

American Heart Association Sodium Reduction Initiative

Pan-American Health Organization
Salt Smart Americas Webinar

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Sodium and AHA's 2020 Impact Goal

Life's Simple 7

20% 
Improved
Health

 Not Smoking

 Physical Activity

 Healthy Diet

 Healthy Weight

 High BP

 Blood Cholesterol

 Blood Glucose

By 2020, to improve the cardiovascular health of all Americans by 20% while reducing deaths from cardiovascular diseases and stroke by 20%

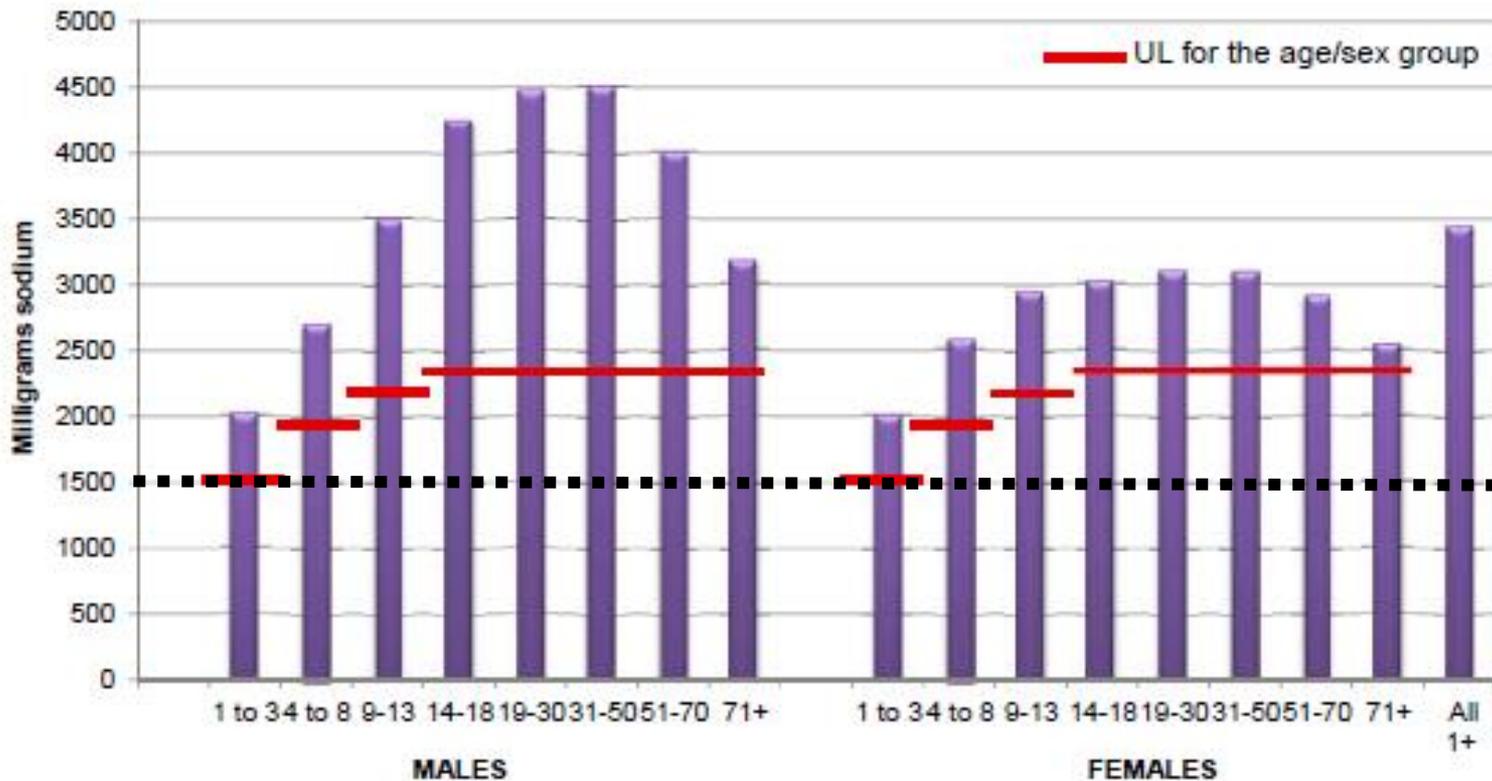
20% 
Mortality



Current U.S. Sodium Intakes and Food Sources

Average Daily Sodium Consumption

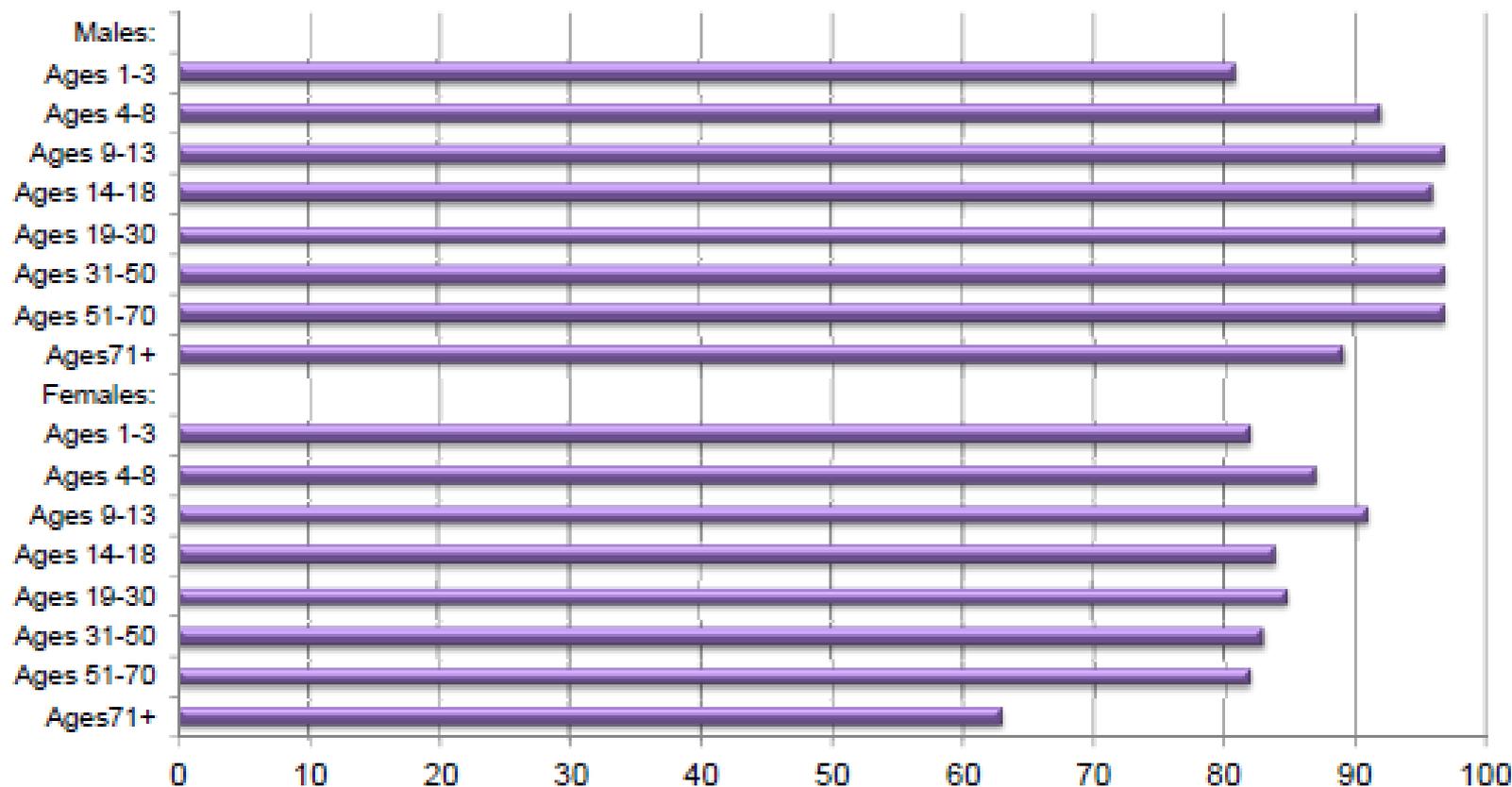
Average: Nearly 3,500+ mg/day for males and females age 1+ years



**AHA
recommendation
for ideal heart
health (1,500
mg/day)**

Note: UL = upper limit according to the 2005 IOM DRI report on sodium
Source: What We Eat in America, NHANES 2007-2010 (National Health and Nutrition Examination Survey), self-reported dietary intake

% of Age/Sex Group with Usual Intake Above UL

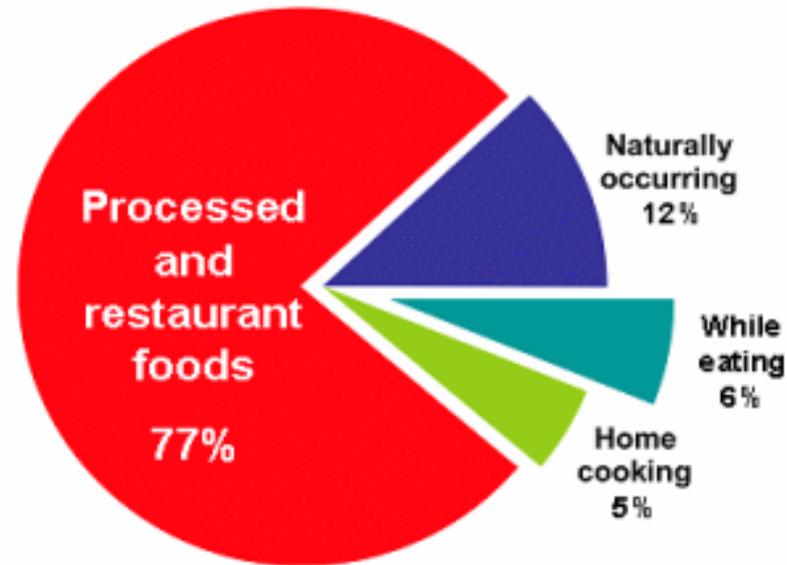


Note: UL = upper limit according to the 2005 IOM DRI report on sodium
Source: What We Eat in America, NHANES 2007-2010 (National Health and Nutrition Examination Survey), self-reported dietary intake

Dietary Sodium Sources



Most Sodium Comes from Processed and Restaurant Foods



Source: Mattes, RD, Donnelly, D. *Journal of the American College of Nutrition*. 1991 Aug;10(4):383-393.

Top Dietary Sodium Sources

Rank	Food Types	%
1	Bread and rolls	7.4
2	Cold cuts and cured meats	5.1
3	Pizza	4.9
4	Poultry	4.5
5	Soups	4.3
6	Sandwiches	4.0
7	Cheese	3.8
8	Pasta mixed dishes	3.3
9	Meat mixed dishes	3.2
10	Savory snacks	3.1



Simple Swaps = Big Changes!

Higher Sodium Choices

Lower Sodium Choices

Top slice of bread
200 mg

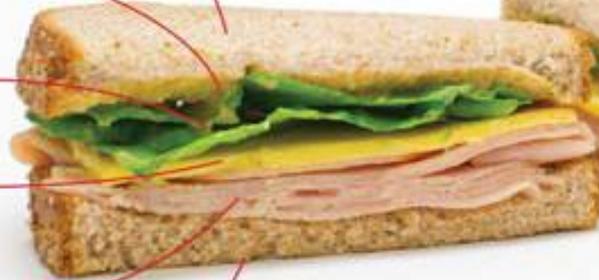
1 teaspoon mustard
120 mg

1 leaf of lettuce
2 mg

1 slice of cheese
310 mg

6 thin slices of turkey
690 mg

Bottom slice of bread
200 mg



Top slice of bread
110 mg

1 teaspoon mustard
55 mg

1 leaf of lettuce
2 mg

1 slice of cheese
135 mg

6 thin slices of turkey
440 mg

Bottom slice of bread
110 mg



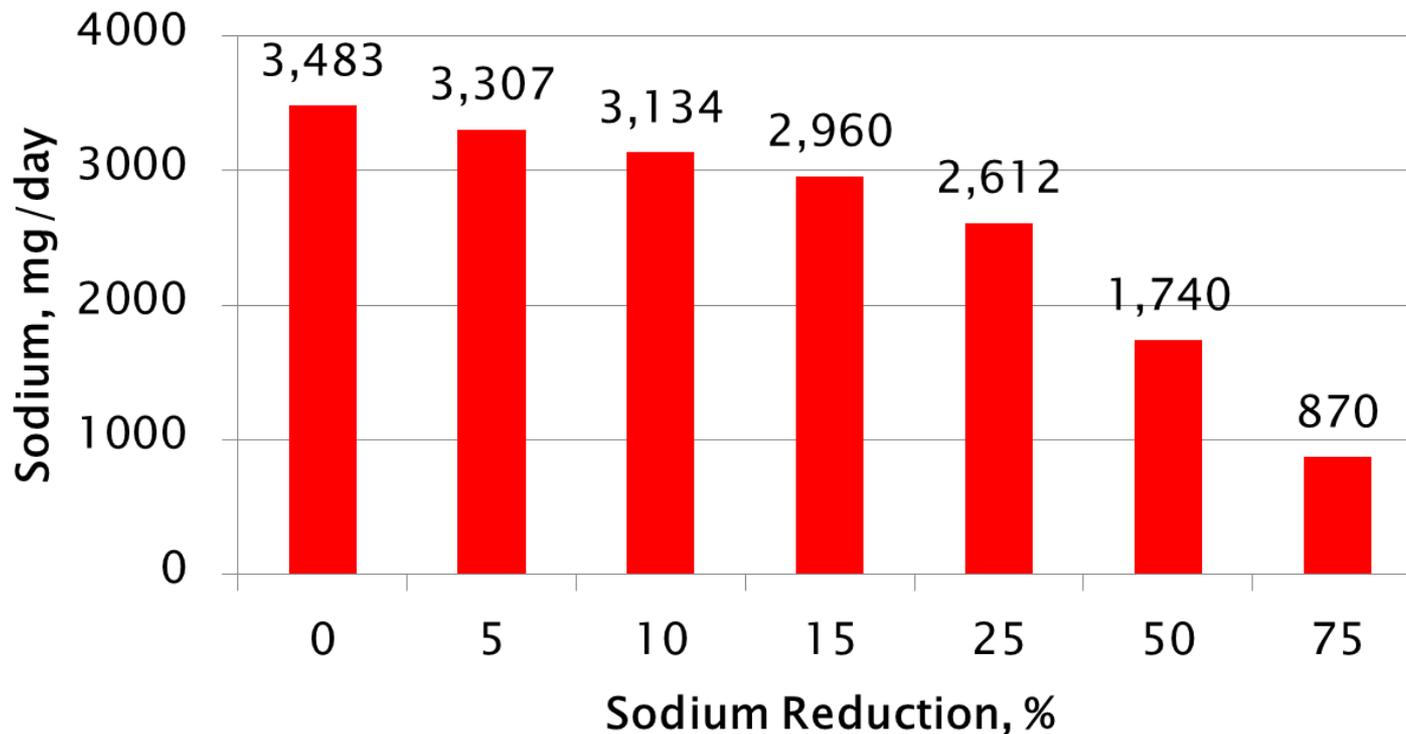
Total = 1,522 mg

**Savings: 670 mg
sodium!**

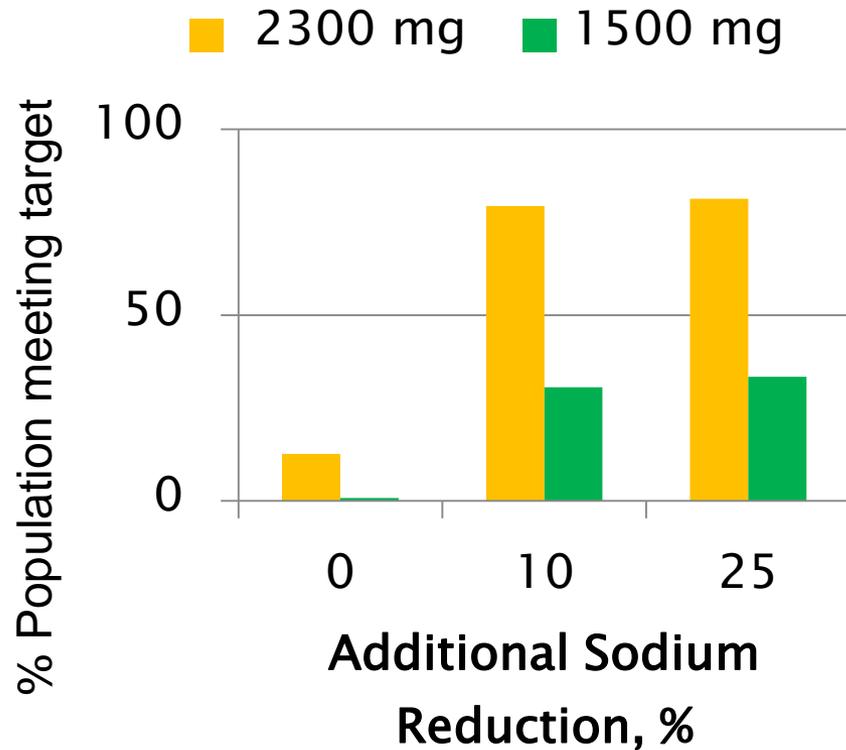
Total = 852 mg

Modeling Impact

It will take a 25-50% sodium reduction in the food supply for Americans' average sodium intakes to meet the U.S. Dietary Guidelines for Americans recommendation of less than 2,300 mg/day



Modeling Impact



**Top 50 Reduced
50%**

If the food industry reduced sodium by 50% in the top 50 foods contributing to Americans' sodium intakes, and then reduced sodium by 10% in all other foods, this could result in 80% of Americans consuming 2,300 mg/day 30% consuming 1,500 mg/day.

AHA Consumer Awareness and Education Efforts

Consumer Research – Focus Group and Survey Findings (2012-2013)

- People understand that too much sodium impacts health
 - 82% associate sodium with high blood pressure
 - 56% with heart disease
 - 43% with stroke
- 97% underestimate or cannot estimate the amount of sodium they are eating – only 2-3% estimate that they consume 3,000-3,500 mg/day
- 95% can correctly identify some foods that are high in sodium (cold cuts, soups); but only small percentages realize that poultry and bread are leading contributors to sodium intake
- High blood pressure is the most commonly reported reason to reduce sodium; second most commonly reported reasons are reducing bloating and losing weight
- Packages that have a reduced/no salt claim often dismissed as “reduced in or having no flavor”
- Many people see eating out/ordering in as an indulgence; are less likely to make healthy food choices at restaurants

Consumer Research – Subgroup Analysis

- Compared to Caucasians and Hispanics, **African Americans** are more concerned about sodium, more likely to seek information, and more interested in taking action to reduce sodium consumption...but they are not necessarily more knowledgeable about how sodium affects their health
- In general, **females** are more likely than males to be concerned, knowledgeable, seek information, and have taken action to reduce sodium intake
- Likewise, **primary food purchasers**, who skew female, are more concerned and likely to take action
- In general, attitudes, knowledge, and behavior correlates with age and **presence of cardiovascular health condition**

Consumer Research - Motivations

On a scale of 0-10, how much would each of the following motivate you to reduce your sodium/salt consumption?

9.0 - Hearing more about exactly how much sodium is in the foods I eat

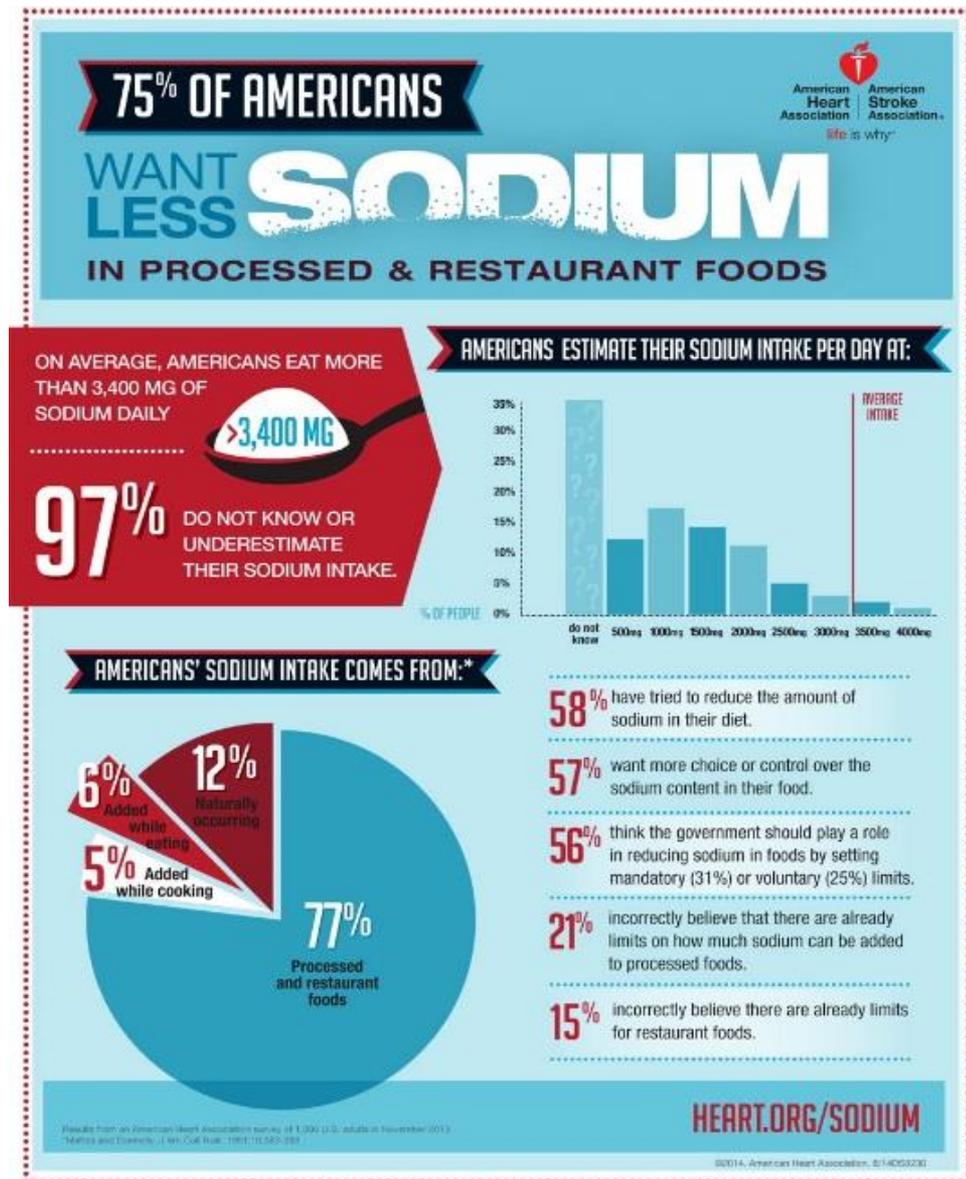
8.5 - Hearing how it affects your appearance

7.0 - Hearing that it causes high blood pressure and other health conditions



Consumer Research – Infographic

- **97% underestimate or cannot estimate** the amount of sodium they are eating
- **58% have tried to reduce** dietary sodium; most common strategies are using less salt at table and in cooking
- **57% want more choice/control** over the amount of sodium they eat
- **75%** prefer that the sodium in processed and restaurant foods be reduced
- **56%** think the **government** should set mandatory or voluntary limits
- **21%** and **15%** think there are already limits on how much salt can be added to processed and restaurant foods, respectively



American Heart Association Sodium Reduction Consumer Campaign



***“I love you salt,
but you’re breaking my heart”***

Sodium Campaign: Objectives

- **Increase awareness** of Americans' excess sodium intakes and the impact those intakes have on health.
- **Inspire behavior change** and drive consumer habits to reduce sodium intake.
- **Build an audience of supporters** to actively engage with decision makers and effect policy changes that reduce sodium in the food supply.



Example Campaign Phases



Take the pledge
– behavior
change

Influence family
and friends to
take the pledge

Change your
community –
lower sodium
offerings in
churches,
schools

State initiatives
like
procurement,
calling on
industry for
change

Spur change in
the food supply
to create a
culture of health

Campaign Website



Search this website

To search, type and hit enter.



[Take the Pledge](#) [Salty Scoop](#) [Sodium 411](#) [Action Center](#) [Contact Us](#)

If you're already a member, please [log in](#). If not, please [register](#).

I love you salt,
but you're
breaking my
heart.

Pledge to break up with excess
sodium and start living healthier!

[Take The Pledge](#)

Break the Breakup Meter!



Sodium Quiz

[Test Your Knowledge](#)

<http://heart.org/sodium>



Campaign Video: Sneaky Salt



1-minute video, “Don’t Let Salt Sneak Up On You”

<http://bit.ly/1trMjLv>



Selected Results to Date



- Site launch: July 14, 2014
- 32,000 website visits per month (steady growth since site launch)
- Approximately 15% of site visitors take the pledge to reduce the sodium they eat
- 47,000+ campaign supporters
- 22,000+ YouTube views of video “Don’t Let Salt Sneak Up On You” (with no advertising budget)
- Earned media:
 - Huffington Post 7/14/14 - http://www.huffingtonpost.com/nancy-brown/rebel-with-a-cause-how-to_b_5573789.html
 - Food Navigator 11/25/2014 - <http://www.foodnavigator-usa.com/Markets/AHA-education-campaign-p pressures-food-manufacturers-to-reduce-sodium>

Join Us!



To build the movement to reduce the sodium Americans eat, the American Heart Association needs your help! How to get involved:

- Visit <http://heart.org/sodium>
- Read and comment on our blog, the Salty Scoop, and consider being a guest blogger
- Sign the pledge to reduce the sodium you eat and encourage your networks to pledge too
- Promote our “salt man” video via email, websites, and social media
- Take the sodium quiz
- Share all of the above actions with your friends via email and social networks.
- Download a toolkit of materials to help promote the campaign:

http://www.heart.org/HEARTORG/Affiliate/Sodium-Reduction-Resources_UCM_471293_SubHomePage.jsp



AHA Sodium Infographics

<http://heart.org/sodiuminfographics>

THE SALTY SIX

DID YOU KNOW?

THESE SIX POPULAR FOODS CAN ADD HIGH LEVELS OF SODIUM TO YOUR DIET

The American Heart Association recommends that you get in **less than 3,500 mg** of sodium per day.

- BREADS & ROLLS**
Some breads that you eat several times a week, such as toast, add up to a lot of sodium. Look for sodium in the ingredients list. Check the labels to find sodium content.
- COLD CUTS & CURED MEATS**
Deli meats, cold cuts, or slices of meat used on sandwiches are high in sodium. Look for sodium in the ingredients list. Check the labels to find sodium content.
- PIZZA**
A slice of pizza is a great source of nutrients, but it can be high in sodium. Look for sodium in the ingredients list. Check the labels to find sodium content.
- POULTRY**
Chicken breast is a good source of protein, but it can be high in sodium. Look for sodium in the ingredients list. Check the labels to find sodium content.
- SOUP**
Soups are a great source of nutrients, but they can be high in sodium. Look for sodium in the ingredients list. Check the labels to find sodium content.
- SANDWICHES**
Sandwiches are a great source of nutrients, but they can be high in sodium. Look for sodium in the ingredients list. Check the labels to find sodium content.

THE SALTY SIX For Kids

• About 90% of kids eat too much sodium.
• Kids' preferences for salty-tasting foods are shaped early in life.
• Parents and caregivers can help lower sodium by influencing how foods are produced, purchased, prepared and served.

FOODS THAT ADD THE MOST SODIUM TO THE DIET, AGES 6-18:

- PIZZA
- BREADS & ROLLS
- COLD CUTS & CURED MEATS
- SAVORY SNACKS
- SANDWICHES
- CHEESE

The sodium kids eat comes from every meal and snack.

Most of the sodium kids eat is already in the foods they get from:

GROCERY STORES RESTAURANTS SCHOOL CAFETERIAS

...and not from the salt shaker

Learn more at heart.org/sodium

FACE FEEL PUFFY? JEANS FIT TIGHTER?

In **3 weeks** you can:

- Change your sodium palate &
- Start enjoying foods with less sodium &
- Reduce bloating

CHANGE your SALTY WAYS

IN ONLY **21 DAYS**

Learning to read & understand food labels can help you make healthier choices.

WEEK ONE

- Look for lower sodium items
- Track your sodium consumption
- Ask how much sodium you've shopped out of your diet

WEEK TWO

- If you do eat pizza, make it one with less cheese & meats
- Ask to replace your pizza instead
- Use fresh poultry rather than bread, canned or processed

WEEK THREE

- One cup of chicken noodle soup can have up to 340 mg of sodium
- Check labels & try lower sodium varieties
- Use lower sodium broths, cheeses & condiments & plenty of vegetables to build healthier sandwiches

On average, American adults eat more than 3,400 milligrams of sodium daily — more than double the American Heart Association's recommended limit.

3,400 mg sodium daily (average)

1,500 mg sodium daily (AHA recommendation)

Look for the Heart-Check mark to find products that can help you make smarter choices about the foods you eat. heartcheckmark.org

KNOW THE SALTY 6

Common foods that may be loaded with excess sodium:

- Breads & Rolls
- Cold Cuts & Cured Meats
- Pizza
- Poultry
- Soup
- Sandwiches

Choose wisely, read nutrition labels & watch portion control.

AMERICANS NINE out of 10 CONSUME TOO MUCH SODIUM

On average, American adults eat more than 3,400 milligrams of sodium daily — more than double the American Heart Association's recommended limit of 1,500 milligrams.

25% comes from restaurants

65% comes from food bought in retail stores*

10% comes from home cooking & at the table*

WHERE does the sodium we eat come from?*

Excess sodium increases a person's risk for **HIGH BLOOD PRESSURE**, which can lead to heart disease and stroke.

Choose lower-sodium foods and cook at home more often.

Look for the Heart-Check mark to find products that can help you make smarter choices about the foods you eat.

Check the Nutrition Facts label for the amount of sodium per serving AND the number of servings per container.

Read food labels. Assorted brands of the same food often have different sodium amounts.

HOW can I control how much sodium I eat?

Source: Centers for Disease Control (CDC)

THE EFFECTS OF EXCESSIVE SODIUM ON YOUR Health & Appearance

9 out of 10 Americans consume too much sodium.

WHERE DOES IT COME FROM?

65% from restaurants, convenience foods

25% from restaurants

10% from other sources

3,400 milligrams of sodium is the average American consumes in a day

1,500 milligrams is the recommended daily allowance of sodium

High Blood Pressure

is a leading risk factor for death in women in the United States, contributing to nearly 200,000 female deaths each year.

That's more than five times the 42,000 annual deaths from breast cancer.

77.9 million American ADULTS have high blood pressure.

KIDS who have a high-sodium diet are **twice as likely to develop high blood pressure** as kids who have low-sodium diets

Your HEALTH

Excess levels of sodium/salt may put you at RISK for:

- STROKE
- HEART FAILURE
- OSTEOPOROSIS
- STOMACH CANCER
- KIDNEY DISEASE
- KIDNEY STONES
- ENLARGED HEART
- MUSCLE HEADACHES

Your APPEARANCE

Excess levels of sodium/salt may cause:

- INCREASED WATER RETENTION, LEADING TO:
 - Puffiness
 - Bloating
 - Weight gain

heart.org/sodium

7 SALTY MYTHS BUSTED

- ELIMINATE sodium COMPLETELY for GOOD HEALTH**
SODIUM is an ESSENTIAL NUTRIENT that CONTROLS BLOOD PRESSURE and is essential for muscle and nerve function. But you need it in the RIGHT AMOUNT.
- SEA SALT has LESS SODIUM than TABLE SALT**
Sea salt is no better than table salt. It's just salt.
- I usually DON'T SALT my FOOD, so I DON'T EAT too MUCH SODIUM**
75% of sodium we eat comes from processed foods — not the salt shaker.
- HIGH levels of SODIUM are FOUND only in FOOD**
Some over-the-counter medications can have high levels of sodium. Check the label and avoid these products.
- LOWER SODIUM foods have NO TASTE**
There is a whole world of creative and flavorful alternatives to salt. Experiment with spices, herbs and oils to enhance the taste. Blend it into your food.
- My BLOOD PRESSURE is NORMAL, so I DON'T NEED TO WORRY about how much SODIUM I eat**
THE AMERICAN HEART ASSOCIATION recommends consuming less than 1,500 mg of sodium daily.
- I don't EAT a lot of SALTY FOOD so I DON'T EAT too much SODIUM**
Even for people who don't have high blood pressure, too much sodium will negatively affect the way the heart processes that sodium and can lead to high blood pressure. The sodium in other condiments, such as ketchup, soy sauce and Worcestershire sauce, can add up to a lot of sodium.

75% of sodium we eat comes from processed foods — not the salt shaker.

Read only what is required. Excess sodium can lead to high blood pressure.

POULTRY CHEESE BREAD

These foods are high in sodium and can increase your risk for heart disease and stroke.

75% OF AMERICANS WANT LESS SODIUM IN PROCESSED & RESTAURANT FOODS

ON AVERAGE, AMERICANS EAT MORE THAN 3,400 MG OF SODIUM DAILY

AMERICANS ESTIMATE THEIR SODIUM INTAKE PER DAY AT:

97% DO NOT KNOW OR UNDERESTIMATE THEIR SODIUM INTAKE

AMERICANS' SODIUM INTAKE COMES FROM:

- 58% have tried to reduce the amount of sodium in their diet.
- 57% want more choice or control over the sodium content in their food.
- 56% think the government should play a role in reducing sodium in foods by setting mandatory (31%) or voluntary (25%) limits.
- 21% incorrectly believe that there are already limits on how much sodium can be added to processed foods.
- 15% incorrectly believe there are already limits for restaurant foods.

Processed and restaurant foods

77%

5% Added white cooking

12% Restaurants

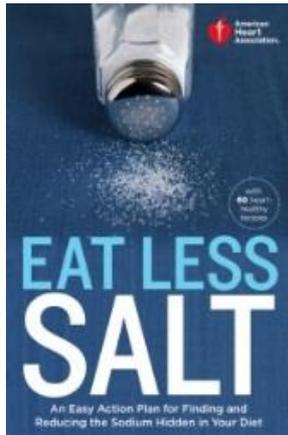
8% Home cooking

HEART.ORG/SODIUM

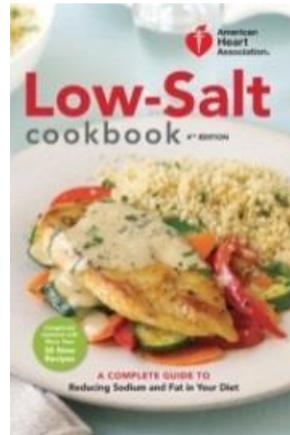
Salty Six and Salty Six for Kids available in Spanish

AHA Consumer Publications

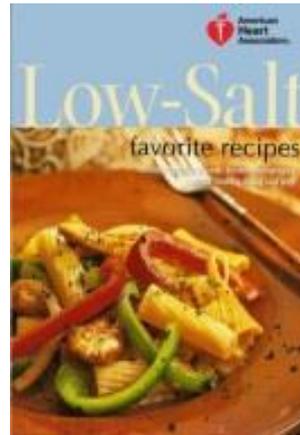
<http://heart.org>



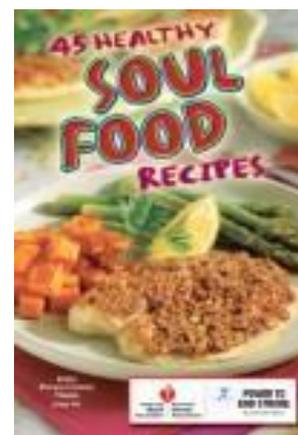
Lifestyle book; practical strategies to maintain a lower-sodium life; 60 recipes



Cookbook of 200+ lower-sodium recipes; info on shopping and cooking, resources, and healthy lifestyle tips



Magazine cookbook; 40 lower-sodium recipes; info on how to eat a healthy, lower-sodium diet



Magazine cookbook; 40 lower-sodium recipes plus cooking tips for those who love Southern comfort foods



Cookbook of 22 lower-sodium recipes that will appeal to a variety of Hispanic cultures



AHA Science Efforts

AHA Sodium Science Papers



All published in *Circulation*:

- Stakeholder Discussion to Reduce Population-Wide Sodium Intake and Decrease Sodium in the Food Supply – AHA Conference Proceedings Report (Antman et al.) (May 2014) – see next slide
- AHA Science Advisory: Methodological Issues in Cohort Studies that Relate Sodium Intake to CVD (Cobb et al.) (Feb. 2014)
- AHA/ACC Guideline on Lifestyle Management to Reduce Cardiovascular Risk - includes guidance on sodium intake and dietary patterns (Nov. 2013)
- Presidential Advisory I (Appel et al.) (Jan. 2011) and II (Whelton et al.) (Nov. 2012)

Available at http://my.americanheart.org/professional/StatementsGuidelines/ByTopic/TopicsD-H/DietNutrition_UCM_320704_Article.jsp

SODIUM CONFERENCE



- June 19-20, 2013 - Arlington, VA
- Approximately 130 attendees - key stakeholders and thought leaders in sodium reduction
- 25+ speakers followed by facilitated working group (breakout) sessions
- Breakout discussion topics: science, consumers, industry, new technologies, health policy
- Conference proceedings published in *Circulation* (Antman et al.), May 2014

AHA Conference Proceedings

Stakeholder Discussion to Reduce Population-Wide Sodium Intake and Decrease Sodium in the Food Supply A Conference Report From the American Heart Association Sodium Conference 2013 Planning Group*

Elliott M. Antman, MD, FAHA; Lawrence J. Appel, MD, MPH, FAHA;
Douglas Balentine, PhD; Rachel K. Johnson, PhD, MPH, RD, FAHA;
Lyn M. Steffen, PhD, MPH, RD, FAHA; Emily Ann Miller, MPH, RD;
Antigoni Pappas, MBA, RD; Kimberly F. Stitzel, MS, RD; Dorothea K. Vafiadis, MS, FAHA;
Laurie Whitsel, PhD

Background—A 2-day interactive forum was convened to discuss the current status and future implications of reducing sodium in the food supply and to identify opportunities for stakeholder collaboration.

Methods and Results—Participants included 128 stakeholders engaged in food research and development, food manufacturing and retail, restaurant and food service operations, regulatory and legislative activities, public health initiatives, healthcare, academia and scientific research, and data monitoring and surveillance. Presentation topics included scientific evidence for sodium reduction and public health policy recommendations; consumer sodium intakes, attitudes, and behaviors; food technologies and solutions for sodium reduction and sensory implications; experiences of the food and dining industries; and translation and implementation of sodium intake recommendations. Facilitated breakout sessions were conducted to allow for sharing of current practices, insights, and expertise.

Conclusions—A well-established body of scientific research shows that there is a strong relationship between excess sodium intake and high blood pressure and other adverse health outcomes. With Americans getting >75% of their sodium from processed and restaurant food, this evidence creates mounting pressure for less sodium in the food supply. The reduction of sodium in the food supply is a complex issue that involves multiple stakeholders. The success of new technological approaches for reducing sodium will depend on product availability, health effects (both intended and unintended), research and development investments, quality and taste of reformulated foods, supply chain management, operational modifications, consumer acceptance, and cost. The conference facilitated an exchange of ideas and set the stage for potential collaboration opportunities among stakeholders with mutual interest in reducing sodium in the food supply and in Americans' diets. Population-wide sodium reduction remains a critically important component of public health efforts to promote cardiovascular health and prevent cardiovascular disease and will remain a priority for the American Heart Association. (*Circulation*. 2014;129:00-00.)

Key Words: AHA Scientific Statements ■ hypertension ■ population ■ sodium chloride, dietary ■ table salt

Conference Breakout Themes

- **Complexity** - Sodium reduction involves much more than just taking out the salt
- **Commitment** - Will be a long term effort; some progress has been made but there is much more work ahead; lowering sodium in the food supply is critical; industry has opportunity to innovate, needs a level playing field
- **Collaboration** - It is imperative to have simultaneous, multi-sector efforts
- **Communication** – To motivate consumer behavior change, need simple, consistent, positive messages that are culturally appropriate and relevant and come from multiple voices
- **Context** – Sodium reduction should be part of holistic approaches to improve diet quality



Interpreting Recent Science on Sodium and Health

Making Sense of the Science on Sodium

- Observational studies that suggest low sodium intakes lead to worse health outcomes often have methodological limitations, e.g. :
 - Unreliable measures of sodium intake (e.g. “spot” vs. 24-hour urine collections)
 - Inclusion of sick populations (reverse causality)
- These issues limit the studies’ usefulness for drawing conclusions about the sodium and health, and for guiding public health policies
- Other types of evidence, especially clinical trials of sodium intake and blood pressure, provide the best scientific basis to guide policy
- The American Heart Association and numerous major national and international public health and scientific organizations continue to recommend reducing sodium intake

Resources: AHA Resources on Recent Controversial Sodium Science

- AHA Science Advisory: Methodological Issues in Cohort Studies that Relate Sodium Intake to CVD Outcomes (*Circulation*, Feb. 2014)
 - Reviews key methodological issues that may account for inconsistency of results in studies of sodium intake and CVD outcomes
- O'Donnell et al. Urinary Sodium and Potassium Excretion, Mortality, and Cardiovascular Events. *New England Journal of Medicine*, August 2014
 - [Excessive sodium consumption has dire impact on global health, new study finds](#)
 - [Study underscores excessive sodium consumption as a global health problem](#)
- Graudal et al. Compared with usual sodium intake, low- and excessive-sodium diets are associated with increased mortality: A meta-analysis. *American Journal of Hypertension*, April 2014
 - [Reduced salt intake still critical](#)
 - [American Heart Association stands by its sodium recommendations](#)

For more info visit hyperlinks above or <http://newsroom.heart.org> & <http://blog.heart.org>

Thank you!



Questions?

For additional information, feel free to contact Emily Ann Miller, MPH, RD, the AHA's National Program Lead for the Sodium Reduction Initiative:

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es por la vida™

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