

Prepared Meats and Protein: A Nutrition Perspective

A Resource for Professionals

NAMI NORTH AMERICAN MEAT INSTITUTE

As today's consumers focus more on healthy eating, their interest in protein is at an all-time high. The clients you counsel may understand that protein offers nutrition benefits, but often they are confused about the different food options and whether meat products can fit into a healthy balanced diet. Many people enjoy eating meats, including prepared meats like deli roast beef, beef hot dogs and beef jerky, because these products offer great taste and convenience. They want to continue to enjoy these foods, but need a better understanding of their nutrition profiles, the wide array of choices available in the marketplace, and strategies for including prepared meats in a healthy diet.

Protein How Much and What Kinds?

When looking at the protein foods group as defined by *Dietary Guidelines for Americans 2015-2020*, average consumption of protein foods is close to the recommendations, although teen boys and adult men may slightly exceed recommended amounts. Seafood intake is low for many people. Looking specifically at the "meat, poultry, eggs" sub-group, most Americans consume these foods in recommended amounts^{1,2}. Notably, a United States Department of Agriculture (USDA) report on food availability, which is one measure of food and nutrient consumption, indicates that 17 percent of calories consumed by Americans comes from meat, poultry and fish³. This is consistent with data collected by NHANES 2007-2010 using food recall methods². The current adult dietary reference intake (DRI) for protein is 10% - 35% of calories from protein⁴.

Take Home Messages for Clients

1. Vary your protein routine for balanced nutrition. Choose nutrient-dense protein foods including lean meats, poultry and eggs; seafood; low fat dairy; and legumes, soy foods, nuts and seeds. For meat products, look for extra lean, lean and low fat choices to get more nutrition for fewer calories.
2. Lower/reduced sodium and low sodium prepared meats can help you stay on track with the sodium guideline of no more than 2,300 milligrams sodium per day.
3. Emerging research supports including 25-30 grams of protein with your daily meals. A 2 oz. serving of lean lower sodium roast beef contains about 13 grams of high quality protein.*
4. Add protein to your snacks with grab-and-go favorites like beef jerky or summer sausage.
5. U.S. companies offer American Heart Association Heart-Check certified roast beef products.
6. Pairing delicious meats with veggies, fruits or low fat dairy is a smart nutrition strategy. Some delicious ideas are adding deli roast beef to a grain bowl; snacking on kebabs of beef salami and veggies; enjoying a trail mix made with sliced beef jerky instead of chocolate candies.

*Nutrition can vary by brand. See Nutrition Facts for full nutrition and sodium content.

While protein intakes are about right for most Americans, many people are consuming too many calories. Therefore, it is important for your clients to learn about nutrient density and how they can make nutrient-dense food choices, concepts emphasized in the *Dietary Guidelines for Americans 2015-2020*. Nutrient-density, when defined for the meat category, means protein and other positive micronutrients in meats are not replaced by calories from solid fats, sugars or refined starches which might be naturally present and/or added to meat¹.

Practically speaking, what does this mean for your clients? When choosing their favorite prepared meat products, they should be aware that reduced fat and low fat choices are available to help them make more nutrient-dense choices and meet their nutrition goals. In addition, they can benefit from the sodium label claims on prepared meats such as lower sodium and low sodium. Such sodium reduced choices can help people stay on track with overall recommendations for sodium while still enjoying their favorite foods. Dietary Guidelines reminds health practitioners who counsel people about food and beverage choices to consider clients' personal preferences and cultural backgrounds so that positive dietary changes are easier to achieve and maintain.

Given the relatively wide range that is recommended for protein intakes (10% - 35% of calories from protein⁴), there is quite a bit of flexibility for you as a health professional to guide your clients' protein choices so they meet their nutrition, taste and lifestyle needs. These are reassuring messages for your clients who enjoy eating a variety of protein foods, including prepared meats.

Creating products for every taste preference and nutrition need

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Protein has Established and Emerging Nutrition Benefits

Protein has many fundamental roles in the body such as supporting growth and development, from pre-birth through adolescence. For all people of all life stages, protein is vital for the proper functioning and repair of every body cell and tissue, including muscles, bones, blood, skin and eyes, just to name a few. Protein, along with dietary carbohydrate and fat, also helps fuel an active body. Emerging research on protein has probed some newer benefit areas of dietary protein that are that are less well known. These include the following:

- **Satiety and weight management:** Although consuming the right number of calories and being physically active are cornerstones to weight loss and weight maintenance, some recent research has shown that including higher amounts of protein in meals and snacks can help with satiety during calorie restriction^{5,6}. Additionally, a recent attitude/behavior survey found that many consumers believe that protein helps them feel full⁷. Emerging research also shows that adding protein to meals during weight loss can help preserve lean body mass in favor of losing fat mass⁸. Taken together, these newer findings indicate that protein may play an important role in satiety and weight management.
- **Healthy aging:** Loss of muscle mass or sarcopenia is a common occurrence with aging. Although there are many factors involved, research has shown if protein needs are met overall and 25-30 grams of high quality protein foods are included in meals throughout the day, the severity of sarcopenia among older individuals appears to be lessened^{9,10}. Another study of aging adults showed that higher intakes of animal protein foods protects against age-related muscle loss and functional decline, regardless of physical activity levels¹¹.

As a health professional, you can help your client better understand both the established and emerging benefits of protein. They need advice as it relates to their individual protein needs and their short and long term health and nutrition goals. Importantly, they look to you for nutrition advice that is right for their life stage and lifestyle.

Meat Contributes Key Nutrients

Meat offers many important nutrients. In particular, prepared beef products are rich in high quality protein and good sources of zinc, selenium, niacin and vitamin B-12. The iron and zinc in meats, including processed beef products, are also more bioavailable to the body than when derived from vegetarian sources¹². In short, meat as a protein choice offers unique nutrition, so varying one's protein routine has important nutrition advantages.

Prepared Meats Can Fit In

Clients often wonder about which protein foods to choose for good nutrition. *Dietary Guidelines for Americans 2015-2020* recommends eating a wide variety of choices from the protein foods group which includes these sub-groups: meat, poultry, eggs; seafood; and nuts, seeds and soy products. Protein from both plant and animal sources can be included in healthy diets, as seen in two of the healthy eating patterns outlined by Dietary Guidelines: the Healthy U.S.-Style Eating Pattern and the Healthy Mediterranean-Style Eating Pattern¹.

The protein food choices are endless for healthy eating, and prepared beef products can fit in as long as recommendations for total calories, sodium, saturated fat and added sugars are attained. The meat case today includes a wide array of extra lean, lean and low fat prepared beef options that can make it easier for consumers who seek products with certain nutrition profiles to enjoy their favorites. "Low sodium" and "lower sodium" claims on labels of certain prepared meats can help you stay on track with the sodium guideline of no more than 2,300 milligrams sodium per day.

Product Data for Health Professionals

Offering your clients accurate product information so they can make sound food selections at the store can help their compliance with healthy eating advice. To search for meat products with an array of nutrition claims, visit the [Product Search Center](http://www.MeatPoultryNutrition.org) at www.MeatPoultryNutrition.org.

¹ USDA and DHHS. Dietary Guidelines for Americans, 2015-2020. 8th Edition, Washington, DC: U.S. Government Printing Office. https://health.gov/dietaryguidelines/2015/resources/2015-2020_Dietary_Guidelines.pdf Accessed March 8, 2018.

² USDA and DHHS. Scientific Report of the 2015 Dietary Guidelines Advisory Committee <https://health.gov/dietaryguidelines/2015-scientific-report/> Accessed March 29, 2018.

³ Rehkamp S. A Look at Calorie Sources in the American Diet. USDA ERS Amber Waves. Published on-line December 5, 2016. <https://www.ers.usda.gov/amber-waves/2016/december/a-look-at-calorie-sources-in-the-american-diet/> Accessed March 29, 2018.

⁴ Food and Nutrition Board of the Institute of Medicine, National Academy of Sciences. Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids, 2002/2005. <https://www.ncbi.nlm.nih.gov/books/NBK56068/table/summarytables.t5/?report=objectonly> Accessed March 8, 2018.

⁵ Smeets AJ, Janssens PLHR, Westertep-Plantenga MS. Addition of capsaicin and exchange of carbohydrate with protein counteract energy intake restriction effects on fullness and energy expenditure. *J Nutr.* 2013;143: 442-7.

⁶ Astrup A, Belza A, MQ, Ritz C, JJ, Rehfeld JF. The contribution of gastrointestinal appetite hormones to protein-induced satiety. *FASEB J.* Published on-line 1 Apr 2012. http://www.fasebj.org/doi/abs/10.1096/fasebj.26.1_supplement.40.5 Accessed March 29, 2018.

⁷ International Food Information Council. International Food Information Council Foundation. 2014 Food & Health Survey: The Pulse of America's Diet: From Beliefs to Behaviors. <http://www.foodinsight.org/sites/default/files/2014%20Food%20and%20Health%20Survey%20Full%20Report.pdf> Accessed March 29, 2018.

⁸ Wycherly TP, Moran LJ, Clifton PM, Noakes M, Brinkworth GD. Effects of energy-restricted high-protein, low-fat compared with standard-protein, low-fat diets: a meta-analysis of randomized controlled trials. *Am J Clin Nutr.* 2012;96: 1281-98.

⁹ Paddon-Jones D, Rasmussen BB. Dietary protein recommendations and the prevention of sarcopenia: Protein, amino acid metabolism and therapy. *Curr Opin Clin Nutr Metab Care.* 2009;12: 86-90.

¹⁰ Cuthbertson D, Smith K, Babraj J, Leese G, Waddell T, Atherton P, Wackerhage H, Taylor PM, Rennie MJ. Anabolic signaling deficits underlie amino acid resistance of wasting, aging muscle. *FASEB J.* 2005; 19: 422-4.

¹¹ Bradlee ML, Mustafa J, Singer MR, Moore LL. High-protein foods and physical activity protect against age-related muscle loss and functional decline. *J Gerontol A Biol Sci Med Sci.* 2017 Dec 12;73(11):88-94. <https://www.ncbi.nlm.nih.gov/pubmed/28549098> Accessed March 29, 2018.

¹² Hunt JR. Bioavailability of iron, zinc, and other trace minerals from vegetarian diets. *Am J Clin Nutr.* 2003; 78, Issue 3: 633S-639S. <https://academic.oup.com/ajcn/article/78/3/633S/4690005> Accessed March 29, 2018.

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