

A LOOK AT THE FACTS

Did you know the United States Department of Agriculture (USDA) has been monitoring food supply data since 1909? This extensive history shapes our insights on dietary trends and Americans' food intake, which is especially important for helping us understand what's behind today's rates of overweight and obesity.

With that in mind, it should come as no surprise Americans consume more than 450 additional calories each day than we did 40 years ago. People were consuming 2,024 calories each day back in 1970. The most recent calorie data shows by 2010 that figure jumped to 2,481 (nearly a 25 percent increase).

During the past 40 years, the additional calorie consumption has paralleled the rise of obesity. The Centers for Disease Control and Prevention and the National Health and Nutrition Examination Survey showed in the early 1970s, obesity prevalence was 14.5 percent. In 2014, that figure jumped significantly to 37.9 percent. ²³

So, how does sugar fit into this?

The latest sugar intake data show that added sugars have only contributed 40 of the additional 457 calories Americans are consuming daily. To drill down even further, USDA data focused on the same period of time shows that per capita consumption of real sugar (i.e., sucrose, or table sugar) is actually one-third lower today than it was in 1970. Similarly, the latest NHANES consumption data estimated a decrease in added sugars by 2.6 teaspoons from 2003-04 to 2011-12. ⁴

ALL FOODS FIT... BUT CALORIES COUNT

Excess calorie consumption, combined with sedentary living, is a major contributing factor to the obesity crisis, independent of any single food or nutrient consumed. A recent systematic review of the evidence concluded "if there are any adverse effects of sugar, they are due entirely to the calories it provides." Additionally, three authoritative scientific organizations, including the Institute of Medicine, European Food Safety Authority, and the United Kingdom Scientific Advisory Committee on Nutrition, each conducted extensive scientific reviews of the evidence on "added sugars" and obesity and found no unique role for added sugars. 6,7,8

The United States' continued focus on the obesity epidemic to assist Americans with achieving healthier weights should place emphasis on individuals reducing their overall food and beverage intake, instead of targeting one isolated component.⁹

"Sugars add desirable sensory effects to many foods, and a sweet taste promotes enjoyment of meals and snacks. In fact, when sugars are added to otherwise nutrient-rich foods, such as sugar-sweetened dairy products like flavored milk and yogurt and sugar-sweetened cereals, the quality of children's and adolescents' diets improves."

-American Heart Association¹⁶



"Sugars consumed in nutrient-poor foods and beverages are the primary problem to be addressed, not simply sugars themselves. Consumed within recommended calorie amounts, sweetness can offer an effective tool to promote consumption of nutrient-dense foods and beverages."

-American Academy of Pediatrics ¹¹



Sugar in the Diet: How Much Are We Actually Consuming?



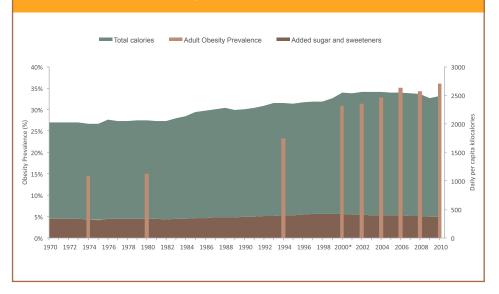
ENSURING A QUALITY DIET

We know calorie balance is essential for weight maintenance, but there's another, very important dimension of planning a healthful diet: nutrient density. A high-quality diet gives the most "bang for your calorie buck," meaning it includes foods that have a higher ratio of vitamins and minerals to the calories they provide.

This is where sugar can play an important role in nutrition. Sugar is often viewed as simply a source of calories that people don't need, while the significant role it plays in a nutrient-rich diet is often not discussed. Decades of research on added sugars in the diet support that sugar helps increase the palatability of healthy foods, making it a key partner in nutrient delivery. 10,11,12,13,14,15,16,17 However, it's important to mention that sugar-containing foods that don't contribute appreciable nutritional value should be treated as, well... treats, and consumed as such within caloric needs.

When you look at the big picture by focusing on the entire nutrient package of a food (versus just one nutrient), sugar can easily be incorporated into a healthy, balanced (and enjoyable!) diet.

Daily per capita Total Calories and Calories consumed from Added Sugars, 1970-2010 20,21,



Year	Sugar	Obesity
	intake (tsp)	Prevalence (%)
1970s	20.8	14.5%
2014	22.9	37.9%
Percent Increas	e 10%	161%

"Choose a healthy eating pattern at an appropriate calorie level to help achieve and maintain a healthy body weight, support nutrient adequacy, and reduce the risk of chronic disease. To meet nutrient needs within calorie limits, choose a variety of nutrient-dense foods across and within all food groups in recommended amounts."

-Dietary Guidelines for Americans, 2015 – 202019

- 1. Food availability (per capita) data system: Loss-adjusted food availability documentation. USDA ERS. http://www.ers.usda.gov/data-products/food-availability-(per-capita)-data-system/loss-adjusted-food-availability-documentation.aspx. Updated August 24, 2016
- 2. Flegal KM, Kruszon-Moran D, Carroll MD, Fryar CD, Ogden CL. Trends in Obesity Among Adults in the United States 2005-2014. JAMA. 2016;315(21):2284-2291. doi:10.1001/jama.2016.6458.
- 3. Ooden CL, Carroll MD, Prevalence of Overweight, Obesity and Extreme Obesity Among Adults, United States, Trends 1960-1962 Through 2007-2008, National Center for Health Statistics, 2010: https://www.cdc.gov/NCHS/data/hestat/obesity adult 07 08/obesity adult 07 08.pdf 4. Bowman SA, Friday JE, Clemens JC, LaComb RP, Moshfegh AJ. A comparison of Food Patterns Equivalents Intakes by Americans: What We Eat in America, NHANES 2003-04 and 2011-12. USDA Food Surveys Research Group. 2016; 16: https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/DBrief/16_Food_Patterns_Equivalents_0304_1112.pdf.
- 5. Kahn, R. and Sievenpiper, J. 'Dietary sugar and body weight: Have we reached a crisis in the epidemic of obesity and diabetes?' Diabetes Care. 2014; 37: 957–962. doi: 10.2337/dc13-2506 6. EFSA Panel on Dietetic Products, Nutrition, and Allergies (NDA). Scientific Opinion on Dietary Reference Values for carbohydrates and dietary fibre. EFSA Journal. 2010;8(3).
- 7. Scientific Advisory Committee on Nutrition. Carbohydrates and Health. UK: The Stationery Office Limited (TSO); 2015.
- 8. Institute of Medicine (U.S.). Panel on Macronutrients., Institute of Medicine (U.S.). Standing Committee on the Scientific Evaluation of Dietary Reference Intakes. Dietary reference intakes for energy, carbohydrate, fiber, fat, fatty acids, cholesterol, protein, and amino acids. Washington, D.C.: National Academies Press; 2005.
- 9. Anderson JJ, Celis-Morales CA, Mackay DF, et al. Adiposity among 132 479 UK Biobank participants; contribution of sugar intake vs other macronutrients, International Journal of Epidemiology, 2016;173. doi: 10.1093/ije/dyw173.
- 10. Council on School Health, Committee on Nutrition. Snack, sweetened beverages, added sugars, and schools. Pediatrics. 2015;135(3):228-258.

 11. Forshee RA, Storey ML. Controversy and statistical issues in the use of nutrient densities in assessing diet quality. The Journal of Nutrition. 2004;134(10):2733-2737.
- 12. Food and Agriculture Organization of the United Nations. Carbohydrates in human nutrition: report of a joint FAO/WHO expert consultation, Rome: World Health Organization: Food and Agriculture Organization of the United Nations; 1998
- 13. Frary CD, Johnson RK, Wang MQ. Children and adolescents' choices of foods and beverages high in added sugars are associated with intakes of key nutrients and food groups. J Adolesc Health. 2004;34(1):56-63.
- 14. Murphy MM, Douglass JS, Johnson RK, Spence LA. Drinking flavored or plain milk is positively associated with nutrient intake and is not associated with adverse effects on weight status in US children and adolescents. J Am Diet Assoc. 2008;108(4):631-639.
- 15. Rennie KL, Livingstone MB. Associations between dietary added sugar intake and micronutrient intake: a systematic review. British Journal of Nutrition. 2007;97(5):832-841.

 16. Johnson RK, Appel LJ, Brands M, et al. Dietary sugars intake and cardiovascular health: a scientific statement from the American Heart Association. Circulation. 2009;120(11):1011-1020. doi: 10.1161/CIRCULATIONAHA.109.192627.
- Gibson SA. Dietary sugars intake and micronutrient adequacy: a systematic review of the evidence. Nutr Res Rev. 2007;20(2):121-131.
 American Academy of Pediatrics, Policy Statement: Snacks, Sweetened Beverages, Added Sugars, and Schools. Pediatrics. 2015;135(3):575-583. doi: 10.1542/peds.2014-3902.
- 19. 2015-2020 Dietary Guidelines for Americans (2016) Available at: http://health.gov/dietaryguidelines/2015/guidelines/ (Accessed: July 19, 2016).
- 20. Food availability (per capita) data system; Loss-adjusted food availability documentation (2015) Available at: http://www.ers.usda.gov/data-products/food-availability-(per-capita)-data-system/loss-adjusted-food-availability-documentation.aspx
- 2.1. Centers for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS), National Health and Nutrition Examination Survey. Survey Questionnaires, Examination Components and Laboratory Components 2007-2008. CDC website. http://www.ncdc.gov/Nchs/Nhanes Search/Nhanes07_08.aspx. (Accessed July 19, 2016).
- 22. Kahn, R. and Sievenpiper, J. (2014) 'Dietary sugar and body weight: Have we reached a crisis in the epidemic of obesity and diabetes?', Current Concepts of Type 2 Diabetes Prevention, 37(4), pp. 957–962. doi: 10.2337/dc13-2506.

