

Culinary medicine: experience report of an elective course for medical students

Authors: Juliana Aiko Watanabe (1), Marina de Andrade Maia Galvão Bueno (1), Adriana Katekawa (1), Marcela Rassi da Cruz (2), Tassiane Alvarenga (1), Ghina Katharine Eugênia Dourado Meira Machado (1), Samira Yarak (3).

1. Médicos na Cozinha, Brazil. 2. Universidade de São Paulo, Brazil. 3 Universidade Federal de São Paulo, Brazil.

Summarized Curriculum Vitae: Juliana Aiko Watanabe

Graduated in Nutrition – Universidade de São Paulo, Brazil.

Postgraduate in Hospital Nutrition in Cardiology – Instituto do Coração, Brazil.

Postgraduate in Gastronomy – Universidade Anhembi Morumbi, Brazil.

Master's degree in Nutrition and Health - International University of Valencia, Spain.

Certified in Chef (Culinary Health Education Fundamentals) Coaching - Harvard Medical School, United States of America.

Certified in Lifestyle Medicine - Spanish Institute of Lifestyle Medicine, Spain.

Nutritionist and chef at the Project Médicos na Cozinha, Brazil.

Introduction: The global increase in unhealthy eating is closely linked to a decline in home food preparation. Scientific evidence shows that improved cooking skills can significantly reduce cardiovascular risk. However, medical curricula often allocate limited time to nutrition education, despite poor diet being a major contributor to high mortality rates. Culinary Medicine (CM) is an emerging field that offers a new educational approach, combining scientific evidence with culinary knowledge, aimed at teaching healthcare professionals the impact of food on health and encouraging improved eating behaviors among both professionals and their patients.

Objectives: This elective course was developed at the Escola Paulista de Medicina, Universidade Federal de São Paulo (Unifesp), with the aim of teaching medical students the fundamental principles of CM.

Methods: A 5-week elective CM course was created at Unifesp, culminating in a descriptive, qualitative study with 18 students who participated in weekly, 100% online sessions via Zoom. Data were collected through student portfolios, where participants described their experiences and were analyzed using thematic analysis. Additionally, a questionnaire assessing the Culinary Skills Index was administered, validated based on self-efficacy in culinary skills, aligned with the Dietary Guidelines for the Brazilian Population.

Results: Many students enrolled in the course out of curiosity to understand the connection between cooking and medicine, a field traditionally studied by nutrition students. The course content, including human behavior science, barriers to lifestyle change, and reflecting on personal habits, motivated students to improve their health. The lesson on food label reading stood out as a key area of learning. Many students also reported feeling more motivated to cook.

Discussion: One of the challenges is raising awareness among physicians about the importance of CM and addressing the subjective nature of behavior change. Nevertheless, the study results indicate that students who participated in the course consider integrating CM into medical curricula both crucial and urgent.

Conclusion: A global trend toward transforming healthcare curricula is emerging. This shift can begin in medical schools through elective courses in CM, such as the one implemented at Unifesp, which represents a step toward incorporating nutrition and cooking education into medical training.

Keywords: Healthy Eating; Lifestyle; Cooking; Medical Students; Educational Activities.