

NUTRITION TO SUPPORT GROWING TWEENS AND TEENS



Funded by Beef Farmers and Ranchers



Adolescence is a transitional life stage distinguished by physical, psychological and emotional development and is influenced by unique challenges:¹

- Rapidly Changing Bodies
- Independence
- Peer Pressure
- Food Choices
- Social Acceptance
- Social Media



Developing healthy habits at this life stage, like eating a balanced diet and getting adequate physical activity, can set tweens and teens up for success now and into the future.

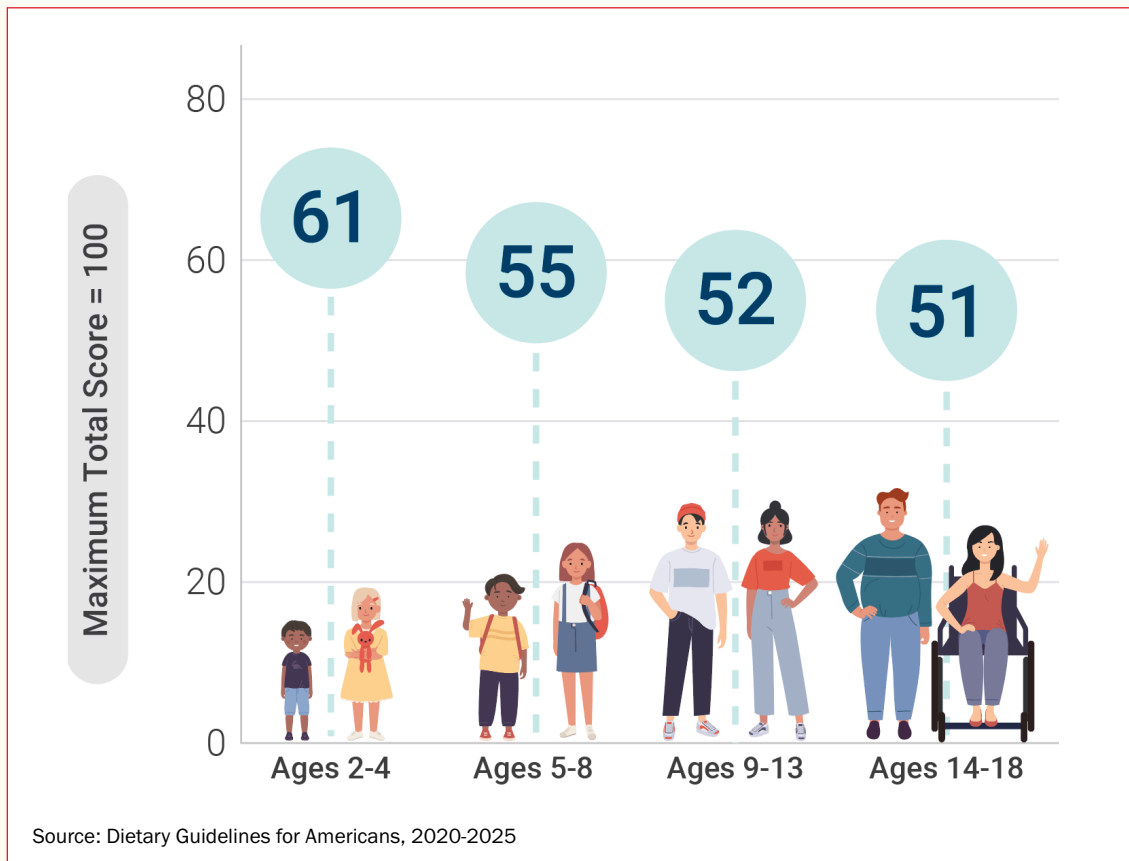
Learn more about how the nutrients in beef provide our bodies with the strength to thrive throughout all stages of life. Visit:

BEEFITSWHATSFORDINNER.COM/NUTRITION



Diet quality declines during childhood and throughout adolescence¹

The Healthy Eating Index (HEI) score measures an individual's dietary intake adherence to the recommendations outlined in the Dietary Guidelines for Americans (DGA). Current dietary intake data for adolescents indicates that their overall diet quality is poor, with HEI scores declining throughout childhood and adolescence.¹



Did you know?

On average, adolescents gain 15-20% of their final adult height and 40-50% of their adult weight during this time period. Bone mass also increases by 40-60%.^{2,3}

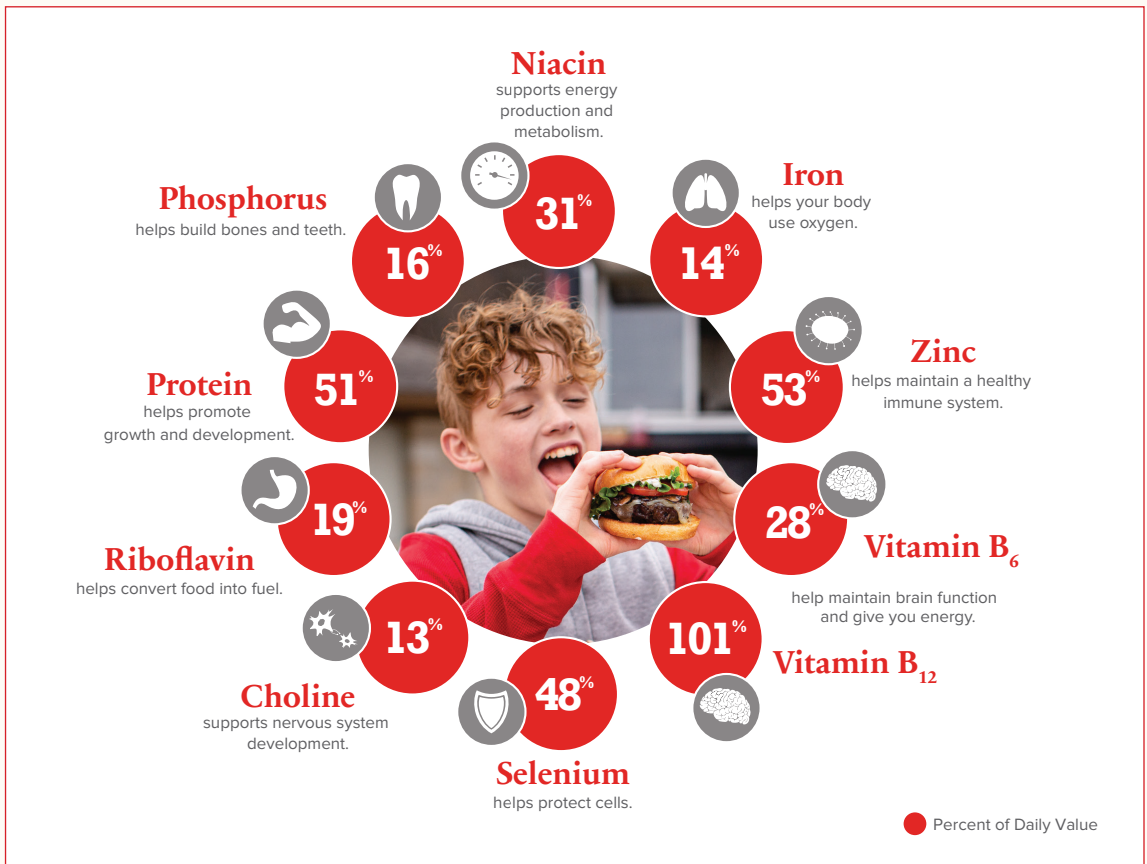
Underconsumed nutrients of public health relevance affecting adolescents include: protein, iron, folate, phosphorus, choline and vitamins B6 and B12.⁴

Poor nutrient intake at this time can lead to significant growth and learning challenges, such as delayed physical development, poor academic performance, and depressed immune function.¹⁻³

1. U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th edition. Available at <https://www.dietaryguidelines.gov/>. 2. Lassi Z, Moin A, Bhutta Z. Nutrition in Middle Childhood and Adolescence. In: Bundy DAP, Silva NJ, Horton S, et al., editors. Child and Adolescent Health and Development. 3rd edition. Washington (DC): The International Bank for Reconstruction and Development / The World Bank; 2017 Nov 20. Chapter 11. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK525242/>. 3. Norris SA, Frongillo EA, Black MM, Dong Y, Fall C, Lampl M, Liese AD, Naguib M, Prentice A, Rochat T, et al. Nutrition in adolescent growth and development. Lancet 2022;399(10320):172-84. 4. Anderson-Villaluz D, LI, MBA, RD, LDN, FAND. (2021, March 30) Giving Children and Adolescents a Healthy Start Through Nutrition. Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services; <https://health.gov/news/202103/giving-children-and-adolescents-healthy-start-through-nutrition>. 5. U.S. Department of Agriculture, Agricultural Research Service, Nutrient Data Laboratory. FoodData Central. Available at fdc.nal.usda.gov (Beef composite, cooked - NDB Number: 13364). 6. American Academy of Pediatrics Committee on Nutrition. Pediatric Nutrition, 8th Ed. Itasca, IL: American Academy of Pediatrics, 2019. 7. Schwarzenberg SJ, Georgieff MK, Committee on Nutrition. Advocacy for improving nutrition in the first 1000 days to support childhood development and adult health. Pediatrics 2018;141(2).

Set adolescents up for success with a balanced diet to fuel play, empower learning, and optimize growth

Beef provides many of the nutrients that adolescents aren't getting enough of each day.⁵ In fact, a 3 oz serving of cooked beef on average provides:



Including beef in a healthy dietary pattern can improve nutrient adequacy in the adolescent population and promote healthy growth and development during this vulnerable life stage.^{1, 5-11} In fact, recent research found that adolescents who eat beef are more likely to achieve nutrient adequacy than beef non-eaters.¹¹

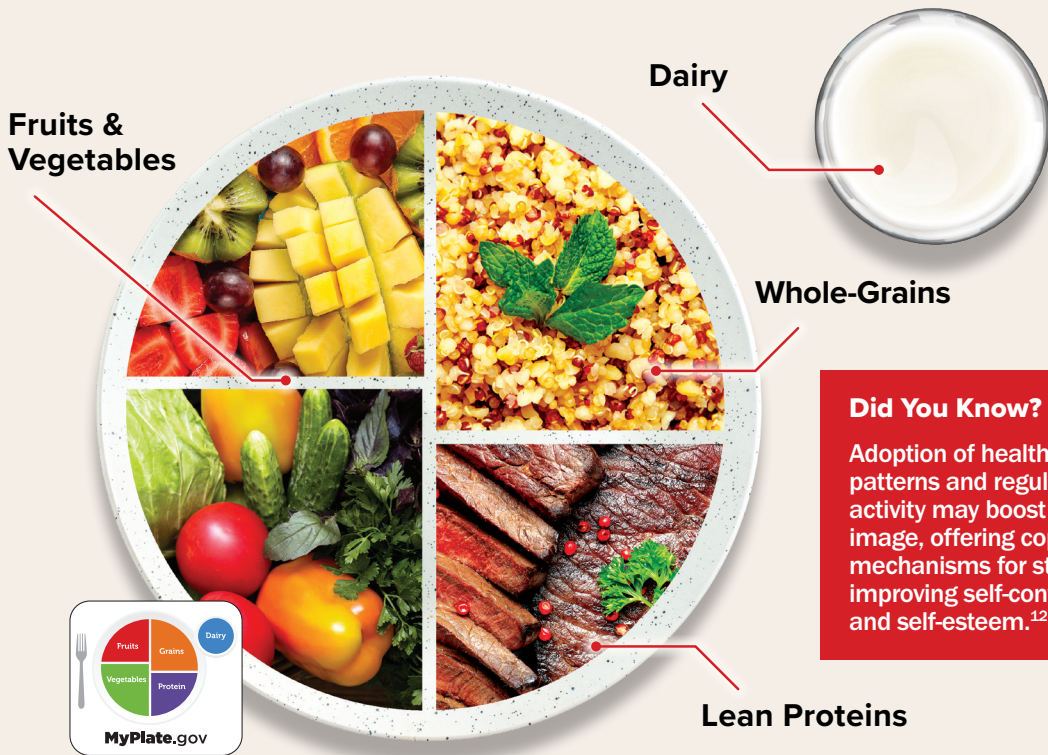


Read the complete research brief on beef's role in helping close nutrient gaps in adolescence.

8. Gow ML, Ho M, Burrows TL, Baur LA, Stewart L, Hutchesson MJ, Cowell CT, Collins CE, Garnett SP. Impact of dietary macronutrient distribution on BMI and cardiometabolic outcomes in overweight and obese children and adolescents: a systematic review. *Nutr Rev* 2014;72(7):453-70. 9. Hermoso M, Vucic V, Vollhardt C, Arsic A, Roman-Vinas B, Iglesias-Altaba I, Gurinovic M, Koletzko B. The effect of iron on cognitive development and function in infants, children and adolescents: a systematic review. *Ann Nutr Metab* 2011;59(2-4):154-65. 10. Wallace TC, Blusztajn JK, Caudill MA, Klatt KC, Natker E, Zeisel SH, Zelman KM. Choline: The Underconsumed and Underappreciated Essential Nutrient. *Nutr Today* 2018;53(6):240-53. 11. Fulgoni K, Fulgoni V, III. Beef Intake is Associated with Higher Nutrient Adequacy in U.S. Adolescents, NHANES 2001-2018. *Nutrients* 2023, 15, 4996. <https://doi.org/10.3390/nu152349912>. Dobersek U, Teel K, Altmeyer S, Adkins J, Wy G, Peak J. Meat and mental health: A meta-analysis of meat consumption, depression, and anxiety. *Crit Rev Food Scr Nutr* 2023; 63(19): 3556-73.

Build Balanced Plates with Beef

Guidance on how to build a balanced plate can help boost nutrition and fuel tweens and teens.



On average, adolescents 14-18 years-old require 5 ½ to 7 oz of protein-rich foods each day.^{1†}

A 3 oz cooked serving of beef contains about 25g of protein and 9 other essential nutrients.⁵

What does 3 oz of cooked beef look like?^{}**



^{**} This is an estimate of 25 grams of protein, actual amount of protein may vary.

[†] Based on the requirements for a 2,000 calorie diet. Individual needs may vary. Consult with your health care provider for specific needs.

