Prepared Meats and Sodium: A Nutrition Perspective

A Resource for Professionals

NORTH AMERICAN MEAT INSTITUTE

Dietary sodium and health have been discussed and debated among nutrition researchers, policy makers and health practitioners for decades. Dietary Guidelines have consistently advised Americans to reduce sodium intake, but little progress has been made in meeting this recommendation [1,2]. Prepared meats like deli roast beef, beef hot dogs and beef jerky are traditional American favorites because of their great taste and convenience but can contribute dietary sodium. For many years, meat processors have been working to reduce sodium in their products and continue to participate in ongoing initiatives to reduce sodium in the food supply [3]. Meanwhile, consumers need advice from health professionals about individual dietary sodium goals and choosing foods, including their favorites, within a healthy eating pattern.

Sodium and Health

Sodium is an essential nutrient. It is critical to fluid and pH balance, nerve transmission, muscle contraction, and the functioning of all types of cells. Sodium intakes that are either too low or too high can lead to health problems. Inadequate sodium intakes and excessive sodium losses can result in hyponatremia, a relatively rare but serious condition. Excessive sodium intakes have been linked to hypertension (high blood pressure), which is a risk factor for heart disease, stroke and kidney disease. Lowering dietary sodium is a U.S. public health priority aimed at reducing the incidence of hypertension and the associated chronic diseases.

Sodium restriction is just part of the picture for preventing and treating hypertension, however. Extensive research has shown that multiple, interacting dietary and lifestyle factors are involved. One foundational study investigated an eating plan called DASH (Dietary Approaches to Stop Hypertension) and was the first research to support managing hypertension with an overall dietary pattern, versus with single nutrients. The DASH Eating Plan, which can lower blood pressure independently of sodium restriction, includes generous amounts of fruits, vegetables, whole grains, lean meats, beans, nuts, and low fat dairy foods; DASH limits foods and beverages high in saturated fat and added sugars [4].

Research has also focused on other minerals as they relate to hypertension, including potassium, magnesium and calcium. The DASH Eating Plan provides adequate levels of these nutrients, but for many Americans potassium, magnesium and calcium are shortfall nutrients [1]. Potassium, in particular, has emerged as a mineral of interest. An area that needs further research is whether the dietary sodium-to-potassium ratio might be a better indicator for hypertension incidence and health outcomes than intakes of sodium or potassium alone [1,5].

Given current and emerging scientific evidence, consumers need messages that extend beyond sodium and include other dietary and lifestyle modifications that can effectively prevent and manage hypertension. Such additional nutrition messages include: reaching a healthy body weight, consuming more fruits and vegetables, reducing alcohol consumption, and increasing physical activity [2,6]. Health practitioners including RDNs can be influential in offering holistic nutrition advice and ensuring clients' food preferences and cultural backgrounds are also considered.

Take Home Messages for Clients

1. **Strategies for sandwiches: compare all the Nutrition Facts of items in your sandwich. You'll find there is a wide range of sodium values for bread, meat, condiments and cheese.**
2. **Opt for a salad with colorful veggies (which are naturally low in sodium) topped with julienned roast beef or corned beef for protein. Dressing can be a major source of dietary sodium, so check labels or make your own.**
3. **Instead of salting cooked veggies like Brussel sprouts or broccoli, roast them with some diced beef salami or summer sausage to boost flavor and protein.**
4. **At the deli counter, ask about the nutrition content of prepared beef products. Many lower sodium products are available.**
5. **When eating out, check nutrition on menu items (or ask a server if they are not stated). Order smaller portions and ask for dressings and sauces on the side.**
6. **Get to know the Nutrition Facts, which always lists sodium content per serving. Look for the following helpful terms on package labels to help you keep tabs on your sodium goals.**

Salt/Sodium-Free	**Less than 5 mg of sodium per serving**
Very Low Sodium	**35 mg of sodium or less per serving**
Low Sodium	**140 mg of sodium or less per serving**
Reduced Sodium	**At least 25% less sodium than the regular product**
Light in Sodium or Lightly Salted	**At least 50% less sodium than the regular product**
No-Salt-Added or Unsalted	**No salt is added during processing – but these products may not be salt/sodium-free unless stated. Check Nutrition Facts.**

Creating products for every taste preference and nutrition need

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Dietary Sodium Recommendations

Dietary Guidelines for Americans 2015-2020 recommends that sodium be limited to 2,300 milligrams per day for adults and children 14 years and older[2], a level consistent with 2013 Institute of Medicine report on sodium[7]. Given evolving research on dietary sodium and health, a panel of U.S. and Canadian experts has recently been formed to review the existing and emerging science related to the sodium and potassium Dietary Reference Intakes (DRIs)[8].

Sodium in American Diets

The average intake of dietary sodium for adults in the U.S. is 3,400 milligrams per day[7]. Dietary sodium comes mainly from foods that are processed or prepared before reaching the consumer, including foods purchased at stores as well as foods consumed when eating out.

When asked about foods that are highest in sodium, consumers frequently mention salty snacks and lunch meat/hot dogs[9], but many more foods besides these two contribute significantly to sodium intakes in the U.S. including the following: bread, pizza, burgers, breakfast sandwiches, soups, burritos/tacos, chicken, cheese, eggs/omelets[10].

Dietary Guidelines for Americans 2015-2020 and other Federal agencies have called upon food manufacturers and the restaurant industry to reduce the sodium in the foods they produce[1, 3]. Both industries are responding with short and long term plans to reach specific sodium goals. Generally, consumers will accept very modest sodium reductions (i.e., reductions of 10%-15%), which is a key reason that revamped products and restaurant menus are phasing in gradually[11].

Salt and Sodium in Prepared Beef Products

Before modern refrigeration, salt was critical to preserving meats. It is an iconic ingredient in many favorite prepared beef items like beef jerky, salami, pastrami, corned beef and hot dogs. Consumers may question why modern methods for making prepared meats still rely on salt. Sodium chloride is used, together with other ingredients, because it optimizes the flavor and texture of prepared meats. For example, the unique texture of a beef hot dog and the juiciness of hot pastrami are qualities that depend on salt. Salt is also critical to preventing growth of microbes that can lead to spoilage or food borne illness.

Sodium and Labeling

Listing of sodium content per serving on the Nutrition Facts has been mandatory for almost 25 years. It is useful information because even similar products can have varying levels of sodium per serving. Certain labeling claims like 'lower sodium" or "low sodium" can also be useful to consumers who are looking for these attributes. Such claims can only be declared if the product meets Federal claim definitions.

Nutrition labeling requirements were recently extended to menus of national and regional restaurants and other locations selling restaurant-like foods and beverages. Consumers will be able to see the nutrient values for menu items, including the amount of sodium, for the foods they consume away from home[12].

Prepared Meats Can Fit In

Dietary Guidelines for Americans 2015-2020 recommends eating a wide variety of foods from all the food groups, which can include protein favorites like prepared beef products[2]. Today's deli counters and meat cases offer many options including lower sodium, low sodium and no salt added products for consumers who have specific dietary sodium goals.

Product Data for Health Professionals

Offering 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 specific nutrition claims, including sodium-related claims, visit the Product Search Center at www.MeatPoultryNutrition.org.

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[9] International Food Information Council. 2011 Consumer Sodium Research: Concern, Perceptions, Action. https://www.foodinsight.org/Content/3862/Sodium%202011_Final%20Report_0916.pdf Accessed April 30, 2018.

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[11] FDA.Sodium Reduction. https://www.fda.gov/Food/IngredientsPackagingLabeling/FoodAdditivesIngredients/ucm253316.htm Accessed April 29, 2018.

[12] FDA. Menu Labeling Final Rule: Food Labeling; Nutrition Labeling of Standard Menu Items in Restaurants and Similar Retail Food Establishments. https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm515020.htm Accessed April 29, 2018.

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