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Closing Nutrient Gaps in Adolescents with Beef

On average, adolescents achieve 15–20% of their final height and 40–50% of their weight during this time period. Bone mass also increases up to 40%.^{1,2}

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



Make Every Bite Count With Beef

Beef helps fill **critical nutrient gaps** for healthy growth and development.³



Research shows regular beef consumption is associated with a greater percentage of adolescents meet nutrient adequacy for:³

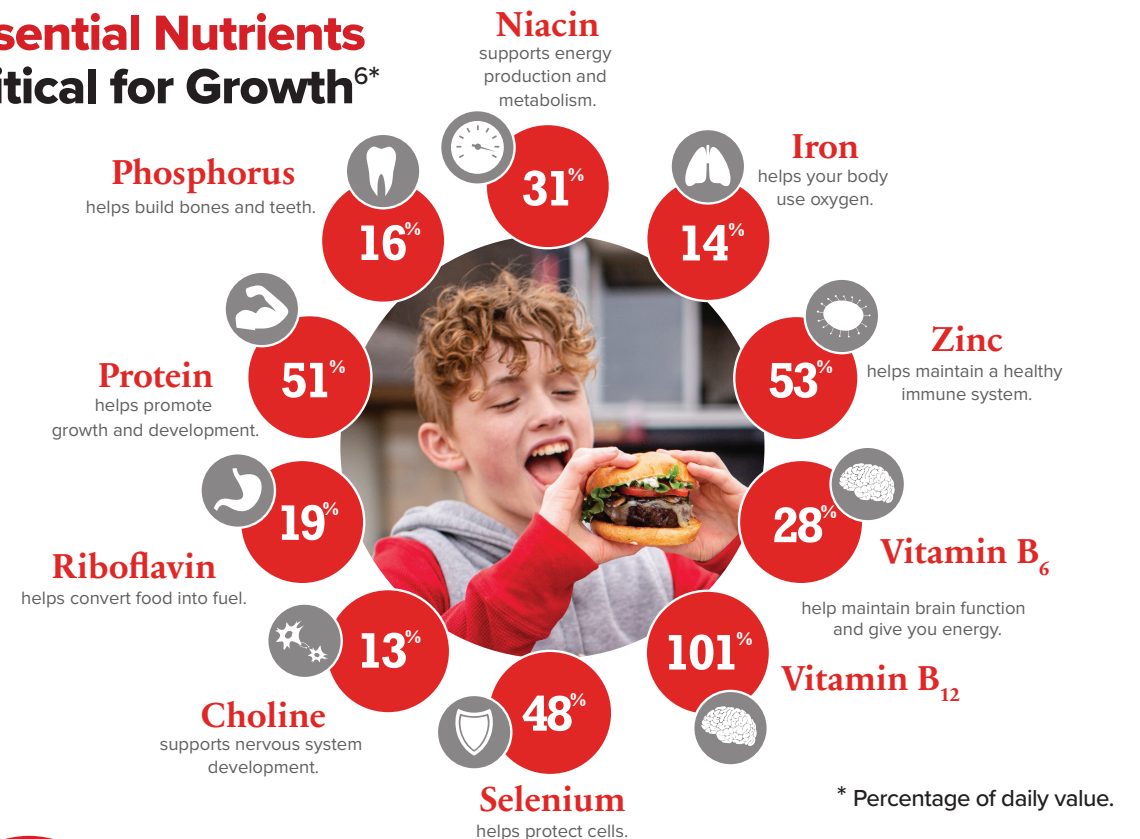
- ✓ Iron ✓ Folate ✓ Riboflavin
- ✓ Thiamin ✓ Vitamins B6 & B12 ✓ Zinc
- ✓ Calcium ✓ Copper ✓ Phosphorus

Protein Supports Performance:

Adolescents, particularly athletes, should aim for 0.6-0.9 grams of protein per pound of body weight, or about 3–4 servings of high-quality protein per day to support growth, red blood cell production, immune health, and overall performance.^{4,5}



Beef Provides 10 Essential Nutrients Critical for Growth^{6*}



1 in 4 Adolescent Girls Aren't Meeting Iron Needs:⁷

Adolescent girls face increased iron demands due to growth, menstrual blood loss, and low intake of iron-rich foods. Heme iron from beef is absorbed more easily than non-heme iron from plants, especially when paired with vitamin C-rich foods.^{8,9}

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



Building **Balanced Plates** with Beef

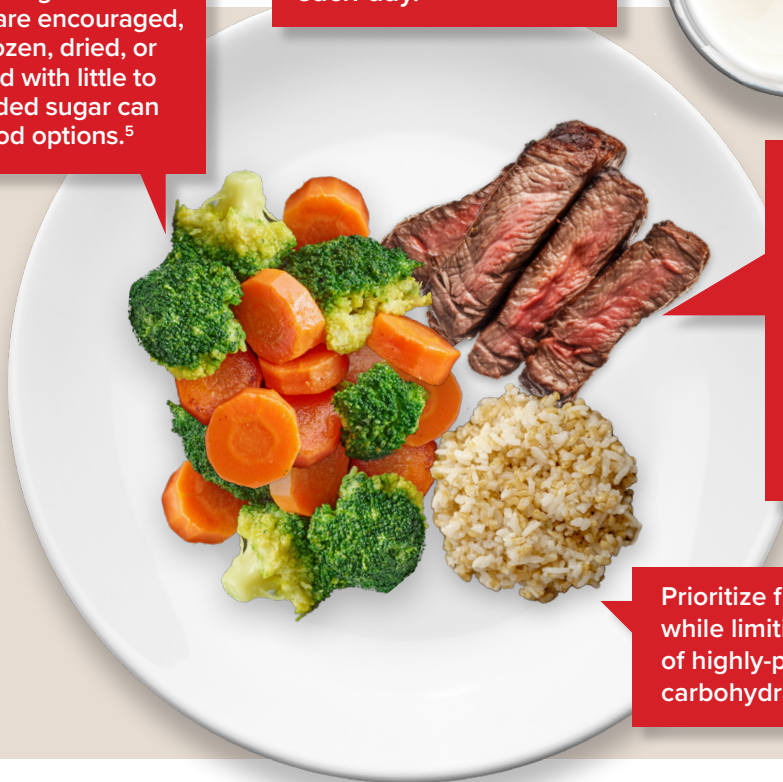
Every meal is a chance to fuel the body and mind. Start with protein, then build it up with veggies, whole grains, and dairy. Follow this playbook to build the Most Valuable Plate!

Eat a variety of colorful vegetables and fruits each day. Whole vegetable and fruits are encouraged, but frozen, dried, or canned with little to no added sugar can be good options.⁵

Aim to consume 3 servings of dairy, including full-fat dairy with no added sugar, each day.⁵



Prioritize high-quality, nutrient-dense protein from whole foods, like beef, at every meal to keep you feeling full and nourished.^{5,7} A 3 oz cooked serving of beef contains about 25 g of protein and 9 other essential nutrients.



Prioritize fiber-rich whole grains while limiting consumption of highly-processed, refined carbohydrates.⁵

Meal-Planning Made Easier:

- Assign themes to days—like Meatloaf Monday or Taco Tuesday—to simplify decisions
- Choose 1–2 proteins for the week and use in multiple meals
- Double your recipes and freeze half for busy days
- Let kids choose fruits and veggies—they'll be more excited to eat them



References: **1.** Lassi et al, 2017 (PMID: 30212127) **2.** Norris et al, 2022 (PMID: 34856190) **3.** Fulgoni et al, 2023 (PMID: 38068854) **4.** Everett, 2025 (PMID: 40944181) **5.** Dietary Guidelines for Americans, 2025-2030 (2026) **6.** FoodData Central, NDB #13364 **7.** 2025 Dietary Guidelines Advisory Committee Scientific Report, (2024) **8.** Friedman et al, 2012 (PMID: 23210492) **9.** Leidy et al, 2010 (PMID: 20125103)