CULINARY MEDICINE ENRICHMENT ELECTIVE DESCRIPTION

COURSE DESCRIPTION

Course Director: Jaclyn Albin, MD (jaclyn.albin@utsouthwestern.edu) Course Instructors: Jaclyn Albin, MD, Milette Siler, RD, LD Department: Pediatrics and Internal Medicine Student Liaisons: Kayla Robinson (Class of 2021), Justin Yan and Madeline Sparks (Class of 2022), Brooklynne Palmer and Joseph Campain (Class of 2023)

Requirements:

Minimum participants for course to be conducted: 12 students Maximum number of students per course: 24 students for virtual course conducted online via Zoom

Rationale:

Disease burden in this country is increasingly shifting toward chronic health problems that are significantly impacted by lifestyle factors, particularly nutrition and physical activity.¹ Despite this, physician education continues to lack adequate exposure to curricular content regarding nutrition and counseling around behavioral change, and only 25-30% of surveyed medical schools offer the 25 hours of nutritional training recommended by the National Academy of Sciences.² In addition to developing effective clinical skills around promotion of lifestyle change, future physicians will increasingly be required to demonstrate competency in regards to their ability to work in multi-disciplinary teams. Educational innovation can successfully provide more comprehensive, nutrition-centered education to medical students that investigates the importance of diet in modulating disease, fosters an appreciation for barriers to lifestyle change, and develops the skill set needed for food preparation. Utilization of a well-established Culinary Medicine curriculum developed at Tulane University and now widely implemented³ will enhance the nutrition education of students at UT Southwestern while building a foundation of multi-disciplinary collaboration that revolutionizes the approach to caring for patient with chronic disease.⁴

Objectives:

¹ Ng M, Marie N, Tom F, et al. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980-2013: a systemic analysis for the Global Burden of Disease Study 2013. *The Lancet.* 2014; 384: 766-781.

² Adams KM, Kohlmeier M, Zeisel SH. Nutrition Education in U.S. medical schools: latest update of a national survey. *Acad Med.* 2010 Sept;85(9):1537-42.

³ Monlezun DJ, Leong B, Joo E, et al. Novel Longitudinal and Propensity Score Matched Analysis of Hands-On Cooking and Nutrition Education versus Traditional Clinical Education among 627 Medical Students. *Advances in Preventative Medicine.* 2015.

⁴ Monlezun DJ, Kasprowicz E, Tosh KW, et al. Medical school-based teaching kitchen improves HbA1c, blood pressure, and cholesterol for patient with type 2 diabetes: Results from a novel randomized controlled trial. *Diabetes Research and Clinical Practice*. 2015; 109: 420-426.

- 1. Learn about the use of diet for prevention and modulation of disease
- 2. Understand relevance of macronutrients in both processed and prepared foods and implications in disease
- 3. Discuss myths and misconceptions about various diets and supplements
- 4. Develop practical skills necessary for meal planning and food preparation, including culinary skills.
- 5. Investigate causes of food insecurity and barriers to adequate, healthful nutrition

Format:

- Funding
 - UTSW licenses an extensive curriculum from Health Meets Food, a national leader in Culinary Medicine; this annual fee is currently covered by funds at the Moncrief Cancer Institute at UTSW
 - Due to alignment of mission, the Moncrief Cancer Institute also provides dietitian support
 - Faculty time and engagement remains voluntary and additional to usual responsibilities; there are not available resources at present to support faculty time which limits the size of the elective
- Prior to virtual modules, students will be asked to review brief, pre-session readings or videos relevant to the subject of that module
- Eight hands-on, interactive virtual modules will be offered approximately once a month from August to April (with breaks for the winter holidays and summer); student test schedules will be utilized to determine module dates
 - The curriculum to be used has already been created by Health Meets Food with curricular enhancements included by Course Directors.
 - Modules:
 - 1 Introduction to Culinary Medicine
 - 2 Mindfulness and Motivational Interviewing
 - 3 Fats
 - 4 Food Allergy & Intolerance
 - 5 Protein, Amino Acids, Vegetarian Diet, & Eating Disorders
 - 6 Sodium, Potassium, & Hypertension
 - 7 Carbohydrates
 - 8 The Pediatric Diet
- Modules will be held at approximately 4:30-7 pm on Wednesdays online via Zoom.
- Senior medical students with nutrition experience and prior graduates of the Culinary Medicine Elective who remain particularly interested in enhanced nutrition education will be invited to participate as "Culinary Medicine Peer Mentors," similarly to the Colleges system. They will help facilitate the modules by guiding small group discussions of patient cases in breakout Zoom conference rooms and providing help with practical culinary skills.

Student Participation Requirements: Due to the nature of the online model, students will need to have access to the following to complete the course successfully:

-Reliable internet connection/broadband access. Class will be conducted via Zoom. Access to a portable internet connection (via laptop and/or smartphone) is required.

-Access to a fundamental kitchen (oven, stove, a chef's knife, a skillet, a cutting board, a cooking pot,etc...) with running water and electricity during class times

-Willingness/ability to procure basic food supplies before class. Culinary Medicine is all about making simple ingredients that can be purchased at any store taste delicious, all for at or around \$1.25 a serving. The average cost of supplies for a cooking class (which will leave you with 6-8 servings) is ~\$8-\$18 for each module (*you will be able to choose which recipe(s) you make and can control expenses this way*). While our program might be able to provide some basic "starter kit" supplies such as spices and possibly offset some costs for some students who truly need it, our program is currently unfunded. *If you have questions or concerns about this aspect of the course, please feel free to reach out to the Directors*.

Student Evaluation: Grades will be pass/fail. Attendance as per below and completion of online modules are required to receive credit for this course.

Course Evaluation:

- Grading will be pass/fail as described above
- Students must attend 6 out of 8 cooking events (with the very first and very last classes required to be 2 of the sessions)
- Students must complete pre-class assignments, including a pre- and postcourse evaluation and survey
- Students must complete course evaluation form at the last class
- Engagement with the course practice quizzes, readings, articles, and other curricular resources is strongly encouraged but not required.

Course Schedule: offered August to May (two-semester duration)

- In August, incoming first-year medical students will be invited to apply to participate in this elective via an online survey system, and the time enrollment opens will be clearly advertised to students. Students will be selected to participate based on brief responses in the application.
- The culinary medicine course will be offered approximately once a month with a break for the winter holidays and completion before summer break (August April)
- Precise scheduling is contingent on the first-year testing schedule each year