

# Protein-rich diet tied to improved physical function during weight loss

New research shows that high-quality protein helps increase physical function during weight loss in older obese adults.

New research published in the Journal of Gerontology: Medical Sciences shows that eat-

ing more protein from foods like lean beef, as part of a reduced-calorie diet, can help obese older adults with limited ability to exercise to lose weight and increase physical function.<sup>[1]</sup> This new research, supported

by the beef checkoff, contributes to the growing body of evidence that shows lean beef and other high-quality protein foods are beneficial for health, including overweight and obese people looking to reduce

weight.

Obesity in older adults contributes to negative health outcomes, leading to a potential loss of independence due to reduced muscle strength and limited ability to perform activities of daily living. Duke University Medical Center researchers Drs. Connie Bales and Kathryn Porter Starr hypothesized that enhancing the quantity and quality of dietary protein at each meal during a weight loss intervention would help protect muscle mass and improve balance, lower-body strength and walking speed in obese older adults with functional limitations.

“Until recently, weight-loss regimens were not recommended for obese older adults due to concerns about further loss of muscle mass, especially in those who could not exercise,” says Bales. “While more recent research shows that engaging in exercise may preserve lean mass in obese older adults, we wanted to look at an intervention that would allow these individuals to start losing weight without exercise to account for functional impairments that may make regular exercise difficult.”

In the study, those who ate a reduced-calorie

diet higher in high-quality lean protein had greater gains in physical function measured by balance, lower body strength and walking speed, compared to those who ate a diet lower in protein. Although the increase in overall dietary protein was modest between the two groups (1.2 vs. 0.8 grams of protein per kilogram of body weight per day), improvements in function were significantly higher in the protein group. The higher protein diet included at least 30 grams of lean, high-quality protein like beef (e.g. Lean Ground Beef, Deli Roast Beef and Flank Steak), along with other lean meats and poultry, low fat dairy foods and eggs at breakfast, lunch and dinner.

“High-quality protein like lean beef has unique benefits for health,” says Shalene McNeill, PhD, RD, who serves as executive director of human nutrition research for the checkoff. “A substantial body of evidence shows the nutrients in beef, such as protein, can help satisfy hunger and maintain a healthy weight and build and maintain muscle.<sup>[2-5]</sup> Beef is an important source of nutrients, including iron, zinc and B-vitamins, for optimal health.”

Although more research is needed, results from this study are encouraging and support the idea that protein-enhanced meals, as part of a reduced-calorie diet, can foster improvements in physical function during periods of weight loss in obese older adults.

[1] Porter Starr, et al. Improved function with enhanced protein intake per meal: A pilot study of weight reduction in frail, obese older adults. *J Gerontol A Biol Sci Med Sci.* 2016. Full text available at <http://biomedgerontology.oxfordjournals.org/content/early/2016/01/15/gerona.glv210.long>.

[2] Westerterp-Plantenga MS, et al. Dietary protein, metabolism, and body-weight regulation: dose-response effects. *Int J Obes* 2006;30:S16-S23.

[3] Paddon-Jones D, et al. Protein, weight management, and satiety. *Am J Clin Nutr* 2008;87:1558S-61S.

[4] Paddon-Jones D, et al. Role of dietary protein in the sarcopenia of aging. *Am J Clin Nutr* 2008;87:1562S-6S.

[5] Wolfe R. The underappreciated role of muscle in health and disease. *Am J Clin Nutr* 2006;84:475-82.

## Chimichurri Steak Wraps

**Total Recipe Time:**  
15 to 20 minutes  
12 ounces grilled beef steak, cut into slices  
3 cups fresh baby spinach  
1/2 large red bell pepper, cut into thin strips  
4 medium whole wheat tortillas (8 to 10-inch diameter)

**Chimichurri Sauce:**  
1 cup fresh parsley leaves  
2 cloves garlic  
3 tablespoons olive oil  
1 tablespoon red wine vinegar  
1/4 teaspoon salt  
1. Place parsley and garlic in food processor or blender container.

Cover; process until finely chopped. Add oil, vinegar and salt; process just until blended.

2. Spread each tortilla evenly with Chimichurri Sauce, leaving 1/4-inch border around edge. Top with equal amounts spinach, bell pepper slices and beef slices on top two-thirds of tortilla. Fold bottom of tortilla up over filling. Fold right and left sides to center overlapping edges; secure with wooden picks, if desired. Makes 4 servings

Nutrition information per serving, using top sirloin steak: 340 calories; 16 g fat (3 g saturated fat; 9 g monounsaturated fat); 49 mg cholesterol; 410 mg sodium; 25 g carbohydrate; 3.7 g fiber; 30 g protein; 8.7 mg niacin; 0.7 mg vitamin B16; 1.5 mcg vitamin B12; 4.1 mg iron; 30.7 mcg selenium; 5.6 mg zinc. This recipe is an excellent source of protein, niacin, vitamin B6, vitamin B12, iron, selenium and zinc; and a good source of fiber.



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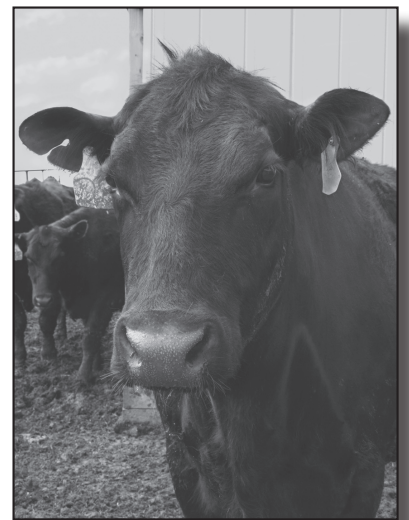



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