

The Sensory Evaluation Lab is located on the third floor of the Remsen Building and offers facilities for food product evaluation (objective and sensory), sensory panel training, consumer sensory test, focus group, sample preparation and storage, and nutrient analysis using software.

Facilities and Equipment within the Sensory Evaluation Lab

Product Preparation Area

- A fully equipped kitchen with storage area
- refrigerators/freezers, conventional ranges/ovens, dishwashers
- convection oven, microwave ovens, & professional grills

Sensory Testing Areas

- 2 individual booths with computers for ballot presentation
- Meeting room with conference table seating for 12-15 panelists
- Positive air pressure and air conditioners

Objective Testing Area

- Analytical balance and electronic food scales
- Hydrometers, pH meter, Refractometer, Consistometer
- Moisture Analyzer, Saltmeter, Specific Gravity Pycnometer
- SPSS and Food Processor® software installed computers

Research Activities with a sensory component

Funded Projects

2024-2025 **Choi, S.** (PI) & Moran, P. (Co-PI). Effect of preference-maximized cooking Classes on the willingness to comply with diet recommendations among adults with type 2 diabetes. For PSC-CUNY 55 grant, #67507-00-55

2023 **Choi, S.** (PI) & Choi, J. (Co-PI). Efficacy of a virtual reality-based approach to improving the dining out experience for people with diabetes or prediabetes. For Queens College 2023 Research Enhancement Award.

2020-2021 **Choi, S.** (PI). Nutritional analysis and evaluation of ethnic soup recipes in bestselling cookbooks from 10 food culture groups. For PSC-CUNY 51 Grant, #63332-00-51.

2019-2020 **Choi, S.** (PI). Effects of miracle fruit supplement on hedonic responses and food intake in diabetic patients. For PSC-CUNY 50 Grant, #62192-00-50.

2017-2018 **Choi, S.** (PI). Effects of prior miracle fruit administration on the flavor profile and consumer liking of selected food items. For PSC-CUNY 48 Grant, #60189-00-48.

- 2012-2013 **Choi, S.** (PI). Comparative analysis on preparation method and acceptability for soup stocks among different dietary cultures. For the Youlchon Foundation Grant, Seoul, South Korea.
- 2012-2013 **Choi, S.** (PI). Comparison of health-related behaviors between regular hot chili pepper users and non-users. For PSC-CUNY 43 Grant, #65362-00-43.
- 2011-2012 **Choi, S.** (PI). Comparison of taste perception and food preference between meat eaters and non-meat eaters. For PSC-CUNY 42 Grant, #64396-00-42.
- 2010-2011 **Choi, S.** (PI). Relationship of taste perceptions to eating patterns and risks of obesity among African-Americans and Asian-Americans. For PSC-CUNY 41 Grant, #60089-40-41.

Publications (#indicates corresponding author; †indicates mentored QC student)

Choi, S. # & Choi, J. (2024). Exploring food preferences as a pre-step for developing diabetes-friendly options in adults with diabetes and prediabetes. *Foods*, 13(20), 3276, 15 pages. <https://doi.org/10.3390/foods13203276>

Choi, S. # & Park, T. (2023). Feasibility and acceptability of miracle fruit application prior to the consumption of sour-tasting foods as a weight-loss strategy in adults with diabetes or prediabetes: A randomized crossover trial. *Appetite*, 191, 107046, 6 pages. <https://doi.org/10.1016/j.appet.2023.107046>

Choi, S. # & Garza, J. (2021). Consumer likings of different miracle fruit products on different sour foods. *Foods*, 10(2), 406, 15 pages. <https://doi.org/10.3390/foods10020406>

Choi, S. # & Garza, J. (2020). Effects of different miracle fruit products on the sensory characteristics of different types of sour foods by Descriptive Analysis. *Journal of Food Science*, 85(1), 36-49. <https://doi.org/10.1111/1750-3841.14988>

Choi, S. # (2019). Chapter 3: Food Evaluation. In S. Edelstein (Ed.), *Food Science: An Ecological Approach*, 2nd edition (ISBN:978-1-2841-2230-5), Sudbury, MA: Jones and Bartlett Publisher.

Choi, S. # (2016). Comparison of soup stock preparation and soup product consumption behavior in an ethnically diverse population. *Journal of Culinary Science & Technology*, 14(3), 234-262. <http://dx.doi.org/10.1080/15428052.2015.1110544>

Choi, S. # (2015). Comparisons of 6-n-propylthiouracil (PROP) sensitivity, food liking, and food intake between vegetarian and non-vegetarian women. *Journal of Obesity and Weight Loss Therapy*, 5(2), 255, 9 pages. <http://dx.doi.org/10.4172/2165-7904.1000255>

Choi, S.[#], Chan, J.[†] (2015). Relationship of 6-n-propylthiouracil (PROP) taste intensity and chili pepper use with body mass index, energy intake and fat intake within an ethnically diverse population. *Journal of the Academy of Nutrition and Dietetics*. 115(3), 389-396.
<http://dx.doi.org/10.1016/j.jand.2014.09.001>

Choi, S.[#] (2015). Taste preference evaluation: the first step toward a successful weight loss strategy. *Journal of Obesity and Weight Loss Therapy*, 5(4), e117.
<http://dx.doi.org/10.4172/2165-7904.1000e117>

Choi, S.[#] (2014). Racial differences in the effect of 6-n-propylthiouracil (PROP) intensity and food liking on body mass index between African Americans and Asian Americans. *Journal of the Academy of Nutrition and Dietetics*, 114(6), 938-944.
<http://dx.doi.org/10.1016/j.jand.2013.11.015>

Choi, S.[#] (2014). Chapter 3: Sensory Evaluation. In S. Edelstein (Ed.), *Food Science: An Ecological Approach*. (ISBN:978-1-4496-9477-7) Sudbury, MA: Jones and Bartlett Publisher.

Student Research Presentations from FNES 307W Experimental Food Science course

([†] indicates mentored Queens College student)

Levine, A.[†], Baig, S.[†], Colby, E.[†], Ross, A.[†], **Choi, S.** Sensory and physical properties of high fiber muffins prepared by replacing all-purpose flour with defatted coconut flour. Annual Sigma Xi Research Day, Queens College, April 13, 2018.

Cannon, A.[†], Chiricella, J.[†], Garcia, O.[†], Wu, M.[†], **Choi, S.** Sensory and physical properties of brownies prepared by replacing butter with black beans. Annual Sigma Xi Research Day, Queens College, April, 5, 2017.

Raynaud, K.[†], Papis, A.[†], Conliffe, J.[†], Gabaldon, M.[†], **Choi, S.** Sensory and physical properties of low-fat Macaroni and Cheese prepared by replacing whole fat cheese with nutritional yeast. Undergraduate Research Showcase 2016, Queens College, September, 28, 2016.

Biondi, M.[†], El Rowmeim, A.[†], Licari, A.[†], **Choi, S.** Sensory characteristics & physical property of pancakes prepared by replacing wheat flour with gluten free substitutes. Annual Sigma Xi Research Day, Queens College, April 23, 2015.

Bordi, A.[†], Ektheerachaisakul, P.[†], Haq, M.[†], Tierney, K.[†], **Choi, S.** Sensory characteristics and cooking loss of low-fat meatloaf prepared by replacing beef with textured vegetable protein (TVP). Undergraduate Research Day, Queens College, October 10, 2014.

Moreno, C.[†], Jamanca, A.[†], Lanzisero, D.[†], Wimmer, I.[†], **Choi, S.** Sensory and physical properties of Alfredo sauce prepared by replacing whole-fat milk with reduced-fat and fat-free milk. Annual Sigma Xi Research Day, Queens College, April 10, 2014.

Coello, S.[†], Meskouris, M.[†], Coopersmith, R.[†], **Choi, S.** Sensory properties and acceptability of gingerbread cakes using applesauce as a fat substitute. Undergraduate Research Day, Queens College, October 8, 2013.

- Messana, S.†, Monteverdi D.†, Asghar, N.†, Hoffmann, A.†, O'Mahony, K.†, **Choi, S.** Consumer sensory acceptability of gluten free falafel prepared with rice flour and chickpea flour. Annual Sigma Xi Research Day, Queens College, March 14, 2013
- Conca, A. †, Daley, P. †, Redwood, T. †, Tejada, A. †, **Choi, S.** Sensory and physical properties of gluten free cupcakes prepared by replacing all-purpose flour with almond flour and coconut flour. Undergraduate Research Day, Queens College, October 16, 2012.
- Sommer, V.†, Kalinski, J.†, Borg, K.†, Maksym, L.†, **Choi, S.** Sensory and physical properties of Macaroni and Cheese prepared by replacing whole-fat cheese with reduced-fat cheese. Annual Sigma Xi Research Day, Queens College, March 22, 2012.
- Whitcomb, R.†, Manzo, A.†, Schwartz, G.†, Read, S.†, **Choi, S.** Development of gluten-free chocolate chip cookie prepared by replacing all-purpose flour with brown rice and chickpea flours. Annual Sigma Xi Research Day, Queens College, March 31, 2011.
- Kaur, N.†, Shergill, R.†, Dhaliwal, B.†, **Choi, S.** Consumer acceptance of blueberry muffins made with whole wheat flour. Undergraduate Research Day, Queens College, September 24, 2010.
- Kim, Y.J.†, Mars, N.†, Yasmin, I.†, **Choi, S.** Sensory and physical properties of blueberry muffin prepared by replacing vegetable oil with applesauce. Undergraduate Research Day, Queens College, September 24, 2010.
- Hwang, S.H.†, Martone, G.†, Vessa, A.†, **Choi, S.** Xylitol as a comparable substitute for sucrose in low sugar oatmeal raisin bars. Undergraduate Research Day, Queens College, September 24, 2010.
- Glickman, E.†, Nasser, S.†, **Choi, S.** Development of low fat, high protein cheesecake using Greek yogurt and egg white. Annual Sigma Xi Research Day, Queens College, March 18, 2010.
- Blue, D.†, Cohen, E.†, Harr, Y.†, **Choi, S.** Development of low fat, low calorie chocolate chip cookies prepared by replacing butter with apple sauce. Annual Sigma Xi Research Day, Queens College, March 18, 2010.
- Gordillo, R.†, Kang, D.Y.†, Gouda, A.†, **Choi, S.** Consumer acceptability of muffin prepared by whole wheat flour. Annual Sigma Xi Research Day, Queens College, March 18, 2010.
-



