



Consumer Focus

► by **Walt Barnhart**, Federation of State Beef Council

Beef, protein an all-day discussion in 2015

Research shows eating high-quality protein throughout the day is a healthful approach toward overall nutrition.

If beef is what's for dinner, what should be on the plates for the other meals? If you said it's still beef, you'd be right. The fact is, research shows balancing protein throughout the day makes good nutritional sense.

However, few Americans eat this way. The beef industry, through its Beef Checkoff Program, is working to educate consumers on the value of balance and adequate protein intake.

The challenge has been formidable. Research shows that Americans eat about two-thirds of their total daily protein at the dinner meal. That doesn't leave much room for protein in your breakfast and lunch meals or snacks — and that could be a problem, current researchers say.

"The imbalance of protein meals is an issue," according to Stuart Phillips, a professor in the Department of Kinesiology at McMaster University in Ontario, Canada. "High-quality protein of sufficient quantities and evenly spaced is key to gaining or maintaining muscle mass."

Phillips, a recognized researcher focusing on the nutrition and exercise factors that affect muscle protein, says the elderly, especially, are in need of more protein per meal to stimulate protein synthesis and muscle generation. An optimal intake for robust

stimulation in older men is 42 grams (g) per meal, or what is provided by about 6 ounces (oz.) of cooked 85% lean ground beef.

According to Heather Leidy, assistant professor in the Department of Nutrition & Exercise Physiology at the University of Missouri, not only is protein important, but the time of day protein is consumed could be significant.

"Protein at breakfast appears to be a good target to increase protein intake," Leidy says.

"A high-protein breakfast seems to reduce food craving-based neural signals and improve overall diet quality."

In a review paper published in the *American Journal of Clinical Nutrition* in 2015, Leidy and her colleagues suggested that higher-protein diets containing between 1.2 g and 1.6 g of protein per kilogram (kg) of body weight per day [82 g-109 g of protein for a 150-pound (lb.) person] — and including meal-specific quantities of at least 25 g-30 g (equivalent to 3-3½ oz. of cooked beef) — provide these and other improvements.

Consensus of opinion

The Beef Checkoff Program has helped support research seeking to answer these kinds of questions.

One checkoff-supported study, conducted by Leidy, found that daily consumption of a higher-protein breakfast that included two eggs and 1.5 oz. of beef was superior to both a normal-protein breakfast that featured milk and cereal or skipping breakfast altogether, in terms of improving appetite control, curbing food cravings and reducing unhealthy snacking in overweight or

obese teenage girls who routinely skip their breakfast meal. The research was featured in the *American Journal of Clinical Nutrition* in 2013 and in the *Nutrition Journal* in 2014.

This line of research has led to additional research on the timing, quantity and quality of protein intake and its impact on appetite and satiety, along with the development of novel dietary strategies and recommendations.

A disparity in the timing of protein

consumption could contribute to health issues such as sarcopenia, or muscle loss, as well. A study on protein intake among the elderly, supported by the Beef Checkoff Program, demonstrated that consumption of both total and animal-source protein was skewed heavily to the dinner meal. That could mean a disparity in quantity and quality of protein among the other meals.

The study, which utilized data from a nationally representative sample of the U.S. population (the National Health and Nutrition Examination Survey, 2005-2006) and quantified protein intake and determined adequacy of protein in the diets of U.S. adults, was published in the *Journal of the Academy of Nutrition and Dietetics* in 2013.

Putting research into action

The research on balancing protein throughout the day provided impetus last spring for the beef industry's 30-Day Protein Challenge, a step-by-step way to get the optimal amount of protein across all meals. The challenge encourages consumers to eat 30 g of protein at every meal to help them maintain and/or build muscle, control food cravings and generally provide better overall health and wellness. Undertaking the Protein Challenge would help them take control of their appetite and kick-start the benefits of balancing protein consumption.

Consumers who sign up for the challenge receive daily inspirational emails, tools to help them succeed and delicious, nutritious beef recipes with plenty of protein. While the 30-Day Protein Challenge was officially kicked off last April, consumers can start any time and receive the 30-day plan.

Registered dietitians helped develop the challenge by first trying it out themselves and providing feedback to strengthen the program. After her own 30-day experience, nutrition expert Melissa Dobbins says, "I liked that my focus shifted to protein, which overall made me choose more nutrient-rich foods. It made me focus on more of a 'real' dinner than just throwing something together."

Dobbins notes that the broad nature of the Protein Challenge helped generate a wider appeal. "Some people still don't get that there is a wide range of acceptable protein intakes and that 'plant-based diets' aren't the only healthful approach," she says.

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Thousands of consumers have since become active in the 30-Day Protein Challenge program, with a website landing page becoming the most visited page on www.beefitswhatsfordinner.com.

Tens of thousands of visits have been made to the page, thanks to state beef council and national efforts to promote it.

It was the research, however, that gave the program its value and credibility.

“Research has always been a cornerstone of our efforts to encourage better nutrition

among consumers,” says Jennifer Houston, a beef producer from Sweetwater, Tenn., and chairman of the Federation of State Beef Councils. “As we learn more about the benefits of protein consumption throughout the day, we can share those with thought leaders and others who are helping consumers enjoy optimal nutrition. Making sure people have the proper amount of high-quality protein at the right times is certainly one way we can improve nutrition nationwide.”

Houston says it’s also a way to continue to

stress the value of beef in the diet. She says the educational and research efforts are a natural fit.

“Without research, our promotions and educational efforts wouldn’t be effective or believable,” she says. “Our emphasis on research is how we find out as much as possible about protein, and that’s evidence that what we do is based on what we know to be true.”



Editor’s Note: *Walt Barnhart is the director of communications for the Federation of State Beef Councils.*