

**Abstract Title**

A needs assessment and environmental scan to inform Culinary Medicine Lab (CML) curriculum to increase nutrition competence of medical graduates at the Northern Ontario School of Medicine (NOSM)

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**Abstract**

**Introduction:** Nutrition curriculum is inadequate in most medical schools including NOSM. Culinary medicine combines food literacy with clinical nutrition for medical trainees. Six CMLs aligning with NOSM's Year 1 curriculum were piloted on Sudbury and Thunder Bay campuses (September 2018-April 2019). Future integration requires tailored content.

**Objectives:** Determine the nutrition-related knowledge, attitudes, and education needs of NOSM medical students; and, identify relevant resources to inform an evidence-based CML curriculum model.

**Methods:** Phase 1 students (n=128) were invited to complete a voluntary 15-item online survey using Qualtrics<sup>®</sup> assessing current nutrition-related attitudes, knowledge, and perceptions. Results were analyzed using Microsoft Excel<sup>®</sup> and pivot tables; open-ended responses were thematically analyzed. The CMLs were optionally attended by up to 24 students; individual evaluations assessed learning and confidence related to nutrition, food skills, and nutrition competence as future physicians. An environmental scan was conducted using PEN<sup>®</sup>, PubMed, and targeted websites. Key search terms related to nutrition, undergraduate medical education, and registered dietitians' (RDs') roles in numerous chronic conditions. Results were appraised using a tool adapted from the National Collaborating Centre for Methods and Tools.

**Results:** The survey yielded 28 responses; half were first-year students. Many (61%) felt unable to provide brief nutrition intervention counselling. Most (79%) were unsure how to refer to RDs. Post-CML evaluations showed they were effective; learning objectives were met for each session and increased students' nutrition knowledge and competence. The environmental scan generated over 70 sources, the majority adaptable for components of a Canadian CML model (student learning tasks, case studies, lectures, integrated clinical skills, references, etc.).

**Conclusions:** The needs assessment, environmental scan, and appraisal along with 2018-19 CML student evaluations supported the development of an evidenced-based CML curriculum at NOSM.

**Significance to the Field of Dietetics:** This innovative model can enhance nutrition curriculum and roles of RDs in medical education.

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