

BACKGROUND

- High sodium intake is associated with hypertension, a major risk factor for heart disease which is the leading cause of death in NYC and across the U.S.^{1,2} Average daily sodium intake in the U.S. exceeds the adult recommended daily limit of 2,300 mg by 40%.^{3,4}
- The NYC Department of Health and Mental Hygiene (NYC DOHMH) launched the National Salt Reduction Initiative (NSRI) in collaboration with over 100 U.S. city and state health authorities and organizations to encourage food companies to voluntarily lower sodium in packaged and restaurant foods from 2009 to 2014 by 25% .
- As part of the NSRI, the NYC DOHMH set sodium density targets (milligrams [mg] sodium per 100 grams of food) for 2012 and 2014 for 25 restaurant food categories that contribute to sodium intake. The goal was for each category's mean sodium density to be reduced to less than or equal to the target.
- NYC DOHMH also set a maximum of 1,500 mg and 1,200 mg per menu item for 2012 and 2014, respectively. The goal was for no restaurant menu items to exceed these values.
- This report evaluates progress toward meeting NSRI targets and maxima from 2009 to 2014 using data from top-selling U.S. chains.

CONCLUSIONS

- Mean sodium density changed very little across top chain restaurant foods. There was a significant decline in sodium in eight categories, indicating that sodium reformulation is achievable during a short time period.
- More than one in 10 menu items contain more than 1,500 mg of sodium and a quarter of items contain more than 1,200 mg sodium, which accounts for well over one half the daily recommended limit of sodium.
- Limitations include: new items or discontinued items were not assessed; sample includes only quick-service restaurants and items that restaurants voluntarily provided serving size in grams and sodium information; data was not weighted by sales; data does not include menu item customizations.
- Setting maximum levels of sodium in addition to targets based on sodium density is important. This dual approach helps encourage reformulation while taking portion size into consideration.
- On June 1, 2016, the FDA announced draft guidance for industry on two and ten year voluntary sodium targets and maxima which, if adopted, will continue the goals and framework of the NSRI.⁶ Sodium levels in restaurant foods should be tracked going forward to assess changes to the food supply during the FDA's sodium reduction program.

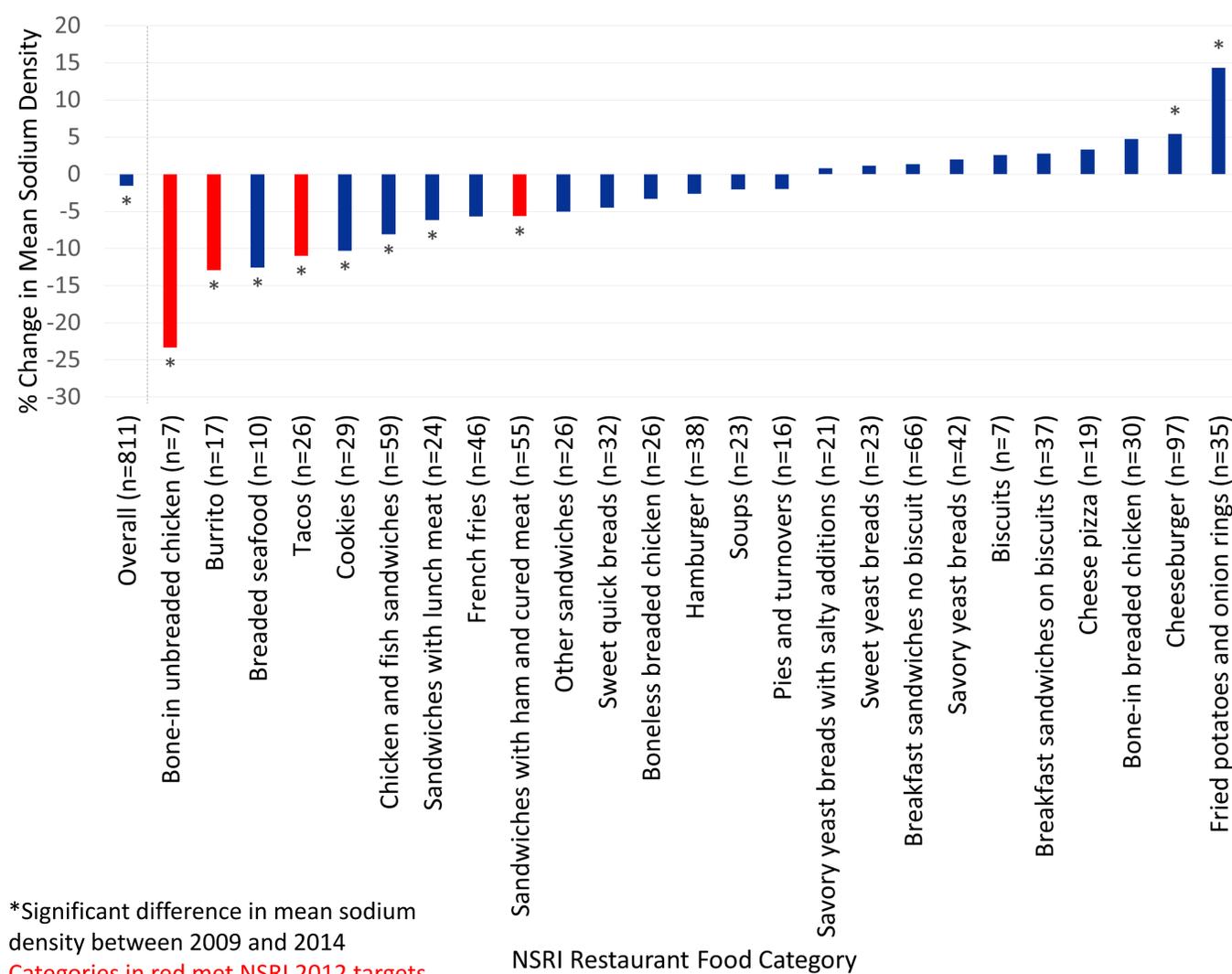
DATA DESCRIPTION

- The NSRI Restaurant Food Database consists of nutrition information collected from restaurant websites of the 50 quick-service restaurants with the highest sales in the U.S in 2009, 2012, and 2015.⁵
- Identical menu items (foods listed on menus in all three years) from the 25 NSRI restaurant food categories were included (n=1107). Seventy-three percent of items had complete sodium and serving size data in every year, which were necessary to calculate sodium density. The final sample included 811 items from 35 restaurants.

RESULTS

- In 2009, when the targets were established, zero categories met NSRI 2012 or 2014 targets. By 2014, four of the 25 categories (16%) met NSRI 2012 targets and zero categories met NSRI 2014 targets (Figure 1).
- From 2009 to 2014, the overall absolute change in mean sodium density was -8 mg, a significant -1.5% relative decrease (P <0.03). Eight categories significantly declined in mean sodium density; two categories increased significantly (Figure 1).
- Sodium reformulation varied by restaurant; relative change in mean sodium density ranged from -26% to 17%. When the two restaurants with the greatest relative change in mean sodium density were excluded (-26.3% [n=8], -24.8% [n=32]), overall mean sodium density did not change significantly (-0.5%; P=0.49).
- In 2009, 85% of items were less than the 2012 NSRI maximum level of 1,500 mg compared to 88% in 2012 and 2014. In 2009, 71% of items were less than the 2014 NSRI maximum level of 1,200 mg compared to 74% in 2012 and 2014.

FIGURE 1. Change in Mean Sodium Density (mg/100 g) by NSRI Restaurant Food Category, 2009 - 2014



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