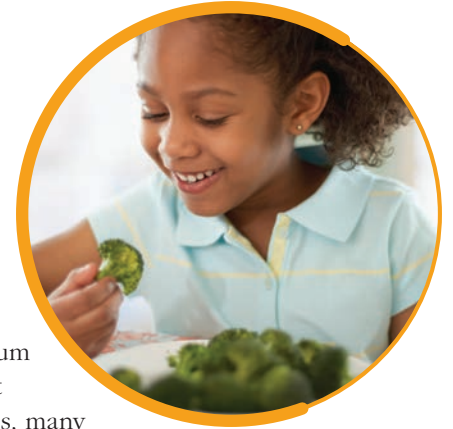


Giving Kids a Head Start on Health: Sodium Reduction in Marion County



Problem

Many of the nearly 2,000 low-income families served by Marion County's Head Start Program have limited access to nutritious foods, making them more likely to join the approximately 90% of U.S. children who consume more than the recommended amount of sodium. Diets high in sodium can lead to high blood pressure, which is a major risk factor for heart disease and stroke.

Project

The Marion County Public Health Department partnered with Family Development Services in an effort to follow the 2015–2020 *Dietary Guidelines for Americans* and reduce sodium in food served to children and staff at all 10 Head Start sites in the county.

Outcomes

From April 2014 to February 2015, participating Head Start sites reduced average sodium content by 14% overall in their provided meals and snacks. The sites also reduced sodium by 43% in the four main meals that they chose for modification.

Resources

- Centers for Disease Control and Prevention: Salt www.cdc.gov/salt
- Marion County Public Health Department www.marionhealth.org
- Family Development Services www.fds.org

Statement of Problem: Diets high in sodium can lead to high blood pressure, which is a major risk factor for heart disease and stroke. About 90% of U.S. children consume more sodium than recommended. Marion County's Head Start Program serves nearly 2,000 low-income families, many of whom have less access to nutritious foods. Children served by the program eat at least a third of their meals at Head Start, so reducing sodium in those meals can make a big difference in the children's sodium intake.

Project Description: The Marion County Public Health Department (MCPHD) is a participant in CDC's **Sodium Reduction in Communities Program**. This 3-year program supports the partnership with Family Development Services (FDS) and is intended to reduce sodium and meet the 2015–2020 *Dietary Guidelines for Americans* for food served to Head Start children and staff. MCPHD's goal is to increase the nutritional value of foods served at all 10 Head Start sites in Marion County, Indiana. One of the project's major components is to reduce sodium intake by improving the availability of lower sodium foods. Evaluating change includes monitoring lower sodium foods and ingredients purchased by the kitchen staff, as well as assessing consumer acceptance of the modified food and meals through taste tests and digital image analysis of plate waste. To date, the project has made several steps:

- Assessed the nutritional content of foods and beverages currently served at Marion County Head Start sites to determine items to target for sodium reduction.
- Created nutrition standards for foods and meals served at county Head Start sites.
- Developed a procurement policy to reflect the new nutrition standards.
- Implemented meal modifications to reduce sodium content.

MCPHD and FDS have also worked with distributors to identify lower sodium products that are components of four specific meals. Using smaller buns, removing cheese, switching to lower sodium sauces, and removing sauces entirely contributed to sodium reduction. Creating lower sodium meals, such as chicken ratatouille to replace chicken bites and zucchini to replace cheesy potatoes, also helped reduce sodium in Head Start menus. Additionally, switches to lower sodium soup bases, salad dressings, and fruit and vegetable options helped reduce sodium levels in eight meals and two sides.



“What I’ve learned is meal placement on the menu is important. I need time to prepare my recipes.”

—Toronna Chilton, head cook,
Family Development Services

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As a result of newly established procurement guidelines, a nutritionist must review products before purchase. By using a grant-funded assessment of the kitchen layout to determine the feasibility of cooking from scratch, FDS was able to make improvements to the central kitchen that prepares and distributes meals to the Head Start sites, including several equipment upgrades. In addition, kitchen staff received training on skills to help reduce sodium, and teachers attended an orientation about introducing children to new foods and positive role modeling at mealtimes.

Outcomes: From baseline in April 2014 to reassessment in February 2015, county Head Start sites achieved a 14% reduction in average daily sodium content across all meals and snacks provided. In addition, sodium content was reduced by 43%, from an average of 1,060 milligrams (mg) to 600 mg, among four meals targeted for modification. The average cost of the four chosen meals was reduced by 5% (from \$1.65 to \$1.56), and plate waste analysis showed no increase in lunch waste.

Conclusions: Support at all levels of the partner organization is crucial to the project’s success and to selecting foods to modify based on feasibility and partner preference. Noteworthy insights from the project include the following:

- Of all the different sodium reduction techniques employed, product substitutions are easiest for kitchen staff to implement and are sustainable if nutrition standards are followed consistently.
- Menu and recipe modifications have the greatest potential for reducing sodium but are the most time-intensive for kitchen staff.
- “Speed scratch” cooking, a method that combines convenience foods and cooking from scratch, can reduce sodium content in meals, but it is labor intensive. Meals prepared in this way need to be paired with less labor-intensive meals on the menu so that staff have time to do the extra work required.
- By working with food distributors, it is possible to identify lower sodium products that meet nutrition standards and still remain within existing cost structures.

Significant sodium reduction in meals provided at early education venues can be achieved through menu modification and product substitution. Implementing revised nutrition standards and procurement policies will not only contribute to sustainable sodium reduction, but also promote changes in purchasing practices, which have the potential to offset any cost increases associated with the purchase of lower sodium food items. Reducing sodium in children’s diets today can offer those children better health tomorrow.