

Integrating Hands-on Culinary Education in Medical School Curricula

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BACKGROUND

Poor nutrition is a leading risk factor for obesity worldwide and increases the risk of several chronic diseases including heart disease, hypertension, type 2 diabetes mellitus, and hypercholesterolemia. For the last several decades, the US population has not been eating a healthy diet and obesity rates are on the rise.^{1,2}



2 in 3 adults are overweight or obese in the United States³

Inadequate nutrition education in most medical schools' curricula is a barrier to promoting healthy dietary habits among medical students.⁴

As future physicians, medical students who ignore adopting a healthy lifestyle are less confident in counseling their patients on healthy eating habits and utilizing nutrition science in their future practice.⁵

Dietitian visits may not be an option for patients, especially in underserved communities. The physician encounter may be the only chance to promote a healthy lifestyle. However, many physicians lack the training to counsel patients about nutrition.^{6,7}

The Central Valley of California, one of the nation's leading agricultural regions, is also one of the poorest and most obese.⁸

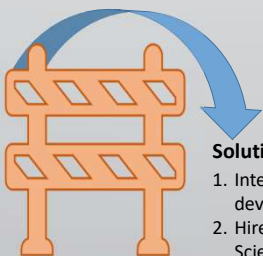
Fresno County Statistics⁹

41.4%	Adult Obesity Rate
33.6%	High Blood Pressure Prevalence
1490:1	Ratio of population to Primary Care Physicians

BARRIERS & SOLUTIONS

Barriers

1. Dense medical school curricula
2. Absence of subject matter experts
3. Limited application of nutrition science
4. Inadequate collaboration with nutrition specialists
5. Resource allocation (e.g. funding, facilities)



Solutions

1. Integrate nutrition into curriculum development as early as possible
2. Hire expert faculty (e.g. Nutritional Sciences PhD)
3. Build a teaching kitchen for application of knowledge
4. Actively involve nutrition faculty in curriculum planning; collaborate with subject matter experts at other institutions
5. Budget for necessary resources

California Health Sciences University College of Osteopathic Medicine (CHSU-COM)

The first four-year medical school in California's Central Valley

The mission is to graduate exceptional Doctors of Osteopathic Medicine by:

Inspiring a diverse student body to commit to careers that serve our region, with a focus on recruiting students from the Central Valley

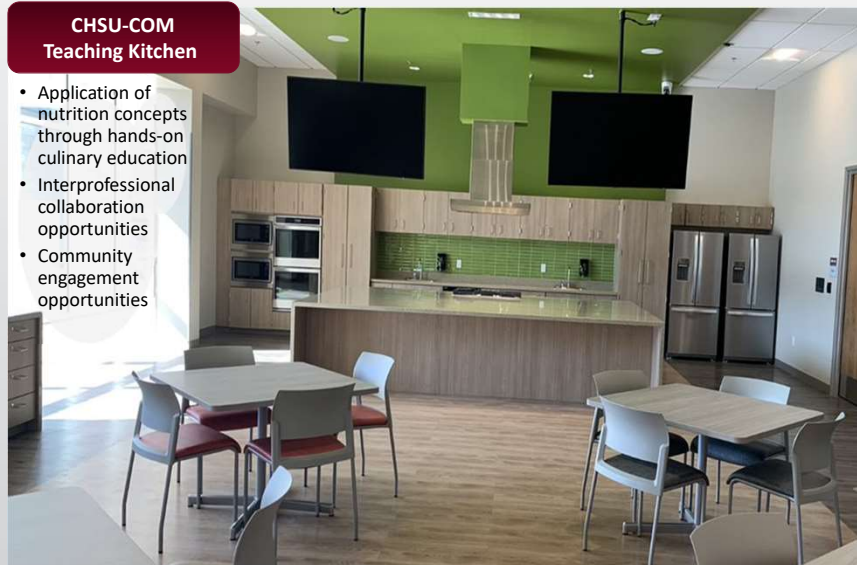
Developing compassionate, highly trained, intellectually curious, adaptive leaders capable of meeting the healthcare needs of the future through a performance-based education

Empowering people to teach, serve, research, innovate, and practice collaboratively in areas of skill and expertise in disciplines related to osteopathic medicine

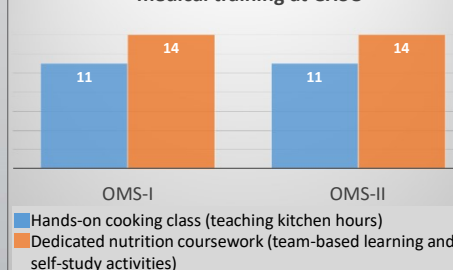
CHSU-COM recognized the need to educate medical students on nutrition science through hands-on healthy cooking classes to enrich its vision of having graduates who are committed to serving and improving the healthcare outcomes of the underserved population in the Central Valley of California

CHSU-COM Teaching Kitchen

- Application of nutrition concepts through hands-on culinary education
- Interprofessional collaboration opportunities
- Community engagement opportunities



Nutrition coursework hours (estimated) in preclinical years of osteopathic medical training at CHSU



CONCLUSION

Ready

Having a healthy, well-balanced diet is a modifiable behavior that can decrease risk and improve management of chronic conditions. It can be a path to a better quality of life.

Set

Medical school is a favorable environment to incorporate culinary nutrition education prior to practice.

Cook

Having a teaching kitchen in a medical school provides students with the unique opportunity to apply the nutritional knowledge taught in class to a hands-on learning experience and increases their basic culinary skills.

These opportunities will allow future physicians to cook visually appealing, healthy foods for themselves and to confidently advocate for healthy eating at the patient and community levels as an approach to disease prevention.

Nutrition
needs to be a focus of
healthcare education
and delivery.

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