

## **Student-led teaching and learning initiatives in nutrition education for future medical and healthcare professionals: a scoping review**

Sean Yong<sup>1</sup>, Lauren Ball<sup>2,3</sup>, Jørgen Johnsen<sup>3,4</sup>, Breanna Lepre<sup>3,5</sup>

1. Medical Student, The University of Queensland, Brisbane, Australia
2. Professor in Community Health and Wellbeing, School of Human Movement and Nutrition Sciences, The University of Queensland, St Lucia, Que, Australia
3. Academic Officer, NNEdPro Global Institute for Food, Nutrition and Health, Cambridge, UK
4. PhD Candidate, Nutrition Innovation Centre for Food & Health (NICHE), Ulster University, Coleraine, UK
5. Lecturer in Nutrition and Dietetics, School of Human Movement and Nutrition Sciences, The University of Queensland, Brisbane, Australia

### **BACKGROUND**

Unhealthy diets are a leading cause of death, yet nutrition education for medical and healthcare professionals remains inadequate internationally. Student-led teaching and learning initiatives have shown success in filling in curricular gaps in other areas of health. Beyond ‘top-down’ curriculum and accreditation initiatives, this scoping review aimed to synthesise evidence on student-led nutrition education initiatives for medical and healthcare professionals.

### **METHODS**

Following JBI methodology for scoping reviews, MEDLINE, Embase, CINAHL, ERIC and Web of Science were searched for studies related to student-led nutrition education initiatives for medical and health care students globally. A grey literature search ensured a comprehensive overview of available literature. Data were synthesised narratively.

### **RESULTS**

20 articles published between 2013-2024 were included, and most were from the United States (n = 15). Student-led nutrition education initiatives included culinary education (n = 9, 45%), lecture series (n = 6, 30%), placement and outreach opportunities (n = 8, 40%) and student interest groups (n = 6, 30%). Eleven studies (55%) included more than one type of initiative. Initiatives mostly targeted medical students (n = 14, 70%), and included students from undergraduate or preclinical years through to practice. One initiative was interdisciplinary (5%). Initiatives were delivered by students, physicians, dietitians, and other health care professionals, mostly in-person (n = 9, 45%) within university (n = 14, 70%) or community (n = 5, 25%) settings. Twelve studies evaluated the initiative using questionnaires and surveys (n = 9, 45%), informal feedback (n = 2, 10%) or focus groups (n = 1, 5%). Eight studies (40%) reported improved confidence and competence in nutrition amongst the students involved. Enablers included resourcing and well-developed partnerships with faculty, clinics, and community organisations.

### **CONCLUSIONS**

Student-led nutrition education initiatives are likely well-received, may improve

nutrition competence, and are a promising approach to address the gap in nutrition education for medical and healthcare students.