



# Transforming a Culinary Medicine Elective for Medical Students into a Virtual Format

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## Purpose

- Physicians state lack of knowledge and skills limit their nutrition counseling, and medical schools lack adequate nutrition education
- Physicians are more likely to counsel patients on behaviors that they practice themselves
- Electives in culinary medicine have been established to supplement and/or replace traditional nutrition education at several US medical schools
- Culinary medicine electives have personal health and professional benefits, as students report increased confidence to provide obesity and dietary counseling to patients
- We transformed our in-person culinary medicine course into a virtual format without altering total teaching hours

## Curriculum

### Goals

- Identify and experience the benefits of culinary medicine in improving personal and patient wellbeing
- Develop cooking skills and tools to make healthier food choices
- Engage patients in conversations about dietary lifestyle changes
- Critically evaluate the evidence base for aspects of nutrition science
- Recognize and address patient factors, including social, cultural, and applying principles of culinary medicine



### Class Topics

- A Diet You Can LIVE with
- Value of Nutrition Education for Your Patients
- Motivational Interviewing – How to Talk to Your Patients about What They Eat
- Socioeconomic Barriers to Healthy Eating & Shopping Healthy on a Budget
- Fresh & Savory Patient Panel & Role of Registered Dietitians
- Mindful Eating
- SNAP Meal Presentations



### Structure

8 virtual sessions: 5 didactic sessions, 3 cooking sessions  
12 students

Afternoon (60 – 90 mins): Interactive Lecture

Evening (2 hours): Cooking

## Curriculum (continued)

**Cooking sessions** for class of 12 second year medical students

Zoom breakout rooms (1 hour): 3-4 students to 1 instructor/volunteer for supervised cooking

Zoom large group (1 hour): eat together and discuss cooking challenges & health benefits of meal



## Quantitative Results

**Table 1. Change in Perceived Competency in Nutrition Counseling from Baseline to Post-class Follow-Up Assessments**

	Pre-Course (%)	Post-Course (%)
Improving health and reducing risk of disease through healthy eating	67	100
Strategies for reducing sodium intake	50	100
Replacing less healthy fats with healthier fat	42	100
Choosing whole over refined grains	50	100
Selecting healthier protein food	73	100
Increasing vegetable and fruit intake	92	92
Avoiding processed food and minimize dessert	67	100
Replacing sugar-sweetened beverages with water, tea, or coffee	100	100
Aiming to have nutritional goals followed at least 80% of the time, and allowing for flexibility at other times	33	100



## Quantitative Results (continued)

- Overall satisfaction with the course was very high
- Students reported the virtual course was effective in meeting the course objectives.
- Students tended to eat more vegetables and whole grains, and fewer whole milk dairy foods, red meat, and processed foods post-course.
- Students reported preparing more meals for themselves post-course.

## Qualitative Results

### Course Highlights

- Learning more about nutrition and local programs
- Meeting other students
- Hands-on cooking with new ingredients
- Lectures from guest speakers
- Panel of patients who have taken a similar course
- Final project - a recipe with SNAP budget constraints

"This course helped me learn about alternative sources of protein that I didn't typically use in my regular diet... I don't think I would've ever cooked with [chickpeas and beans] on my own but having done it in this class really allowed me to expand my cooking ingredient repertoire."



"[Through the course] I've realized how integral nutrition is to my future patients' health."

"[The course] helped me become more mindful of what and how I ate. Something I couldn't have learned on my own by reading a textbook."

## Future Directions

- If virtual format in the future:
  - Change didactics and cooking sessions to 1.5 hours each
  - Utilize questions or discussion prompts for the breakout sessions
  - Have instructors/volunteers cook alongside students
- Spread out student presentations throughout the eight sessions

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