

A Culinary Medicine Course Improves Nutrition and Dietary Competencies of Medical and Physician Assistant Students

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Background Information

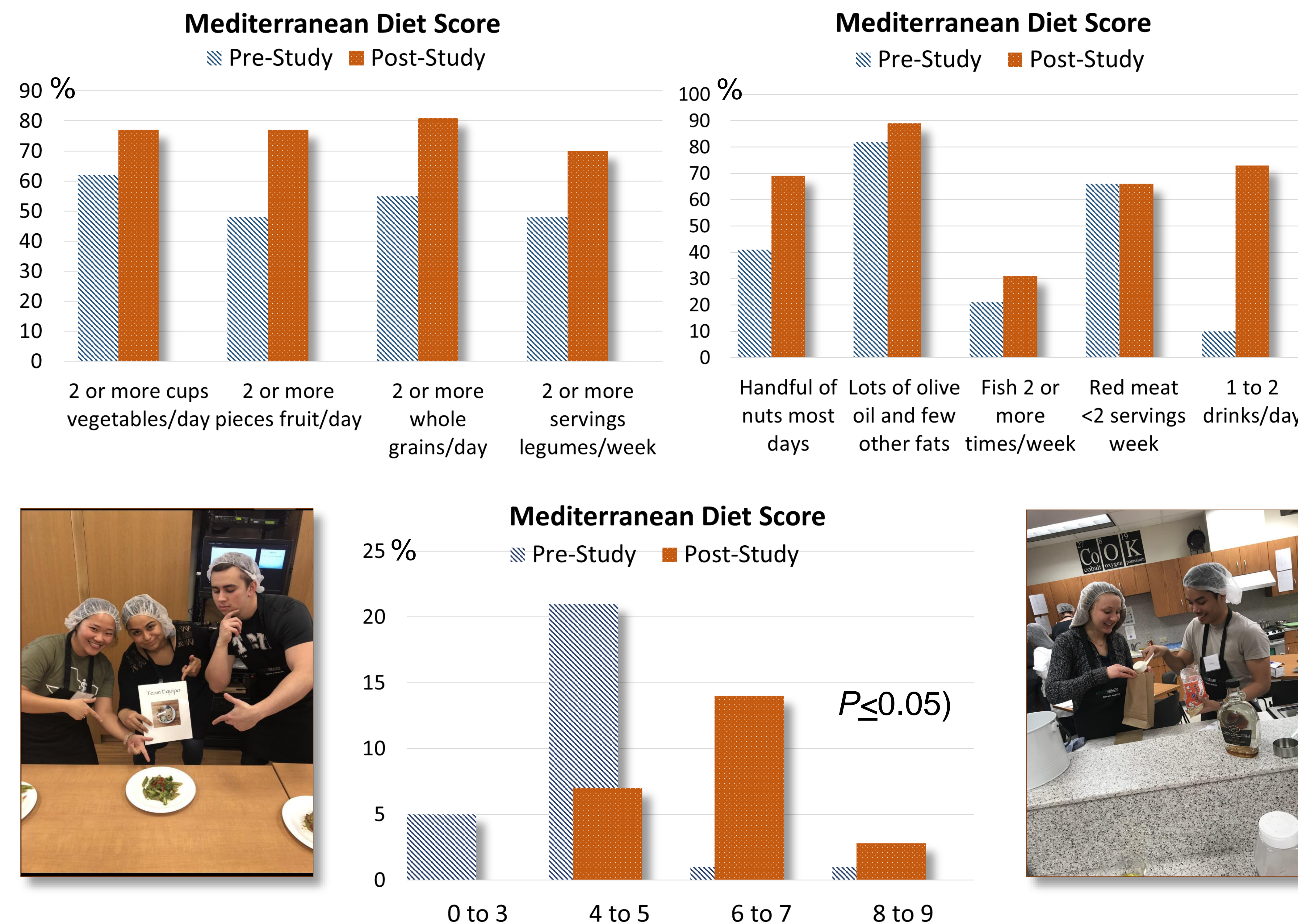
- Nutrition related chronic disease such as heart disease, hypertension, diabetes, cancer, and kidney disease can all be treated and/or prevented with proper nutrition.
- Nutrition plays a vital role in disease prevention and health promotion, however few health professions curriculums provide adequate nutrition education.
- The Goldring Center for Culinary Medicine at Tulane University partnered with Johnson and Wales University in 2012 to become the first dedicated center in the United States whose purpose was to integrate nutrition and dietary intervention into medical school curriculum
- The GCCM curriculum was piloted in Fort Worth, TX in 2014 and taught by faculty from UNTHSC, TCOM, Texas Christian University (TCU) and Moncrief Cancer Institute.
- The Culinary Medicine program trains medical students about nutrition. Students participate in learning and hands-on culinary activities. Participating programs take a 10-year longitudinal study (Cooking for Health Optimization with Patients (CHOP) to assess outcomes.

Objectives

1. Determine 2016-2018 outcomes of CHOP competencies among health professions students following Culinary Medicine training
2. Assess Mediterranean Diet Scores among health professions students following 2019 Culinary Medicine course

Design & Methods

- During 2016-2018, 77 medical and 13 physician assistant students (57/female; 33/male) from University of North Texas Health Science Center (UNTHSC) and Texas College of Osteopathic Medicine (TCOM) who participated in the CM course were assessed using the 4-part CHOP survey including demographics, attitudes, dietary habits, and degree of proficiency in competencies related to nutrition knowledge.
- During 2019, 26 medical and 4 physician assistant students completed the Mediterranean Diet Score pre and post Culinary Medicine course.
- Study procedures were approved by Tulane and TCU IRB, and participant informed consent was obtained. Data was analyzed to meet study objectives (SPSS, $P \leq 0.05$).



2019 Culinary Medicine Class



Discussion & Conclusions

- Overall health perception, attitudes, and nutrition-related knowledge and behaviors improved in medical and physician assistant students after participation in the Culinary Medicine course.
- Providing useful nutrition and culinary knowledge and skills is beneficial for future medical practitioners confidence and ability to provide nutrition-related education to patients.
- Creating a positive, mutually beneficial relationship between medical and dietetic students preparing for future interprofessional relationships in healthcare settings is essential and emphasizes the importance of an RD/RDN as a valuable member of a health professions team..
- Study results underline the value of RD/RDNs, providing innovative learning opportunities that integrate nutrition into training for other health professions.

Recommendations

- The addition of nutrition education and dietary applications should be included in all health professions curriculum.
- Programs such as Culinary Medicine are beneficial for optimizing the care process and practices of the health team.

Summary of Results

Students who participated in the CM course showed greater proficiency in the following nutrition competencies ($p \leq 0.05$)

- Health effects of the Mediterranean, dash, and low-fat diets
- Weight loss strategies, portion control, food label facts and serving sizes
- Dietary patterns for type 2 diabetes, hypertension, celiac disease, and food allergies
- Role of dietary cholesterol/saturated fats in blood lipids
- Recognizing warning signs/symptoms for eating disorders
- Role of sodium, fiber and omega-3 fatty acids in disease prevention and heart health

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RATE YOUR MED DIET SCORE
 with Oldways and the Mediterranean Foods Alliance

Scientific studies show that people who follow the Med Diet enjoy better health than those who don't. Find out your Med Diet Score today, by giving yourself one point for each yes below, and zero for each no.

eat....		If Yes, score 1	If No, score 0
Vegetables	Two or more cups of vegetables a day		
Fruit	Two or more pieces of fruit a day		
Whole grains	2 or more whole grains a day		
Wine	½ to 1 drink a day for women, 1 to 2 for men (but no more)		
Fish	Fish 2 or more times a week		
Legumes / beans	2 or more servings a week		
Nuts / Seeds	A handful of nuts most days		
Fat	Lots of olive oil and few other fats		
Red or Processed Meat	2 servings or fewer a week		
Your Total Med Diet Score			

If your score is...
 8-9 Long life! Your eating habits follow the Med Diet very closely.
 6-7 You're doing well. What would help you to add another point or two?
 4-5 A good start, but you can do better, if you value your health.
 0-3 Time to turn your life around.

If your score was lower than you'd like, pick one category every month and start to change your eating habits for the better. The Mediterranean Diet is delicious and satisfying — and you deserve the best. Visit www.Oldwayspt.org for recipes and resources to help you on your way.

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