

## **Nutrition Education for Medical Students: Does Mobile Technology Make a Difference?**

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**Needs** Increasing rates of obesity and chronic diseases in the United States lead more patients to request dietary advice from their physicians. Lack of nutrition education for physicians-in-training and time constraints for practicing physicians make nutrition-related patient interventions difficult.

**Objectives** (1) initiate a nutrition elective with Baylor College of Medicine (BCM) medical students, (2) measure student knowledge via pre/post-tests, and (3) assess the impact of a mobile application on student confidence.

**Description** This was a prospective, interventional pilot study of first year medical students. Participants enrolled in an 8-week nutrition course. Pre/post-tests of nutrition knowledge were administered at the beginning and end of the course, respectively. Participants downloaded a nutrition mobile application (*Lose It*®) to practice providing weight loss interventions to an acquaintance. An end of course survey measured student confidence levels to provide this nutritional intervention.

A total of 78 students (n=37 male, n=41 female) successfully completed the course. Students improved their nutrition knowledge test scores from 50% ( $\pm 11\%$ ) correct at pretest to 86.5% ( $\pm 9.9\%$ ) correct at post-test ( $t = -24.59$ ,  $p < .0001$ ). Most students reported that the mobile application was effective to increase their confidence of conducting caloric assessments (68.8%) while only a third of students reported that the mobile application provided helpful nutrition information. The majority (97.4%) of students would recommend this nutrition elective to a colleague.

**Lessons Learned** A nutrition course, which included the use of a mobile application, increased both student knowledge and self-reported confidence to conduct caloric assessments. Widespread interest in this course suggests that nutrition education in medical school deserves continued pursuit.

Further investigation is needed using medical students further in training and a broader spectrum of mobile applications. Based on this pilot data, the use of a mobile application may be a promising tool for future physicians.