

Center for Culinary Medicine

A proposed Inter-professional Practice and Education Collaboration Project

Background

Nutrition-related chronic diseases continue to be a major health problem among Americans. The prevalence of obesity was 36.5% among US adults and 20.5% among adolescents during 2011-2014 (1). Obesity was even more prevalent among non-Hispanic blacks (48.1%) and Hispanic (42.5%) adults. Trends in obesity prevalence show increases in both adults and youth from 1999-2000 through 2013-2014. Of the 10 leading causes of death, half of them are associated with obesity (#1 heart disease, #2 cancer, #5 stroke, #6 diabetes, #8 kidney disease)(2). 29.1 million American adults have diabetes (9.3%) and 37% have prediabetes (3). The prevalence of hypertension was 29% among US adults during 2011-2014 and almost 65% in adults over the age of 65 (4).

American adults regard primary care providers as an important source of accurate nutrition information. The 1985 Report of the National Research Council's Committee on Nutrition Education recommended that 25-30 hours be the required in the medical school curriculum (5). Although the scope of medically relevant nutrition knowledge has grown tremendously over that period of time, the average hours of required nutrition education has fallen from 20.4 hours in 2000 to 19.0 hours in 2012 (6). The prevalence of schools with a required nutrition course has fallen from 35% in 2000 to only 18% in 2012.

Partially as a consequence of this limited formal exposure to nutrition information, the time spent by primary care providers in discussing important nutrition topics is often compromised. For example, only half of primary care physicians regularly track body mass index or provide nutrition education (7). Currently, the PNWU curriculum provides 35.7 hours of content in biochemistry/metabolism/nutrition. However, most of that is actually biochemistry/metabolism. Only 16.4 hours is nutrition-proper (e.g., eating for chronic disease and disease prevention, assessment of nutrition status, how to help patients make healthier choices, etc). Approximately 70% of recently graduated medical students reported that they had been inadequately trained in nutrition counseling (8). Nearly 20% of medical school faculty and residents reported inadequate competency in every item on a questionnaire regarding

obesity care and 48% of respondents reporting an inability to adequately counsel patients about common obesity treatment options (9).

A number of medical schools, including Texas COM and Western, have made efforts to improve the ability of primary care providers to deliver effective nutrition education. One such effort has been developed at Tulane University School of Medicine. Their Goldring Center for Culinary Medicine is an elective part of a nutrition curriculum that includes simulation-based medical education with a deliberate practice style hands-on cooking and nutrition education course. Monlezun et al reported the superiority of this program regarding medical student's diet, attitudes, and competencies counseling patients on nutrition compared to a traditional clinical education (10). In a randomized controlled trial involving 27 patients with type 2 diabetes, significantly greater reductions in HbA1c, diastolic blood pressure, and total cholesterol was observed in patients receiving a hands-on Mediterranean diet-based cooking and nutrition curriculum at the Goldring Center for Culinary Medicine (11).

Proposal

The Department of Nutrition, Exercise, and Health Sciences (NEHS) at Central Washington University and Pacific Northwest University of Health Sciences will collaborate in the development of a Center For Culinary Medicine. The Food Science and Nutrition Program within NEHS currently has six full time tenure/tenure-track faculty, 1.5 FTE of adjunct faculty, and one full time food laboratory technician. The program has an accredited Didactic Program in Dietetics and an accredited Dietetic Internship. There are approximately 100 undergraduate majors, 20 undergraduate minors and 9 dietetic interns. The program currently is housed in Purser Hall (lecture rooms, faculty offices) and Michaelsen Hall (lecture rooms and food and nutrition laboratories). It is anticipated that the NEHS department will be moving into a newly constructed building in the fall of 2019.

The Center for Culinary Medicine could include the following activities:

1. An elective course that provides a didactic component taught by faculty at CWU or PNWU, a cooking demonstration conducted by a professional chef, and a hands-on cooking experience involving medical students, other students training to be primary care providers, and dietetic students. Topics could include weight control, prevention/treatment of chronic diseases (hypertension, dyslipidemia, diabetes), and specialized diets (Mediterranean, vegetarian, vegan).
2. Continuing education course for primary care providers taught by faculty at CWU or PNWU, a cooking demonstration conducted by a professional chef, and a hands-on cooking experience.

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3. Continuing education course for Registered Dietitian Nutritionists or related nutrition professionals for the development of cooking demonstration classes targeting patients with nutritional concerns.

Other activities associated with the proposed Center for Culinary Medicine could include:

1. Organization of an Advisory Committee made up of faculty/administrators at CWU & PNWU, faculty at other primary care training programs (e.g., Heritage University, WSU), health care administrators, regional physicians and other primary care providers, regional chefs, and other stakeholders.
2. Incorporate the Center for Culinary Medicine as a component of the Yakima Valley Inter-professional Practice & Education Collaborative.
3. Develop the continuing education course so that it may be used to meet the required 12 hours of hands-on participation at an approved Culinary Medicine Teaching Kitchen as part of the eligibility to take the Culinary Medicine Certification exam.
4. Develop coursework so that participants can gain relevant certification (e.g. Specialist Certification of Obesity Professional Education [SCOPE, worldobesity.org])

References

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