**Nutrition tracking apps: (Course 2)**

The goal of this exercise is to evaluate the efficacy of a nutrition-tracking app based on the information in the chapter.

Caution: apps for tracking consumption are known to lead to chronic underreporting, as discussed in Course 2 of Chapter 7. Instructors should introduce this activity carefully so that students are aware of potential underreporting of intake. Thus, we do NOT recommend extensive nutrition tracking beyond a single day for students.

First, identify apps and compare features.

* Students identify 2-3 websites or mobile apps for tracking nutrition.
* Compare the features of each website / app. How large is the food database? How are portion sizes recorded? Does the app provide push notifications to prompt entry? Can you add recipes? Scan bar codes?
* Encourage students to enter their ONE most recent meal to assess usability of these apps.

Second, apply concepts from Chapter 7 to highlight the potential problems with these apps.

* What are the limitations of self-report research for sensitive topics such as eating habits?
* Why might a person be prone to over-reporting or under-reporting intake?
* How are portion sizes estimated?
* Describe the reconstructive nature of recording food consumption hours or days after consumed.

Third, brainstorm and describe two ways to improve the validity and reliability of nutrition self-report.

* Encourage students to cite evidence for their proposed improvements. Resources highlighted below.

**Related references:**

Ahn et al. (2019), ‘Development of a smartphone application for dietary self-monitoring’, *Frontiers in Nutrition,* 6: <https://doi.org/10.3389/fnut.2019.00149>

Chen, Cader & Allman-Farinelli. (2015), ‘The most popular smartphone apps for weight loss: A quality assessment’, *JMIR*, 3(4).

Khazan et al. (2020), ‘Rethinking the use of mobile apps for dietary assessment in medical research’, *JMIR,* 22(6).