



NUTRITION CONNECTION

MENU MAKEOVERS USING HEALTHY PEOPLE 2030

BY KRISTIN KLINEFELTER, MS, RDN, LDN

IS IMPROVING THE NUTRITIONAL HEALTH OF YOUR CLIENTS one of your daily objectives? Like all objectives, our nutritional goals should be measurable and purpose-driven. Using the objectives set forth by Healthy People 2030 may help guide your menu planning and nutritional health programming in your department.

Healthy People 2030 is an initiative by the U.S. Department of Health and Human Services (HHS) that includes 359 measurable, evidence-based health objectives for Americans (Healthy People 2030, 2023). Understanding the history and purpose of the Healthy People initiative can set the stage for the policy and programs you manage to keep your clients healthy.

Since 1980, the Healthy People objectives have been setting the stage for health initiatives in America. At the beginning of every decade, new objectives are released. Healthy People 2030 is the 5th edition. The Social Determinants of Health (SDOH) set the stage for the direction each decade's objectives are focused on. SDOH are environmental conditions that affect health and quality of life. There are five SDOH domains including economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context (U.S. Department of Health and Human Services, 2021). One practical example of using SDOH includes disparities in income and access to healthy food. If a person lives in a "food desert" and does not have money to own a car or buy healthy food, their nutritional health will suffer.

Using SDOH, the Healthy People committee—composed of top health subject matter experts—creates core objectives. The core objectives are valid and reliable, utilizing current baseline data. They provide data from no later than 2015 to support the objectives. Each objective is supported by public health initiatives. Once objectives are set, the Federal Interagency Workgroup (FIW) assesses all objectives to see if the criteria are met (Office of Disease Prevention and Health Promotion, 2019).

Because there are 359 Healthy People 2030 objectives and we have limited space to explore them, we will focus on five of the 27 "Nutrition and Healthy Eating" objectives and how we can aim our menu and nutrition and foodservice programming towards achieving them. Please note: the Healthy People 2030 intake goals related to nutrition objectives are set based on many factors including improvement goals from baseline data, typically gathered from the National Health and Nutrition Examination Survey (NHANES) and dozens of other data sources. In short, the intake goals for Healthy People 2030 are recommendations to do better or improve Americans' usual/baseline intake of the food group or nutrient as well as information from dozens of reputable scientific sources (Healthy People 2030, 2023). Intake goals may be slightly different than recommendations set forth from the Dietary Guidelines for Americans, MyPlate, or other recognized health agencies. Intake goals are listed under each category for comparison.



OBJECTIVE:

Increase Whole Grain Consumption by People Aged 2 Years and Over

People who consume more whole grains experience less digestive tract cancer (Zhang et al., 2020).

Intake Goal (Healthy People 2030, 2023): 0.62 oz equivalents per 1,000 calories

Intake Goal (U.S. Department of Agriculture, U.S. Department of Health and Human Services, 2020a): 3-5 oz whole grains daily

| Calorie Goal | Whole Grain Intake Goal* |
|--------------|--------------------------|
| 1,000 | 3 oz. |
| 1,500 | 4 oz. |
| 2,000 | 5 oz. |

* In ounces (Dietary Guidelines)

What counts as an ounce (U.S. Department of Agriculture, 2020c)?

- 1 slice of whole grain bread
- 1 cup of whole grain ready-to-eat cereal



START LOOKING FOR EASY SWAPS ON YOUR MENU

such as using whole grain rice instead of white or jasmine rice. Make it a rule to only serve whole-grain bread and cereal. Have a snack cycle that includes 1 oz of whole grain every day.

- 1/2 cup of cooked rice, cooked pasta, or cooked cereal
- 4-6 whole grain crackers
- 3 cups popcorn

Menu Application: Start by looking for easy swaps on your menu such as using whole grain rice instead of white or jasmine rice. Make it a rule to only serve whole-grain bread and cereal. Have a snack cycle that includes 1 oz of whole grain every day.

OBJECTIVE:

Increase Consumption of Dark Green Vegetables, Red and Orange Vegetables, and Beans and Peas by People Aged 2 Years and Over

These colorful vegetables provide key nutrients such as Vitamin A, Vitamin C, Vitamin K, folate, and fiber (U.S. Department of Agriculture, 2020b). Higher intake of dark green, red, and orange vegetables results in lower rates of cardiovascular disease, obesity, certain cancers, and diabetes (Wang, 2022).

Intake Goal (Healthy People 2030, 2023): 0.33 cups per 1,000 calories

Intake Goal (U.S. Department of Agriculture, 2020b): 1/4 plate per meal, 2-1/2 cups per day (1-1/2 -2 cups green leafy vegetables per week)

This means that Jo, an active second grader who needs 2,200 calories daily, should eat 3/4 cup of dark green, red, orange vegetables and beans daily. Jo can have chili for lunch with 1/4 cup beans and 1/2 cup broccoli for dinner.

| Calorie Goal | Dark Green, Red, Orange Veggie & Bean Intake Goal* |
|--------------|--|
| 1,000 | 1/3 cup |
| 1,500 | 1/2 cup |
| 2,000 | 2/3 cup |

* Healthy People 2030, 2023

What counts as 1/2 cup? (U.S. Department of Agriculture, U.S. Department of Health and Human Services, 2020a)

- 1/2 cup cooked acorn or butternut squash
- 6 baby carrots or 1 medium carrot
- 1/2 large red pepper
- 1/2 large sweet potato
- 1/2 large tomato
- 1/2 cup spinach or kale
- 1/2 cup broccoli
- 1/2 cup peas or beans

Menu Application: Start by assessing your current menu and counting how many daily servings you offer of these nutrition superpowers. When reviewing Head Start menus, I use red, green, and orange highlighters or Sharpies to mark up the menu for visual assessment of how many each week are served.

Top Sources and Average Intakes of Added Sugars: U.S. Population Ages 1 and Older

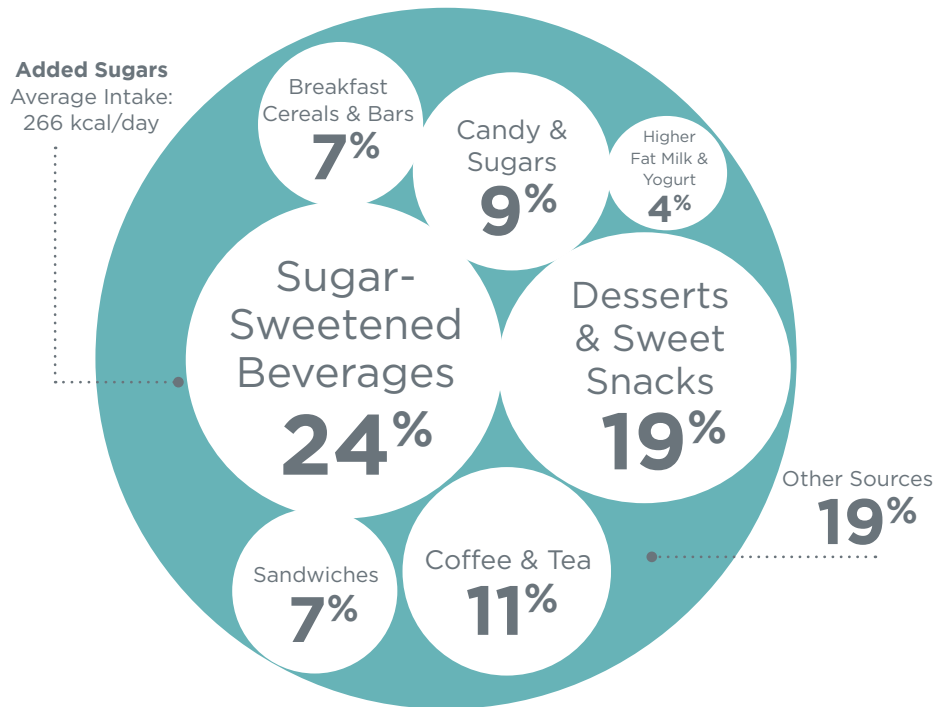


Figure 1. Top Sources and Average Intakes of Added Sugars: US Population Ages 1 and Older. Reprinted from Dietary Guidelines for Americans 2020-2025, 9th Edition, by U.S. Department of Agriculture and U.S. Department of Health and Human Services, 2020a, Retrieved from https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary_Guidelines_for_Americans-2020-2025.pdf. Reprinted with permission.

If your menu provides 2,000 calories daily, your goal is to implement 4.5 cups per week of these foods. Write them in the week's menu to achieve targets. Remember to include them as ingredients in recipes and not just side dishes. For example, add red peppers to the bean chili or spinach leaves on the sandwich bar. Look for ways to substitute these colorful veggies in your menu, such as swapping the sweet potato in for the mashed white potatoes. Frozen vegetables can be economical and nutritious.

OBJECTIVE:

Increase Fruit Consumption By People Aged 2 Years and Over

Intake Goal (Healthy People 2030, 2023): 0.56 cups of fruit per 1,000 calories

Intake Goal (U.S. Department of Agriculture, 2020a): 2 cups per day for 2,000 calories

For example, if Pat, who lives in apartment 102, has a calorie goal of 1,500 calories, their fruit intake goal is 3/4 cup fruit daily. Pat might have 1/2 banana at breakfast and 1/2 cup berries at lunch to achieve their goal.

Top Sources and Average Intakes of Saturated Fat: U.S. Population Ages 1 and Older

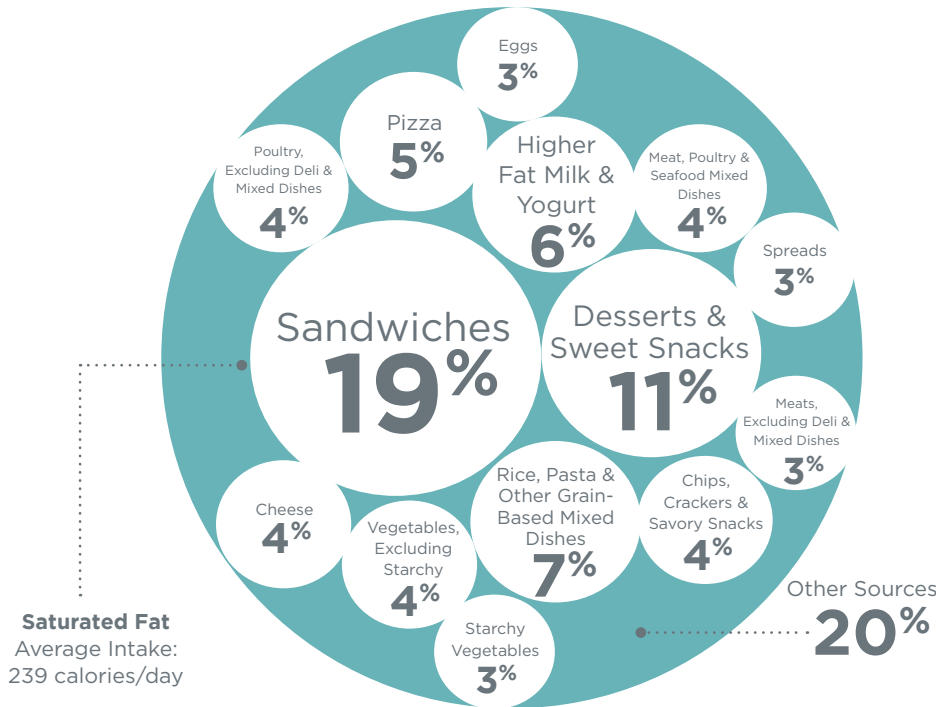


Figure 2. Top Sources and Average Intakes of Saturated Fat: US Population Ages 1 and Older. Reprinted from Dietary Guidelines for Americans 2020-2025, 9th Edition. U.S. Department of Agriculture and U.S. Department of Health and Human Services, 2020a, Retrieved from https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary_Guidelines_for_Americans-2020-2025.pdf. Reprinted with permission.

| Calorie Goal | Fruit Intake Goal* |
|--------------|--------------------|
| 1,000 | 1/2 cup |
| 1,500 | 3/4 cup |
| 2,000 | 1 cup |

* Healthy People 2030, 2023

What counts as a cup? (U.S. Department of Agriculture, 2020a)

- Apples: 1 cup of sliced apples or 1 medium apple
- Bananas: 1 cup of sliced bananas or 1 large banana
- Cantaloupe: 1 cup of cubed melon or 2 medium wedges (about 1/4 of a medium melon)
- Dried fruit: 1/4 cup

- Grapes: 1 cup of grapes or 32 seedless grapes
- Oranges: 1 cup of orange sections or 1 large orange
- Pineapple: 1 cup of pineapple chunks or 1 slice (about 3/4 inch thick)
- Strawberries: 1 cup of whole strawberries or 8 large strawberries

Menu Application: Align with the objective of “reducing intake of sugar” and offer whole fruit versus juice to achieve intake. Considering that fresh, whole fruit can be a significant line item on your foodservice budget, use frozen fruit in smoothies or no sugar added canned fruit for one meal daily. Know what your edible portion

is and compare to precut prices for items such as cantaloupe. For more information on calculating edible portions, see the ANFPtv Focus on Formulas Edible Yield Factor video at <https://videos.ANFPonline.org/edible-yield-factor/>.

If you are fortunate enough to live in a climate that supports fruit tree growth, team up with the activities department or a local fruit farmer for harvest. You may also consider a field trip to a local berry farm or apple orchard. Consult with your facility quality control officer, local health department agencies, or the 2022 Food Code to ensure you have policies and practices in place for food safety for garden or farm-to-table applications. Bake fruit with cinnamon and oatmeal crumble as a dessert.

OBJECTIVE:

Reduce Consumption of Saturated Fat by People Aged 2 Years and Over

Intake Goal (U.S. Department of Agriculture, U.S. Department of Health and Human Services, 2020a): <10% of total calories

Intake Goal (American Heart Association, 2021): <6% of total calories

Practical example using Healthy People 2030: Cam, a 78-year-old retired teacher, has a calorie target of 1,500 calories so should be limited to 14 grams saturated fat per day. For reference, a 4 oz sirloin steak has 6.3 grams of saturated fat and 1 cup of whole milk has 4.6 grams saturated fat (CalorieKing, 2019).

Diets high in saturated fat promote heart disease, as well as increase risk for obesity, certain cancers, and diabetes (Hooper, 2025).

Menu Application: If you are only offering low-fat dairy on your menu, along with serving proper portion sizes of animal proteins, you should hit the target. Additional saturated fat can be reduced by using oils instead of solid fats for preparation, using fat substitutes in baked products, and cutting down cheese as an ingredient.

OBJECTIVE:

Reduce Consumption of Sugar by People Aged 2 Years and Over

Increased sugar intake has been linked to cardiovascular disease, cancer, depression, dental caries, obesity, and metabolic disorders (Gillespie, 2025).

Intake Goal (Healthy People 2030, 2023): <11.5% of total calories

Intake Goal (American Heart Association, 2019):

- Men: 9 tsp/36 grams/150 calories
- Women: 6 tsp/25 grams/100 calories

Intake Goal (U.S. Department of Agriculture, U.S. Department of Health and Human Services, 2020a): Limit intake of added sugars to <10% of calories

For example, Kelly, a 20-year-old college student, has a calorie goal of 1,900 calories so should consume less than 220 calories or 55 grams of added sugars (this is 13 teaspoons). For reference, a typical 16-oz-citrus caffeinated soda has 61 grams or 15 teaspoons of added sugar (CalorieKing, 2019).

Social Determinants of Health



Figure 3. Social Determinants of Health. Reprinted from Healthy People 2030, 2020, Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services, 2021. Retrieved from <https://health.gov/healthypeople/priority-areas/social-determinants-health>. Reprinted with permission.

Menu Application: Start again by assessing your current menu sugar content and modify where needed. With the availability of robust menu and nutrition software programs, it is simple to calculate added sugar content of menu items. Limit or avoid sugary desserts and use fruit on menus to achieve the aforementioned fruit goal. Coordinate with other departments to modify celebration foods. The birthday cakes and milestone treats can add up to excessive sugar intake. Offer healthy celebration treats such as fruit smoothies or protein bites with cacao nibs.

SUMMING IT UP

Does this limited list make you hungry for more menu modifications to move towards meeting Healthy People 2030 objectives? Most likely, there are several objectives that fit within your practice specialty. You can even apply to be a Healthy People 2030 Champion! For simple menu modifications, start by reviewing the resources included in this article to guide you in policy, product, or process changes in your department. Here's to Healthy People! 🍷



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ARTICLE REFERENCES

- American Heart Association. (2019). How Much Sugar Is Too Much? www.heart.org; American Heart Association. <https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/sugar/how-much-sugar-is-too-much>
- American Heart Association. (2021, November 1). Saturated Fat. www.heart.org; American Heart Association. <https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/fats/saturated-fats>
- CalorieKing. (2019). Food Nutrition Facts and Free Calorie Counter | CalorieKing. Calorieking.com; CalorieKing. <https://www.calorieking.com/us/en/>
- Gillespie, K. M., Kempes, E., White, M. J., & Bartlett, S. E. (2023). The Impact of Free Sugar on Human Health—A Narrative Review. *Nutrients*, 15(4), 889. <https://doi.org/10.3390/nu15040889>
- Healthy People 2030. (2023). Nutrition and Healthy Eating - Healthy People 2030 | health.gov. Health.gov; U.S. Department of Health and Human Services. <https://health.gov/healthypeople/objectives-and-data/browse-objectives/nutrition-and-healthy-eating>
- Hooper, L., Martin, N., Abdelhamid, A., & Davey Smith, G. (2015). Reduction in saturated fat intake for cardiovascular disease. *Cochrane Database of Systematic Reviews*, 8(6). <https://doi.org/10.1002/14651858.cd011737>
- McRae, M. P. (2017). Health Benefits of Dietary Whole Grains: An Umbrella Review of Meta-analyses. *Journal of Chiropractic Medicine*, 16(1), 10–18. <https://doi.org/10.1016/j.jcm.2016.08.008>
- Office of Disease Prevention and Health Promotion. (2019). Home of the Office of Disease Prevention and Health Promotion - health.gov. Health.gov; U.S. Department of Health and Human Services. <https://health.gov/>
- U.S. Department of Agriculture. (2020a). Fruits | MyPlate. www.myplate.gov; U.S. Department of Agriculture. <https://www.myplate.gov/eat-healthy/fruits>
- U.S. Department of Agriculture. (2020b). Vegetables | MyPlate. www.myplate.gov; U.S. Department of Agriculture. <https://www.myplate.gov/eat-healthy/vegetables>
- U.S. Department of Agriculture, U.S. Department of Health and Human Services. (2020a). Dietary Guidelines for Americans, 2020-2025, 9th Edition. In *Dietary Guidelines for Americans* (pp. 1–149). U.S. Department of Agriculture, U.S. Department of Health and Human Services. https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary_Guidelines_for_Americans-2020-2025.pdf
- U.S. Department of Agriculture, U.S. Department of Health and Human Services. (2020b). Top sources and average intakes of added sugars: US population ages 1 and older. [Online image]. In *Dietary Guidelines for Americans 2020-2025. 9th Edition*. https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary_Guidelines_for_Americans-2020-2025.pdf
- U.S. Department of Agriculture, U.S. Department of Health and Human Services. (2020c). Top sources and average intakes of saturated fat: US population ages 1 and older. [Online image]. In *Dietary Guidelines for Americans 2020-2025. 9th Edition*. https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary_Guidelines_for_Americans-2020-2025.pdf
- Office of Disease Prevention and Health Promotion. (2021). Social determinants of health [Online image]. In *Healthy People 2030*. <https://health.gov/healthypeople/priority-areas/social-determinants-health>
- Wang, D. D., Li, Y., Bhupathiraju, S. N., Rosner, B. A., Sun, Q., Giovannucci, E. L., Rimm, E. B., Manson, J. E., Willett, W. C., Stampfer, M. J., & Hu, F. B. (2021). Fruit and Vegetable Intake and Mortality: Results From 2 Prospective Cohort Studies of US Men and Women and a Meta-Analysis of 26 Cohort Studies. *Circulation*, 143(17). <https://doi.org/10.1161/circulationaha.120.048996>

CE QUESTIONS | NUTRITION CONNECTION



This **Level II NUTRITION** article assumes that the reader has a thorough knowledge of the topic. The desired outcome is to facilitate application of knowledge into practice by drawing connections among ideas and using information in new situations.



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1. Which government agency produces Healthy People objectives?
 - A. National Institutes of Health
 - B. U.S. Department of Health and Human Services
 - C. State Public Health Departments
2. Which statement summarizes how Healthy People objectives criteria are met?
 - A. The Federal Interagency Workgroup (FIW) assesses all objectives to see if the criteria are met
 - B. Causes of death are reviewed for lifestyle choices related to risk of chronic disease
 - C. Self-reported dietary intake surveys are collected and analyzed
3. Which of the following is a Social Determinant of Health?
 - A. Whether or not a person eats breakfast
 - B. BMI gathered at annual physicals
 - C. Where a person lives
4. Which menu would qualify as contributing to the five Healthy People 2030 objectives highlighted in this article?
 - A. Chicken alfredo, white bread stick, iceberg lettuce salad, orange juice
 - B. Grilled chicken cutlets, roasted sweet potatoes, spinach salad with olive oil & vinegar dressing, sliced pears with cinnamon
 - C. Turkey burger with white bun, canned corn, whole milk, canned peaches in heavy syrup, cranberry juice
5. Which of the following statements is true about sugar intake?
 - A. Natural sugars in fruit do not contribute to total added sugar limit goals
 - B. A person can most likely consume two sugar-sweetened beverages daily and still be within sugar limit targets
 - C. Increased sugar intake does not contribute to increased risk of heart disease
6. How are Healthy People 2030 intake goals established?
 - A. They are the same as the Dietary Guidelines for Americans
 - B. By using a combination of improved goals from baseline data set and multiple evidence-based research sources
 - C. They are the same as MyPlate
7. Which menu substitution will achieve targets for consuming less added sugar?
 - A. Replace a brownie with hot fudge topping with chocolate drizzled strawberries
 - B. Use turbinado sugar in place of white cane sugar in the birthday cake recipe
 - C. Use fat-free chocolate syrup in the chocolate sundaes
8. How many Healthy People 2030 initiatives are related to nutrition?
 - A. 5 of 27 total initiatives
 - B. 35 of 90 total initiatives
 - C. 27 of 359 total initiatives

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