples that convey this selection criteria.

(Grp1) Food Selection: Sensory Criteria = Sight

Add your name here: Gwen Jepsen Matt Pavlatos

Question answers:

- How presentable the food looks- fresh, attractive, clean, color, shape, serving size, shine, texture
 - One scoop of ice cream versus five scoops of ice cream
 - Refried beans versus mashed potatoes
- Comparatively- is the food normal in your culture or society (familiar) ; unknown or different food choices may be intimidating; preference

(Grp2) Food Selection: Sensory Criteria = Taste

Add your names here: Kaylee Hough, Hsin-Yu Hsieh

Question answers:

- The six taste stimuli: sweet, sour, bitter, salty, umami (savory), and oleogustus (taste for fat)
- The variety of our foods can affect taste. (Example: If you eat the same food every day, it may become unappealing/unappetizing overtime)
- Different factors affect taste such as color of food, time of day eaten, hunger level, and psychological factors.

(Grp3) Food Selection: Sensory Criteria = Odor

Add your name here: Zihan Huang, Jessica Walkowiak

Question answers:

- Odors can be appetizers. E.g. Maillard reaction will create a good odor and people will prefer to choose those meats.
- Bad smells such as the smell of burnt food or the fishy smell will make people avoid those food.

(Grp4) Food Selection: Sensory Criteria = Touch

Julia Rothweiler

Emily Krawski

- Choosing or not choosing certain foods because of texture/how a food feels
- Finger foods, at a social gathering you have foods where you will use your fingers to eat them
- Choose foods based on either crunchy, jelly, etc.

(Grp5) Food Selection: Sensory Criteria = Sound

Add your name here: Ashley Hess and Malinda Downing

Question answers:

- Sounds associated with foods which can determine their quality, either freshness or doneness.
- A few examples would be hot dogs and hamburgers on the grill, a sizzling fajita platter or tapping on a fruit to test it's ripeness.

Example #2: Applying scientific principles to understand how a process works



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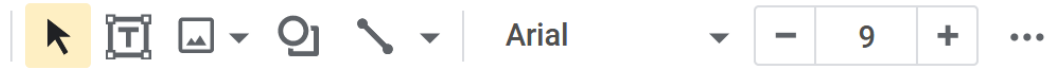


Instructions

- Add your names in the title of the slide.
- Answer your assigned question given to you in the speaker notes

Questions:

1. In the conventional method, the first step is to the cream the butter, then add sugar and beat on high until blended. What is this step doing and how did it affect the outcome?
2. In the Quick Mix method, why did the cake have less rise and fall in the center? In the Quick Mix method cake, why was the crumb rough and more open?
3. In the conventional method, why was the egg added, then blended, then the dry ingredients and liquid ingredients



Group 1: Madison Nasuti, Allison White, Kelly Li, Erika Lose, Madison Buckley, Nicholas Bisceglie

- By completing this step the sugar will be fully incorporated into the butter. Beating this mixture will create a smooth consistency and there will be air incorporated in as well which gives the baked good structure. As a result of this, the crumb will be slightly rough and thick.



•In the conventional method, the first step is to the cream the butter, then add sugar and beat on high until blended. What is this step doing and how did it affect the outcome?



Example #3: Applying scientific principles to understand how an ingredient works – Different Google Doc look



Example #3: Applying scientific principles to understand how an ingredient works – Different Google Doc look



Week 8: Starch Experiment



Present



Share

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Instructions

- Add your names in the title of the slide.
- Answer your assigned question given to you in the speaker notes
- Identify a leader for each group to share your answer with the class



Starch A



Starch B



Starch C

Group 1: Colby DeBellis, Abigail Stull, Anthony Maradeo, Grace Kave

Starch A: Wheat Flour

Provide evidence for your answer below

- Darker brown color
- Took the slowest to thicken
- Thinner than B and C
- Opaque
- Cloudier than potato starch

Starch B: Potato Starch

Provide evidence for your answer below

- Longer than corn starch but shorter than wheat flour
- Thickest
- Creamy
- Most color change to lighter in color
- Shiny

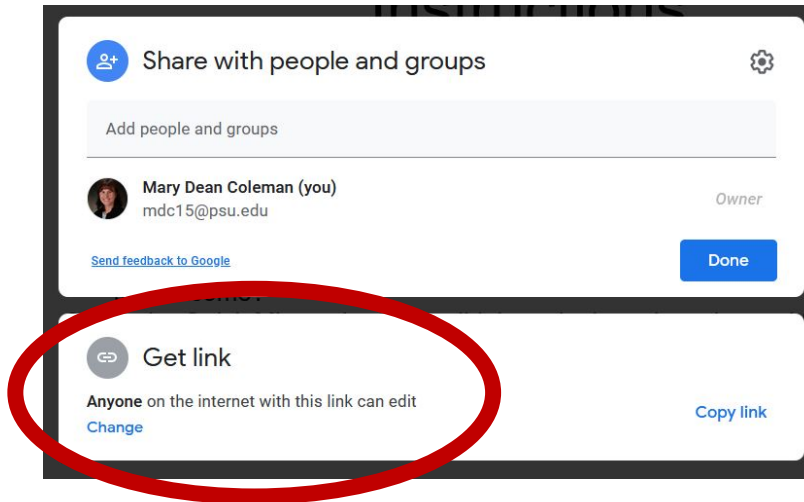
Starch C: Corn Starch

Provide evidence for your answer below

- Thicken very fast
- Average viscosity
- Looks like a jelly
- Glossy almost a clear brown

Tips for success

- Google Doc settings – use your Penn State G-Suite Google Account
 - Share the link so all students have access regardless of the account they use



- If using Zoom breakouts, share the link in the chat before moving them to the breakout rooms
- 2-3 students in a group is ideal
- Add the questions in the “notes” section of the presentation slides
- The first slide is the instructions slide
- Title each slide with the group number and ask students to add their names
- Keep the slides available for the students to use as a study tool

Helpful Resources

- Penn State G-Suite website:
 - <https://gsuite.psu.edu/>
- PSU Teaching & Learning with Technology Engaging Student Series (ESS)
 - <https://psu.pb.unizin.org/engagingstudents/>

