COUNTY OF SAN DIEGO | San Diego, California County Psychiatric Hospital Lowers Sodium in Meals

Problem

Almost 30% of adults in San Diego County have been diagnosed with high blood pressure, which increases the risk for heart disease and stroke. Heart disease accounts for 23% of deaths in San Diego County and 24% of deaths in the U.S.

Project

Congregate meal settings present an ideal opportunity to improve the health of large numbers of people. The County of San Diego's Chronic Disease and Health Equity Unit aimed to reduce sodium in meals served by the San Diego County Psychiatric Hospital by at least 10% over 2 years.

Outcomes

The hospital's food service operator exceeded the goal by initiating changes in procurement procedures, cooking practices, and ingredients for a 16% reduction of the menu's average daily sodium content.

Resources

- Centers for Disease Control and Prevention: Salt www.cdc.gov/salt
- Sodium Reduction in Communities Program www.cdc.gov/dhdsp/programs/ sodium_reduction.htm
- Chronic Disease in San Diego County Report http://bit.ly/2bm4n5o

Statement of Problem: The typical American consumes more than 3,400 milligrams (mg) of sodium each day. The recently updated *Dietary Guidelines for Americans* recommend consuming less than 2,300 mg of sodium per day. In San Diego County, 29% of adults have been diagnosed with high blood pressure. High blood pressure increases the risk for heart disease and stroke, the leading causes of death in the U.S. Usert disease and



the leading causes of death in the U.S. Heart disease accounts for 24% of deaths in the U.S. and 23% of deaths in San Diego County.

Reduced sodium teriyaki burger (Photo credit: Kathleen Bundy)

Project Description: The Chronic Disease and Health Equity (CDHE)
Unit received funding through CDC's Sodium Reduction in Communities
Program (SRCP) in 2014 and created the Healthy Works: Sodium Reduction
Initiative (SRI). SRI focuses on county-run congregate meal and workplace cafeterias, including the San Diego County Psychiatric Hospital that serves approximately
250 meals each day to patients and staff. The goal was to reduce sodium in meals by at least 10% over the 2-year project.

SRI staff and the hospital's food service management company, Food Management Associates (FMA), worked together to assess practices that affected sodium levels of meals and developed an action plan. A nutrient analysis of the hospital's 5-week menu, completed by FMA with assistance from SRI, showed that the average baseline sodium content for a day of meals was 3,878 mg. On the basis of the sodium practices assessment results, SRI and FMA put a number of strategies into action to reduce the menu's sodium content, including identifying and purchasing lower sodium ingredients, reducing the use of processed products, increasing scratch cooking, and using more fresh produce.

Kathleen Bundy, registered dietitian and director of Food and Nutrition Services at the hospital, researched lower sodium products available through FMA's primary food distributor and began purchasing lower sodium breakfast and luncheon meats, canned tomato products, chicken base, and salsa. The county's food systems specialist helped procure local produce through FMA's current produce distributor. FMA prides itself on using freshly prepared foods in recipes that are lower in fat, sodium, and cholesterol. SRI provided cooking supplies, such as a wedge cutter, a slicer, a food scale, and cutting boards, to encourage the use of more fresh fruits and vegetables. FMA dietary staff also changed cooking processes and modified recipes to reduce sodium. Bundy said, "It is important for organizations as customers to put more pressure on their suppliers for healthier food items."

To make these changes, the Food and Nutrition Services staff engaged dietary staff in the project to help them learn more about healthy eating and food preparation. "It can be a challenge to train kitchen staff and get 'buy-in' on a project.



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New cooking supplies provided by SRI (Photo credit: Deirdre Kleske)

"It's exciting to be a part of promoting healthy eating institutionally and encouraging people to appreciate the true taste of fresh food. I believe this project has broader implications for public health."

 Kathleen Bundy, Registered Dietitian and Director of Food and Nutrition Services, San Diego County
 Psychiatric Hospital

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The entire food service team needs to be on board and motivated to make the changes, otherwise it can just be business as usual. It's exciting for them to be part of a national project affecting positive change and see real results from their hard work," Bundy said.

Outcomes: By modifying cooking processes or replacing products high in sodium, the hospital was able to reduce the menu's average daily sodium content by 16%, from 3,878 mg to 3,257 mg, exceeding the 10% reduction goal.

The following strategies made a significant difference:

- Using lower sodium versions of chicken and beef base, canned tomato products, breakfast and luncheon meats, soy sauce, and salsa.
- Using dried beans instead of canned beans (which also resulted in cost savings).
- Replacing processed Swiss and American cheese with real Swiss and cheddar cheese slices.
- Using fresh potatoes instead of frozen potato products.
- Engaging kitchen staff in food preparation changes.

Conclusions: In a hospital facility with a pre-set menu, patients' sodium intake is dependent on what is offered; they have little control over their sodium intake. By adapting recipes and committing to more scratch cooking, finding product substitutions, and obtaining labor-saving scratch-cooking supplies, the food service operator at the San Diego County Psychiatric Hospital was able to achieve a 16% reduction in sodium in the patient menu.

Maintaining the current budget through strategic product substitutions and training staff in sodium reduction strategies helps ensure that reduced sodium levels are sustained after the project concludes. Reducing sodium content in the menu contributes to the health and well-being of even short-term patients, while adopting new procurement practices leads to long-term, institutional change. Leadership and personal commitment from food service directors, like Bundy, is a key factor in gaining support from the food service team to make changes in product choice and cooking habits that advance healthful, sustainable food and beverage practices. Bundy now co-chairs the Nutrition in Healthcare Leadership Team, a local collaboration facilitated by Community Health Improvement Partners to adopt healthful, sustainable food and beverage purchasing practices in San Diego County health care systems. In addition to making improvements at the hospital, Bundy joined other county food service operators to develop *Eat Well Standards* for all foods and beverages sold and served by the county. Once approved, these standards will take into account the nutritional, environmental, and economic effects of the foods and beverages purchased and consumed and will promote a healthy food system.

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Slicing equipment provided by SRI

(Photo credit: Kathleen Bundy)