

The Salty Truth About Sodium: Why New York Needs Menu Warnings S428 (Rivera)/A6529 (Reyes)

Diet & Chronic Disease

- Unhealthy dietary patterns, characterized in part by high consumption of sodium, are a leading risk factor for mortality due to heart disease and other conditions. High sodium intake accounts for a substantial number of cardiovascular deaths in the United States.¹
- The overconsumption of sodium can lead to hypertension, which is a major risk factor for heart disease and stroke.²
- Having chronic conditions related to diet, including heart disease and high blood pressure, is associated with increased risk of becoming severely ill from infectious diseases like COVID-19.^{3,4}
- Heart disease was the leading cause of death from 2000-2018 in New York.⁵
- The projected total cost of chronic disease from 2016-2030 in New York is \$2.2 trillion.⁶
- If current trends continue, the projected per person medical and productivity costs of chronic disease in 2030 will be \$7,900 per New York resident.⁷

Hypertension Rates in New York State

- Over 4.5 million adults in New York (30%) report being told by a health professional they have hypertension, and 79% of that group reports taking medication to control it.⁸

Sodium in the Diet

- Sodium is a mineral added to foods to enhance flavor, increase shelf life, or improve the texture and appearance of food.
- While some sodium is necessary in the diet, eating higher levels of sodium can increase the risk of hypertension, heart disease and stroke.⁹
- The 2020 Dietary Guidelines for Americans recommend that adults limit their sodium intake to 2,300 mg/day (equal to about 1 teaspoon) to reduce the risk of chronic disease.¹⁰
- However, about 90 percent of people living in the US consume excessive sodium¹¹, with an average daily intake of 3,393 mg of sodium a day (1 ½ teaspoons), nearly one and a half times the recommended limit.¹²
- Dietary sodium reduction is a recommended strategy for prevention and treatment of hypertension and is supported by the American College of Cardiology, American Heart Association, and other leading medical organizations.¹³
- For people with hypertension, a low-sodium diet can reduce systolic blood pressure by 7-10mm Hg, a reduction that is comparable to some medications.^{14,15}
- Researchers have estimated that reducing Americans' daily sodium intake by about a third (1,200 mg) would prevent between 44,000 and 92,000 deaths per year from stroke, heart attack, and other causes.¹⁶
- Even a smaller reduction in sodium of just under 10 percent (350 mg per day) could prevent about 1 million strokes and heart attacks, adding more than 1.3 million years to American's lives.¹⁷

The Salty Truth About Chain Restaurant Foods

- The average sodium content of a default combination meal at a chain restaurant in the US is 2,110 milligrams, a value that aggressively approaches the daily limit for sodium (2,300mg/day).¹⁸
 - The leading sources of sodium in the American diet, accounting for 71% of overall sodium intake, are from restaurants, prepackaged, and processed foods (as opposed to sodium inherent to a food or added during cooking or at the table).¹⁹
 - The top food type contributing sodium to our diet is sandwiches—including burgers, chicken sandwiches, hotdogs, breakfast sandwiches, sandwiches made with deli meats, and burritos/tacos.²⁰
 - Restaurant foods have more sodium per calorie compared to food obtained from stores.²¹
 - The sodium content in similar menu items at different restaurant chains varies significantly, making it impossible for consumers to know how much sodium they are ordering.²²
- For example, a regular side of French fries at KFC contains 1,100mg (48%DV) of sodium²³, where a regular side of French fries at Popeyes's contains 590mg (26% DV).²⁴

Warning Icons on Restaurant Menus Show Promise for Reducing Sodium Consumption


- Sodium warning icons can increase consumers' knowledge of sodium content and lead to lower-sodium food purchases.²⁵
- Requiring restaurants to tell customers what is in their food can motivate them to make foods healthier. When restaurants in King County, Washington were first required to publish the amount of sodium in their menu items, they changed their recipes, leading to overall reductions in sodium in menu items at sit-down restaurants (but not quick-service restaurants).²⁶ Further reformulation may be seen with more prominent posting of sodium content through warning icons.
- Warning icons provide a pictorial element that makes them accessible to low literacy and non-English speaking consumers, providing more equitable access to information.²⁷

To learn more about the science behind nutrient warnings, check out CSPI's

Nutrient Warnings Factsheet at:

<https://bit.ly/NutrientWarnings>



Warning:  indicates that the sodium (salt) content of this item is higher than the total daily recommended limit (2,300 mg). High sodium intake can increase blood pressure and risk of heart disease and stroke.

Senate bill S428/A6529, sponsored by New York State Senator Gustavo Rivera and Assemblymember Karines Reyes, would require warning icons on chain restaurant menus for items that exceed an entire day's worth of sodium (2,300mg).

For more information, please contact the Center for Science in the Public Interest at dnara@cspinet.org.

¹ Micha, R., et al. (2017). Association Between Dietary Factors and Mortality From Heart Disease, Stroke, and Type 2 Diabetes in the United States. *JAMA*, 317(9), 912–924. <https://doi.org/10.1001/jama.2017.0947>

² National Academies of Sciences, Engineering, and Medicine (2019). *Dietary Reference Intakes for Sodium and Potassium*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25353>.

³ Centers for Disease Control and Prevention. (2021, December 14). People with certain medical conditions. Centers for Disease Control and Prevention. Retrieved February 4, 2022, from <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>

⁴ Yang, J., et al. (2020). Prevalence of comorbidities and its effects in patients infected with SARS-CoV-2: a systematic review and meta-analysis. *International journal of infectious diseases: IJID : official publication of the International Society for Infectious Diseases*, 94, 91–95. <https://doi.org/10.1016/j.ijid.2020.03.017>

⁵ New York State Department of Health. Vital Statistics Data as of August 2020. (2020). (rep.). *Leading Causes of Death, New York State, 2009-2018*. Retrieved September 17, 2021, from https://apps.health.ny.gov/public/tabvis/PHIG_Public/lcd/reports/#state.

⁶ Partnership to Fight Chronic Disease: A Vision for a Healthier New York. (n.d.). (rep.). *What is the Impact of Chronic Disease in New York?* Retrieved September 17, 2021, from https://www.fightchronicdisease.org/sites/default/files/download/PFC_D_NY_FactSheet_FINAL1.pdf.

⁷ Ibid., 2.

⁸ BRFSS Brief. Number 2021-12. (2019). (rep.). *High Blood Pressure, New York State Adults, 2019*. Retrieved September 17, 2021, from https://www.health.ny.gov/statistics/brfss/reports/docs/2021-12_brfss_high_blood_pressure.pdf.

⁹ National Academies of Sciences, Engineering, and Medicine. (2019). *Dietary Reference Intakes for Sodium and Potassium*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25353>.

¹⁰ U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th Edition. December 2020. Available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

¹¹ Jackson, S. L., et al. (2016). Prevalence of Excess Sodium Intake in the United States - NHANES, 2009-2012. *MMWR. Morbidity and mortality weekly report*, 64(52), 1393–1397. <https://doi.org/10.15585/mmwr.mm6452a1>

¹² U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th Edition. December 2020. Available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

¹³ Whelton, P. K., et al. (2018). 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: Executive Summary: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *Hypertension (Dallas, Tex.: 1979)*, 71(6), 1269–1324.

¹⁴ Juraschek, S. P., et al. (2017). Effects of Sodium Reduction and the DASH Diet in Relation to Baseline Blood Pressure. *Journal of the American College of Cardiology*, 70(23), 2841–2848. <https://doi.org/10.1016/j.jacc.2017.10.011>.

¹⁵ Food and Drug Administration, Center for Drug Evaluation and Research. Summary Minutes of the Cardiovascular and Renal Drugs Advisory Committee Meeting September 9, 2014. [Accessed February 16, 2022]; Available at: <https://www.fda.gov/downloads/AdvisoryCommittees/CommitteesMeetingMaterials/Drugs/CardiovascularandRenalDrugsAdvisoryCommittee/UCM456601.pdf>.

¹⁶ Bibbins-Domingo, K., et al. (2010). Projected effect of dietary sodium salt reductions on future cardiovascular disease. *The New England journal of medicine*, 362(7), 590–599. <https://doi.org/10.1056/NEJMoa0907355>

¹⁷ Smith-Spangler, C. M., et al. (2010). Population strategies to decrease sodium intake and the burden of cardiovascular disease: a cost-effectiveness analysis. *Annals of internal medicine*, 152(8), 481–W173. <https://doi.org/10.7326/0003-4819-152-8-201004200-00212>

¹⁸ Vercammen, K. A., et al. (2019). Calorie and Nutrient Profile of Combination Meals at U.S. Fast Food and Fast Casual Restaurants. *American journal of preventive medicine*, 57(3), e77–e85. <https://doi.org/10.1016/j.amepre.2019.04.008>

¹⁹ Harnack LJ, et al. (2017). Sources of sodium in US adults from 3 geographic regions. *Circulation*. 135(19):1775-1783.

²⁰ U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th Edition. December 2020. Available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

²¹ Quader, Z. S., et al. (2017). Sodium Intake Among Persons Aged ≥2 Years - United States, 2013-2014. *MMWR. Morbidity and mortality weekly report*, 66(12), 324–328. <https://doi.org/10.15585/mmwr.mm6612a3>

²² Urban, L. E., et al. (2014). Temporal trends in fast-food restaurant energy, sodium, saturated fat, and trans-fat content, United States, 1996-2013. *Preventing chronic disease*, 11, E229. <https://doi.org/10.5888/pcd11.140202>

²³ <https://www.kfc.com/full-nutrition-guide>

²⁴ https://plk-use1-prod.sites.rbictg.com/nutrition/PLK_Nutrition.pdf

²⁵ Musicus, A., et al. (2019). Online Randomized Controlled Trials of Restaurant Sodium Warning Labels. *American journal of preventive medicine*, 57(6), e181–e193. <https://doi.org/10.1016/j.amepre.2019.06.024>

²⁶ Bruemmer, B., et al. (2012). Energy, saturated fat, and sodium were lower in entrées at chain restaurants at 18 months compared with 6 months following the implementation of mandatory menu labeling regulation in King County, Washington. *Journal of the Academy of Nutrition and Dietetics*, 112(8), 1169–1176. <https://doi.org/10.1016/j.jand.2012.04.019>

²⁷ Roberto, C. A., et al. (2021). The Influence of Front-of-Package Nutrition Labeling on Consumer Behavior and Product Reformulation. *Annual review of nutrition*, 41, 529–550. <https://doi.org/10.1146/annurev-nutr-111120-094932>