

Meat/meat alternates have always been integral to the school lunch program but in the 2012-2013 school year a new National School Lunch Program¹ required what USDA refers to as a "weekly range" for meat/meat alternates. This is intended to help schools offer age-appropriate meals within the required calorie range. Under these guidelines and depending on grade level, kids may be offered more ounces of meat/meat alternates than under the previous guidelines.²

- As background, meat and meat alternates include meat, poultry, fish, cheese, yogurt, dry beans and peas, whole eggs, alternate protein products, peanut butter or other nut or seed butters, and nuts and seeds.
- For students in grades 9-12, schools are required to provide 2 oz. eq. of meat/meat alternates daily and provide a total of 10-12 oz. each week.
- For students below grade 9, schools are required to provide 1 oz. eq. of meat/meat alternates daily and between 8-10 oz. eq. weekly. This is similar to the 7.5-10 oz provision per week that was required prior to the 2012-2013 school year.

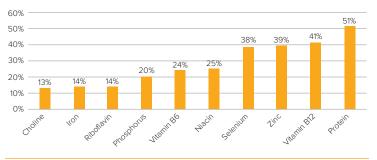
High-quality protein, like lean beef, is especially important for children because it supports the growth, repair and maintenance of all body tissues, makes red blood cells and boosts the immune system.<sup>3</sup> Sufficient protein is essential for children to perform their best both physically and mentally.<sup>4,5</sup>

- Many studies show a direct link between nutrient intake and academic performance. Zinc, iron and other nutrients in beef are critical for brain development and function. 4.5.6.78.9
- Beef is an excellent source of zinc; a 3-oz serving of cooked beef provides about 39% of the daily value for zinc.<sup>10,11</sup> Beef is the top food source of zinc among U.S. children aged 2 to 18 years.<sup>12</sup>
- A 3 oz. serving of cooked beef provides 14% of the daily value for iron and 32% of the iron recommendations for 9 to 13-year-old boys and girls. 10.11.13

Schools can feel good about continuing to include high-quality protein, like beef, on the menu to help growing kids get many of the essential nutrients they need for optimal health while still meeting the requirements for healthy school meal patterns. Pairing fruits and vegetables with favorite foods like beef can help make it easier to enjoy more produce in a balanced diet. Once people have anchored their plate with protein, then fill at least half of the plate with colorful vegetables and fruits. <sup>14</sup> By pairing produce and other whole foods with beef, kids will receive a nutrient-packed mid-day meal that provides the fuel they need for success in school.

## **Beef Makes the Grade**

A 3-oz serving of cooked beef on average provides 175 calories and 10 essential nutrients



- National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger- Free Kids Act of 2010; Final rule and interim final rule. Federal Register/Vol. 81, No. 146/July 29, 2016. Available at https://www.federalregister.gov/documents/2016/07/29/2016-17227/national-school-lunchprogram-and-school-breakfast-program-nutrition-standards-for-all-foods-sold-in
- Nutrition Standards in the National School Lunch and School Breakfast Programs; Final Rule. Federal Register/Vol. 77, No. 17/January 26, 2012. Available at https://www.federalregister.gov/documents/2012/01/26/2012-1010/nutrition-standards-inthe-national-school-lunch-and-school-breakfast-programs
- Duyff RL. Academy of Nutrition and Dietetics Complete Food and Nutrition Guide. 5th ed. Houghton Mifflin Harcourt; Revised, Updated edition, 2017
- Schwarzenberg SJ, et al. Advocacy for improving nutrition in the first 1000 days to support childhood development and adult health. Pediatrics 2018;141:e20173716.
- Michaelsen KF, Greer FR. Protein needs early in life and long-term health. Am J Clin Nutr 2014;99:718S-22S.
- 6. Black MM. Micronutrient deficiencies and cognitive functioning. J Nutr 2003;133:3927s-31s.
- 7. Black MM. The evidence linking zinc deficiency with children's cognitive and motor functioning. J Nutr 2003;133:1473S-6S.
- Benton D. The influence of dietary status on the cognitive performance of children. Mol Nutr Food Res 2010;54:457–70.
- Prado EL & Dewey KG. Nutrition and brain development in early life. Nutr Rev 2014; 72:267–84.
- U.S. Department of Agriculture (USDA), Agricultural Research Service, Nutrient Data Laboratory. USDA National Nutrient Database for Standard Reference, Legacy. Version Current: April 2018. Available at http://www.ars.usda.gov/nutrientdata. (NDB#13364)
- National Institutes of Health Dietary Supplement Label Database. Labeling Daily Values. Available at https://www.dsld.nlm.nih.qov/dsld/dailyvalue.jsp
- 12. Keast DR, et al. Food sources of energy and nutrients among children in the United States: National Health and Nutrition Examination Survey 2003–2006. Nutrients 2013; 571: 293–201
- National Institutes of Health Office of Dietary Supplements. Iron: Fact sheet for health professionals. Available at https://ods.od.nih.gov/factsheets/Iron-HealthProfessional/
- National Institutes of Health Office of Dietary Supplements. Iron: Fact sheet for health professionals. Available at https://ods.od.nih.gov/factsheets/Iron-HealthProfessional/

## SCHOOL FOODSERVICE RECIPES

to help growing kids get all the essential nutrients they need for optimal health while still meeting the requirements for healthy school meal patterns.

















