**The Sugar Challenge: (Course 3, interventions)**

The purpose of this ancillary is to provide further instruction regarding the challenges with curbing excess sugar consumption. The information in the text, as well as the “Food Addiction debate” ancillary in this chapter, and the “This is your brain on sugar” exercise from Chapter 5. In this activity, we explore the potential harm of too much sugar, assess personal sugar consumption, and brainstorm potential changes. Provide the instructions detailed in each step below to students.

**Step 1: What are the recommendations for added sugar?**

Consult the chapter and this supplemental resource from the American Heart Association.

<https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/sugar/added-sugars>

**Step 2: What are the sources of sugar in your diet?**

Assess your current sugar intake. We recommend an assessment over 4 or more days that spans both working and weekend days. Be sure to take detailed notes as they will be helpful in calculating your total sugar intake, and be sure to include beverages

Some individuals find the experience of diet tracking to be unpleasant, even potentially exacerbating symptoms of restrictive eating. Please use caution when assigning this activity. It might be useful for students to only track items containing sugar and added sugar, and to omit nonrelevant food items.

Assessing sugar intake can be accomplished in many ways. Here are two suggestions

* Option A: simply track your food and sugar intake on a piece of paper. For each meal, write down what you eat. Also include the total carbohydrates and added sugars in grams. This information is either available on the nutritional label or by a simple internet search.
* Option B: use a website or app meant for diet tracking. These tools can make the process easier (especially if you already use one) but vary in their goals. If you are using one of these tools for the first time, the app or website may prompt you to indicate whether you are trying to lose weight – for the purpose of this assignment, please indicate that your goal is not to lose weight.

**Step 3: How much sugar are you consuming at each meal?**

At the end of your assessment period, add up your total carbohydrate and sugar intake for each meal. You may choose to put an asterisk next to added sugars.

It might be useful to chart your sugar as follows. Note that only relevant food items are listed in this example, this is not inclusive of all foods consumed.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Meal** | **Food item** | **Portion size** | **Sugar (g)**  |
| **12 Sept** | Breakfast | YogurtStrawberriesFlavored creamer | 1 container1/2 cup2 tbsp | 9 g \*3.5 g10 g \* |
| Lunch | Bread | 2 slices | 3 g |
| Snack | Popcorn (plain) | 1 cup | 0 g |
| Dinner | Flour tortillasSalsa | 22 tbsp | 2 g1 g |
| Dessert | Ice cream | 1/2 cup | 25 g \* |
| **Total** |  |  | **53.5 g** |

After completing this step, it is useful to examine and reflect on the sources of sugar and added sugar in your diet. Are you surprised by any food items? Be sure you have included beverages!

**Step 4: Challenge yourself by adding one strategy**

One alternative to dieting is to approach health improvement by making small changes rather than large shifts in eating patterns. Below are several strategies to decrease sugar (or added sugar) intake. Identify one strategy that seems like a reasonable and attainable goal and challenge yourself to implement that strategy for one week. If it goes well, you may want to up the challenge by adding an additional strategy after one or more weeks of success.

Strategies:

* Remove added sugar from one meal or snack, for example, trading out sweetened yogurt for an unsweetened variety
* Swap one dessert or candy for fruit
* Eliminate sugar from beverages, by swapping a sugar-sweetened beverage for water or omitting sweeteners from coffee or tea
* Check your sauces, condiments and salad dressings, which may be a hidden source of added sugar. These can be replaced by homemade options with less or no sugar, or alternates like harissa or pesto.

**Step 5: Discussion**

This may be a good time to encourage class discussion through a think-pair-share activity. For example, students can share examples of food items they were surprised to find high in sugar, or brainstorm additional strategies or curbing sugar intake.

**Inspiration:**

7-day sugar challenge <https://nyti.ms/2ZxNPiq>

Benefits <https://www.nytimes.com/2019/01/22/well/eat/to-fight-fatty-liver-avoid-sugary-foods-and-drinks.html>

**Related references:**

Bellisle, F., A. Drewnowski, G.H. Anderson, M. Westerterp-Plantenga, & C.K. Martin (2002), ‘Sweetness, satiation, and satiety’, *The Journal of Nutrition,* 142: 1149S-1154S.

Hu, F.B. & V.S. Malik (2010), ‘Sugar-sweetened beverages and risk of obesity and type 2 diabetes’, *Physiology & Behavior,* 100(1): 47-54.

Johnson, R.K. (2009), ‘Dietary sugars intake and cardiovascular health: A statement from the American Heart Association’, *Circulation,* 120: 1011-1020.

Popkin, B.M. & S.J. Nielsen (2003), ‘The sweetening of the world’s diet’, *Obesity Research,* 11(11): 1325-1332.

Podcast: There’s a war on sugar, is it justified? <https://freakonomics.com/podcast/theres-war-sugar-justified/>