

# **GIFTS: Balance Builders: Stirring Together Community, Conversations, and Culinary Metaphors for Wellness in First-Year Engineering Students**

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# **G.I.F.T.S: Balance Builders: Stirring Together Community, Conversations, and Culinary Metaphors for Wellness in First-Year Engineering Students**

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## **Abstract**

Balance Builders (BB) is an innovative program designed to foster community and support mental and physical wellness among freshman engineers. The Balance Builders initiative exemplifies how community-driven programs can empower students and enhance the first-year journey through a unique mechanism: Cooking and Community Nights. Designed by engineering undergraduates in consultation with mental health professionals, BB creates a natural and familiar environment space for first-year engineers to engage with difficult topics without feeling externally imposed.

In our presentation, we will describe the origins and evolution of the program in response to student feedback. Recognizing that strong bonds within communities are essential to student success, our program is a dynamic, hands-on experience. Every Thursday evening, we guide a group of ten freshmen through cooking lessons that blend practical culinary skills with open dialogue. By preparing meals, we not only nurture essential life skills but also foster an environment where meaningful conversations can flourish. We will describe the framework we use to create these meals as unique metaphors, their grounding in evidence-based concepts from clinical mental health research, and our evidence for the effectiveness of the program.

Our approach is built on our slogan: a balanced life starts with a balanced meal. The culinary focus is particularly fitting for engineers, who often appreciate the logical precision and creative problem-solving that cooking and baking require. These activities, grounded in mathematics and systematic processes, serve as metaphors uniquely tailored to engineers, highlighting important topics in mental wellness through the approachable lens of cooking. For instance, crafting unique sushi rolls mirrors the challenge of overcoming imposter syndrome, while creating a perfectly imperfect beef wellington illustrates that success does not demand perfection. These sessions are more than cooking; they are a vehicle for building a sense of belonging and encouraging dialogue about common challenges such as the pressures of transitioning to college. After we cook each meal, we sit with the students, eating and discussing topics relevant to the week's theme such as, "What does community mean to you? And why is it important to have community in college?".

Ultimately, our program is designed to increase engagement and provide a space to develop critical connections between upperclassmen and peers and empowering students from diverse backgrounds. Our approach highlights the importance of innovative, community-driven methods in engineering education, demonstrating that nurturing the mind and body can go hand in hand. We envision a sustainable legacy in which returning students help perpetuate our mission.

## Introduction and Background

This program began in January 2025 and has been composed of weekly cooking lessons. Each week for the entire semester, we have space for 10 students, and our attendance was consistently close to the maximum. Attendance is first-come first-serve and open to any CU Boulder student, regardless of year or major. However, the program is hosted in an engineering dorm kitchen to target first year engineering students, which was highly successful. Some students returned every week and others cycled in and out for exams and other conflicts. See the appendix for a table of the recipes we completed and their significances.



**Figure 1: First year student showing off his handmade sushi rolls.**

On February 20<sup>th</sup>, we hosted a Build-Your-Own Sushi Roll lesson which focused on imposter phenomenon. We chose this theme for earlier in the semester because it is an extremely common topic, especially for engineers, and can often take place in the earlier days of the semester. This was our most popular night, and we had to turn away a few students because we were already at our maximum for the night. Fig. 1 shows a student enjoying the cooking lesson.

After the success of this cooking lesson, we added a family style dinner component where we, the two peer leaders, led discussions related to the topic and its correlation to the meal. We sat with the students and each of them chose one open-ended question from a list we provided of five or so open-ended questions to answer while we all enjoyed the food we had just cooked.

The list of questions was focused on the theme of the night and were provided by Licensed

Professional Counselor Alison West who serves as a mentor for the program. As an example, for tempeh night the theme was changes in relationships. This dish was chosen for this theme because it is a vegetarian spin on the classic dish coconut shrimp—therefore encouraging students to try new things and look at their experiences in a different light. Some of the questions to choose from included: Are your college friendships what you thought they'd be? How are they different? How have your college friendships changed over time? And, What have you learned about yourself through your college friendships? These questions were added to guide the group conversation toward harder topics that first year students often need support with.

A standard cooking night involved us, the two student leaders, arriving on campus at 5:00pm to gather the necessary kitchen supplies and ingredients. We also provided printed copies of the recipe each week for students to reference while cooking and keep for future reference, an attendance sheet, and a list of group norms to ensure a safe space for productive conversations.

The lesson officially started at 5:30pm and usually ended at 7:30pm, though some weeks were shorter or longer depending on the difficulty of the dish. We, the student leaders, were there to provide guidance on how to cook and upperclassmen perspectives on any personal questions they may have. Our only requirements for attendance were that each student help us cook, clean up, and engage in the guided group conversation.

Further, we anonymously surveyed the students near the end of the semester to see how this program affected them. Of students who replied to the survey:

- 100% said they felt significantly or slightly more confident in their cooking skills after attending Balance Builders.
- 100% said this program has helped them form new relationships in their residents' hall.
- On average, they gave a 7.67 out of 10 for how likely they are to attend Balance Builders next semester.

Students also anonymously said:

- "It's something I can look forward to every week no matter what else is going on."
- "It made me feel more confident and more outgoing to try new things. It taught me the patience you need with cooking."

## Conclusion

Over the spring semester of 2025, we held a total of 11 cooking lessons, each a different dish and theme to provide support for first year students during their transition to college. We prepared for each lesson by choosing a recipe and topic, shopping for the ingredients, and preparing discussion questions. Then, we guided the ten students through the recipe and sat and ate with them after while listening to each of them answer one of the discussion questions.

The program was highly successful and will be expanding in the upcoming fall semester. We will have three new Balance Builder student mentors, two of whom were first year students that attended the program throughout the semester. They will continue the program with one cooking lesson per week with a new theme for each dish, but we hope to expand the program to two nights per week over the next academic year. The program is funded by Engineering Connections, a first-year engineering support program at the University of Colorado Boulder.

Our long-term goal is to create a self-sustaining model that empowers students to lead and evolve the program each year. With continued support, Balance Builders has the potential to become a permanent pillar of first-year engineering support at CU Boulder.



**Figure 2: Students learning how to separate eggs for the beef wellington recipe on the perfectionism cooking night.**

## Appendix: Completed Cooking Nights and Themes

2/6	Grilled Salmon with Quinoa and Roasted Vegetables	Balanced, healthy routine: A meal rich in omega-3s, fiber, and antioxidants to support physical and mental balance.
2/13	Individual Beef Wellington	Perfectionism: A sophisticated meal that balances technique with creativity, teaching participants to embrace imperfection in execution.
2/20	Build-Your-Own Sushi Rolls	Imposter Phenomenon: A customizable dish allowing participants to celebrate their creativity and individuality.
2/27	Pasta (from scratch) and a Meat Sauce	Increase in academic difficulty/demands: When school asks for big projects that require a lot of effort, the result is difficult to reach but is very satisfying.
3/6	Crispy Coconut Tempeh with a Cucumber Salad	Changes in relationships: Something new! A vegetarian spin on the beloved coconut shrimp. Shifts happen often, and it's important to embrace change and try new things.
3/13	Fried Chicken with Asparagus and Mashed Potatoes	Fried chicken has a long history, originating from many different cultures and traditions around the globe. During the era of American slavery, Black individuals (primarily women) fried chicken on special occasions, and the dish created a sense of community and comfort; people gathered to share meals and invaluable time with one another.
3/20	Swedish Meatballs with Princess Cake Dessert	This is a recipe suggested by a freshman Swedish exchange student who was feeling homesick. It can be helpful to reframe homesickness—while it's often a difficult experience, this longing for home often reflects deep love and connection with people, places, and/or pets back home. Cooking a traditional meal can help you stay connected.
4/3	Yachejeon and Tteokgalbi	This is a Korean recipe suggested by a Balance Builder's attendee. There are endless variations of Pajeon, or savory green onion pancakes. These variations leave room for creativity and adaptability. While it's true that you can devote your time to chopping the vegetables and other ingredients into "perfect" shapes before mixing them into the batter, the truth is, the pancake will be delicious either way.

4/10	Pad See Ew and Khao Tom Madd	The iconic Thai dessert “khao tom madd” is made up of bananas and steamed in sticky rice. Someone who isn’t familiar with khao tom madd might have trouble imaging how these ingredients could go together to create such a delicious dish. The same can be said for peers with different backgrounds and identities coming together. It may not always be clear what may come from forming diverse friendships, but if uncertainty and unfamiliarity are embraced, something beautiful can happen!
4/24	Naan Pizza	Life comes in waves. Sometimes we have the time and energy to manage many of life’s demands and challenges, and other times there are more limits to what we can accomplish. Sometimes, surviving is enough, especially when nearing the end of a semester: one of the busiest, most stressful times of the year.
5/1	Fried Pork in Scoop and Crystal Sticky Cake	This recipe was suggested by a Chinese student who attended all of our cooking lessons. By teaching us this recipe, he allowed us to try something new.

### **Acknowledgment**

Special thanks to Licensed Professional Counselor Alison West for her contributions to creating B.B. as a student-led Academic Wellness Program based in clinical mental health research and experience. She has greatly aided in the creation and continuation of success in the program by offering a specialized perspective and guidance on how to interact with students when discussing mental health and wellness.