

# Food is Medicine: A Novel Educational Intervention to Improve Nutritional Competency in Graduate Medical Education



<sup>1</sup>James S Love, MD; <sup>2</sup>Anna M Lipowska, MD

<sup>1</sup>Department of Internal Medicine, <sup>2</sup>Division of Gastroenterology and Hepatology, University of Illinois at Chicago College of Medicine, Chicago, IL

## Introduction

- Nutrition plays a critical role in the pathogenesis of many chronic conditions, and thus it is essential that physicians and trainees possess a strong knowledge base of key nutritional concepts.
- Unfortunately, physicians receive minimal nutritional instruction throughout their medical training due to curricular and time constraints, and often feel unprepared to effectively counsel patients on key aspects of nutrition.
- This study aimed to evaluate resident physicians' attitudes toward nutrition and to improve competency in nutritional counseling using a novel educational intervention.

#### Methods

- A novel nutrition training intervention was developed based on fundamental nutritional concepts and evidence-based nutritional considerations on high-yield topics
- Senior internal medicine (IM) and medicinepediatrics (MP) resident physicians were surveyed using an abbreviated version of a validated nutrition survey and questionnaire evaluating attitudes on nutrition and objective nutritional competence before and after receiving the presentation.
- Comparison of pre- and post-intervention scores was made by two-sample t-test.

### Results Physicians are not adequately Are you interested in improving trained to counsel on nutrition your knowledge of nutrition? **■** Agree Neutral ■ No Disagree

Baseline Participant Demographics				
	Pre-Intervention Survey Completion	Post-intervention Survey Completion		
PGY2	22	12		
PGY3	14	4		
PGY4	2	1		
Male	29	12		
Female	10	6		

Objective Competence Scores				
Pre-Intervention (n=39)	Post-intervention (n=18)	<i>p</i> -Value		
63.60%	72.20%	0.0169		

Measurement of Subjective Confidence in Nutritional Counseling				
Nutritional Topic	Pre-Intervention (n=39)	Post-Intervention (n=18)	p-Value	
Food constituents	2.85	4.12	<0.0001	
Body mass index	3.08	4.06	0.0055	
Basic metabolism	3.46	4.67	0.0007	
Vitamins	3.00	4.17	0.0003	
Omega-3/6 fats	3.11	3.72	0.0409	
Dietary cholesterol	3.55	4.28	0.0103	
Type 2 diabetes	3.90	4.50	0.0033	
Osteoporosis	3.26	4.00	0.0032	
HIV	2.08	3.89	<0.0001	

# Study Design

A novel nutrition training intervention was developed

**Pre-intervention survey of senior IM and MP** residents (n=39)

Administration of nutritional intervention (45 minutes)

Immediate post-intervention survey of senior IM and MP residents (n=18)

Statistical analysis of pre- and post-intervention attitudes on nutrition and objective competence

#### Conclusion

- Resident physicians value nutritional education and desire to improve their knowledge of nutrition.
- Residents are not satisfied with the current quality of nutrition training.
- Our novel educational intervention is a simple, efficient method of improving objective nutritional competency among resident physicians that can be easily implemented while respecting time constraints associated with graduate medical training.





Twitter: @JamesLoveMD