

School of Nutrition & Food Sciences

The Experience of College Life and the Challenges Faced by Students with Food Sensitivities in Adhering to Dietary Guidelines Despite Prevalence of Gastrointestinal Problems



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Abstract

Understanding the challenges faced by college students with medical dietary restrictions is crucial. This study focused on students aged 18-26 with food allergies, sensitivities, or autoimmune diseases. Surveys and interviews found those with sensitivities encounter the most difficulties, including self-induced gastrointestinal symptoms from ignored restrictions. Emotional responses varied from frustration to anxiety, stemming from limited campus dining choices. There are opportunities for campus dining outlets to enhance support for various food restrictions to improve students' well-being.

Background

- People with autoimmune diseases (AD), food allergies (FA), food intolerances (FI) and food sensitivities (FS) may need to follow medical dietary restrictions that add additional challenges to students' academic lives.
- Some common symptoms amongst this population includes various GI symptoms such as nausea, vomiting, diarrhea, bloating, along with life-threatening anaphylaxis that requires immediate medical attention.
- Concerns about cross contamination, accessibility issues, and financial constraints are added to a college student's life along with navigating the transition into being an adult.
- Managing these dietary restrictions often increases the mental load every time food and drinks are available or not available.
- In college, students living on campus, off campus with other students, with family, and without roommates all face unique colleges.
- There is an increase in financial burden of allergen and gluten free foods. Finding these often takes more time to read the labels.
- The experience of trying to find food on campus varies depending on the training of staff members working.
- There are also psychological effects, mainly an increase in anxiety and depression among this population, as well as additional emotional and social challenges. If unmanaged, these effects can significantly impact overall health.
- There is currently a knowledge gap on what these college-aged students with medical dietary restrictions must face daily.



Scan the QR code or go to the bit.ly to read the first publication from this study.

https://bit.ly/4cBVPmc

Methods

- Original Inclusion Criteria:
 - 18 years or older;
 - Graduate or Undergraduate LSU student;
 - Have a dietary restriction (food allergy and/or food sensitivity and/or autoimmune disease)
- Qualtrics was used for the initial data collection.
- The study had a follow-up interview portion with a sample of 18 adult students attending Louisiana State University.
- Teams was used to conduct the video interviews. There was a semistructured interview guide with 8-questions and 5 sub-questions.
- Interviews were transcribed manually and checked by two randomly assigned other researchers.

Results

- A total of 18 interviews were completed.
- Those with peanut, tree nut, and sesame allergies had an easier time and were accommodated better than those with other medical dietary restrictions.
- People with food sensitives were found to prioritize following their dietary restrictions significantly less often than those with allergies and autoimmune diseases (p<.001).
- This was also reflected in their responses to how often they read food labels, which revealed they were significantly less likely to read labels (p=0.005) than those with food allergies.
- Most students (87.5%) with medical dietary restrictions reported gastrointestinal (GI) symptoms like diarrhea, nausea, bloating, gas, and vomiting when eating food(s) they should be avoiding.

Table 1. Respondent Quotes on Emotional Responses and Subsequent Affects to Campus/College Life Due to Dietary Restrictions Theme Selected Respondent Quotes

Feelings of fear "It's scary. It's very scary actually. And it makes me very anxious to eat anything." "I'm scared a lot like cause in the dining halls. There is a lot of, like shellfish, because that's what allergy I have and sometimes you don't know or like whenever you're in the Union, you don't really know Like what food is going to be cooked with shellfish and what's not? And I feel weird whenever I have to ask"

Feelings of aggravation

"Some aggravation. And, umm, I guess solitude might be another word that you could use, or I would use."

"It's very frustrating, you know seeing everybody else eat what they want to eat and then

you have to restrict yourself just because of what it does to your body. "

"It kind of made me feel like they didn't believe me because they made my doctor and made my doctor send over a note. she was so aggravated at the fact that they were like

you have to send over professional documentation with your doctor's signature and stuff.'

Feelings of embarrassment

"I would honestly say embarrassing because for my case, I have low blood pressure. But my doctor recommended that I increase my salt intake. So, a lot of the times when I'm feeling like I'm going to pass out, or something like that I'll have to take salt packets and just like eat them as they are. I haven't had to do it in a public place yet, but it's a little embarrassing."

Feeling excluded

"I want to stay with friends and study. But I literally can't because there's no food here, I eat, like to eat"

"I feel like LSU is not very inclusive"

Falling ill and missing class

"One time he put out. Vegan cheese that still had lactose in it. So it wasn't, it was like plant-based, but it wasn't vegan ohm. And so, I had to go to the hospital for 7 1/2 hours because I wasn't told. Well, that one time when I was in the hospital, I missed class. It was like the week before final exams and so umm I had a lab final the day after. Like when I came back to school, and I didn't do very good at it because I was exhausted, and I couldn't study and after that, I just really wished I would have stayed with my parents. It just sucked and then there was another time where umm, I couldn't get to the hospital and so I had to call 911 and that was just really embarrassing. And I missed a test that day too."

Struggles of bringing their own food

snacks, because, like I'm on campus all day today. And when I tell you I have literally a duffle bag, 2 lunch kits, because there's no food out here, and I don't care what people say but it does affect me because I have to run to my car to get it. I've always done it, not a big deal, but when it comes to like you're on campus and you're starving because you didn't pack the lunch that day, or you didn't bring enough in the lunch. I'm just like I don't even know what to eat at this point and sometimes I have to go home."

Meal skipping

"Having to think way ahead of time about like what I'm going to eat that day or the next day, like if, having made sure I have some at home to bring for lunch. If I don't, I may be like, can't eat till I get back home from classes. Like there's no one else to fall back on. If I don't have a meal like there's no one else to rely on, no one else to blame. It's all on me to figure it out."

" I feel I have to like neglect it (eating meals) per se."

Conclusions and Implications

- Improvements need to be made to better accommodate those with medical dietary restrictions on college campuses, both in terms of promoting better mental health and inclusion to better fulfill their physical needs.
- If they are included in a safer and more supportive manner, their overall college experience may be smoother and last longer, which can improve overall satisfaction with campus life and decrease dropout rates.
- Experiencing uncomfortable GI symptoms may interrupt college students' busy schedules causing an increase in stress, embarrassment, money spent on medication to alleviate symptoms, missing class/work, feelings of isolation, and put a strain on intimate relationships.
- The lack of adequate finances, not enough food options on and near campus, a formal diagnosis, finding the root cause(s) of symptoms, and lack of dietary education could all be contributing factors to why those with medical dietary restrictions experience greater challenges throughout their academic career.
- If students are without the resources to prepare their own meals and snacks to bring to campus for the day, then skipping meals and/or inadequate energy intake may be a consequence.
- Further studies should research other colleges as well as follow up on improvements, accommodations, inclusion, and students' emotions along with suggestions to improve campus life.

References

Ersig, A. L., Williams, J. K., (2018). Student and parent perspectives on severe food allergies at college, *Journal of Pediatric Health Care*, 32 (5), 445-454.

Gupta, R. S., Springston, E. E., Warrier, M. R., Smith, B., Kumar, R., Pongracic, J., & Holl, J. L. (2011). The prevalence, severity, and distribution of childhood food allergy in the United States. *Pediatrics*, 128(1), e9-e17.

Gupta, R. S., Warren, C. M., Smith, B. M., Jiang, J., Blumenstock, J. A., Davis, M. M., Schleimer, R. P., & Nadeau, K. C. (2019). Prevalence and severity of food allergies Among US Adults. JAMA network open, 2(1), e185630.

Lomer, M. C. (2015). Review article: the etiology, diagnosis, mechanisms and clinical evidence for food intolerance. *Alimentary Pharmacology & Therapeutics*, 41(3), 262–275.