

Sodium: Meeting the *Dietary Guidelines*

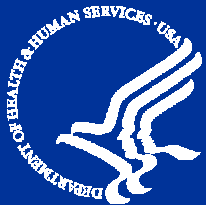
IOM Panel on Strategies to Reduce Sodium Intake

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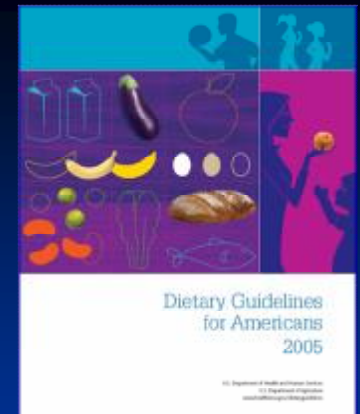
**Office of Disease Prevention and Health Promotion
U.S. Department of Health and Human Services**



US Dietary Guidelines: 1980-2000

- n 1980: Avoid too much sodium
- n 1985: Avoid too much sodium
- n 1990: Use salt and sodium only in moderation
- n 1995: Choose a diet moderate in salt and sodium
- n 2000: Choose and prepare foods with less salt

2005 Dietary Guidelines: Sodium and Potassium



n Key Recommendations

- ∅ Consume < 2,300 mg (~1 tsp. salt) of sodium per day
- ∅ Choose and prepare foods with little salt
- ∅ Consume potassium-rich foods, such as fruits and vegetables

n Key Recommendations for Specific Population Groups

- ∅ Individuals with hypertension, blacks, and middle-aged and older adults
- ∅ Aim to consume no more than 1,500 mg of sodium per day and meet potassium recommendation [4,700 mg/d] with food

Sodium Intakes

100% of adults exceed the AI of 1,500 mg sodium/day.

Men (age 31 to 50)

- ∅ 95% of men exceed the UL (2,300 mg sodium/day)
- ∅ Median = 4,300 mg of sodium/ day

Women (age 31 to 50)

- ∅ 75% of women exceed the UL (2,300 mg sodium/ day)
- ∅ Median = 2,900 mg sodium/day

Data from NHANES III (IOM, 2004)

Prevalence of Hypertension

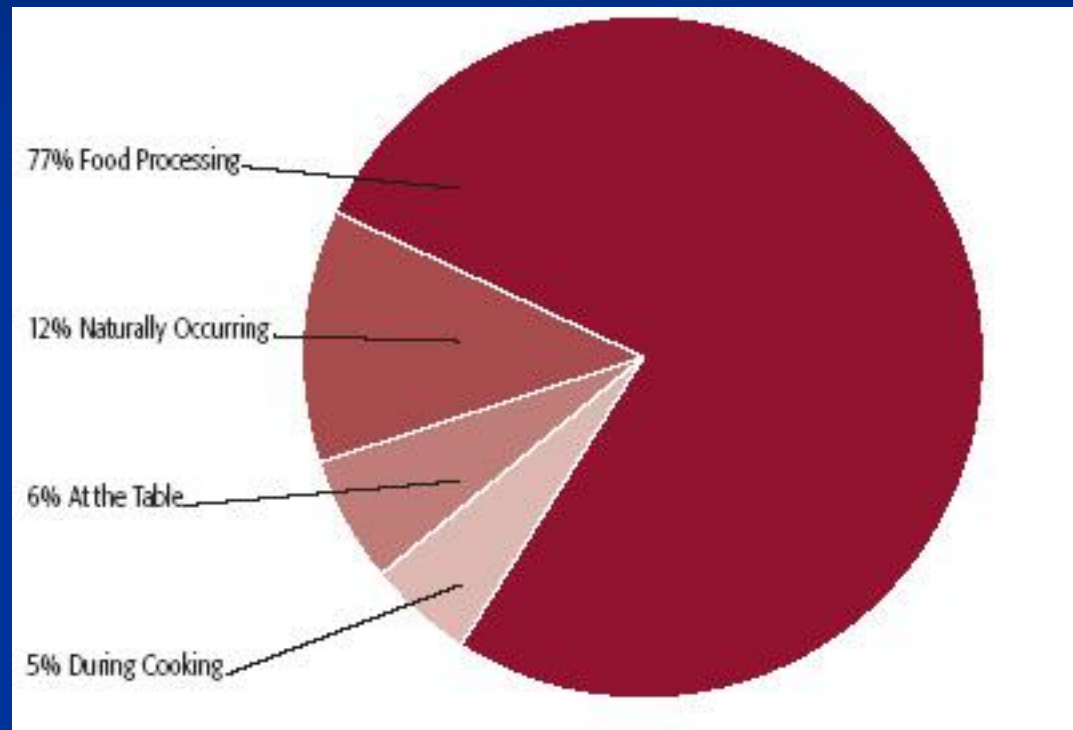
- n 90% of non-hypertensive adults likely to develop hypertension during their lifetime.*
- n Hypertension: > 25 % of adults**
- n Pre-hypertension: 22 % of adults**
- n Hypertension prevalence is increasing in adults and children and adolescents.***

*Vasan et al., 2002

**Chobanian, 2003

***NHANES, Muntner et al., 2004

Sources of Dietary Sodium



Source: Mattes, 1991

Sources of Sodium

1. Other Foods*
2. Yeast Bread
3. Cheese
4. Ham
5. Salad Dressings/
Mayonnaise
6. Cakes/ Cookies/ Quick
breads/ Doughnuts
7. Beef
8. Milk
9. Cold Cuts (excluding ham)
10. Ready-to-eat cereal
11. Condiments/ Other sauces
12. Sausage
13. Poultry
14. Margarine
15. Tomatoes

*Includes salt (from disaggregated food mixtures), monosodium glutamate, spices, herbs, plain gelatin, gums, seaweed, grain-based beverages, and cocoa powder.

Source: Dietary Sources of Nutrients Among US Adults, CSFII 1994 to 1996

Food Technology

n Taste

- ∅ Flavor Enhancement
- ∅ Taste Threshold
- ∅ Reformulation

n Preservation

n Leavening

n Moisture Retention (Meats)

- ∅ Saturated Fat trade-off

Consumer Attitudes/ Awareness

- n Consumers understand the recommendation—
[Focus Group and Web-based research]
- n Why aren't they achieving it?
 - ∅ Does it apply to me— I don't have hypertension?
 - ∅ How do I know if I'm salt-sensitive?
 - ∅ Where is the sodium in foods?
 - ∅ Are other aspects of a healthy diet easier to do/
more important?

Questions

- n Are food manufacturers and chefs using the lowest amount necessary?
- n Are some sectors making improvements and others increasing sodium?
- n How can we avoid nutritional trade-offs?
- n Can we invisibly change the food supply?
- n How can we motivate consumers?

Final Thoughts

- n Food Supply
- n Incentives
- n Partnerships
- n Education/ Communication
- n Resources

THANK YOU!