



LIVE INTERACTIVE LEARNING @ YOUR DESKTOP

FDA/CFSAN: Sodium in the Diet

Presented by: Crystal Rasnake

Thursday, April 15, 2010

6:30 p.m. - 8:00 p.m. Eastern time



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Section I

Sodium in the Diet



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Poll Question

I am personally concerned with the amount of sodium/salt that is in my diet?

✓ Yes

✗ No



Sodium in the Diet

- Essential nutrient
 - Sodium is found in extracellular fluids
 - Electrolyte that is important for maintaining water balance
 - Nerve transduction and other biological functions



Sodium in the Diet

- Too much sodium can increase your risk of developing hypertension
- A blood pressure level of 140/90 mmHg or higher is considered high. If your blood pressure is between 120/80 mmHg and 139/89 mmHg, then you have *prehypertension*.



How much sodium should you consume?

- Adequate Intake (AI) -to ensure that the overall diet provides an adequate intake of other important nutrients and to cover sodium sweat losses
 - 4-8 years-1,200 mg/d
 - 9-50 years-1,500 mg/d
 - 51- 70 years-1,300 mg/d
 - ≥ 70 years-1,200 mg/d
- Upper Limit (UL)- reduce the risk of developing high blood pressure
 - 4-8 years-1,900 mg/d
 - 9-13 years-2,200 mg/d
 - ≥ 14 years-2,300 mg/d
- *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 the potassium recommendation (4,700 mg/day) with food.

(Source: Dietary Reference Intakes for Water, Potassium, Sodium, Chloride, and Sulfate, IOM 2005 and 2005 Dietary Guidelines for Americans)



Sodium intake



What is the mean intake of sodium in the U.S?

1,500 mg	3,400 mg
2,300 mg	800 mg



How much sodium are Americans consuming?

- Sodium intake data:
 - 3,473 mg/d- age 4 years and older (National Health and Nutrition Examination Survey, 1999-2000)
 - 4-8 years-3,017 mg/d boys, 2,605 mg/d girls
 - 9-13 years-3,014 mg/d boys, 2,613 mg/d girls



Poll Question

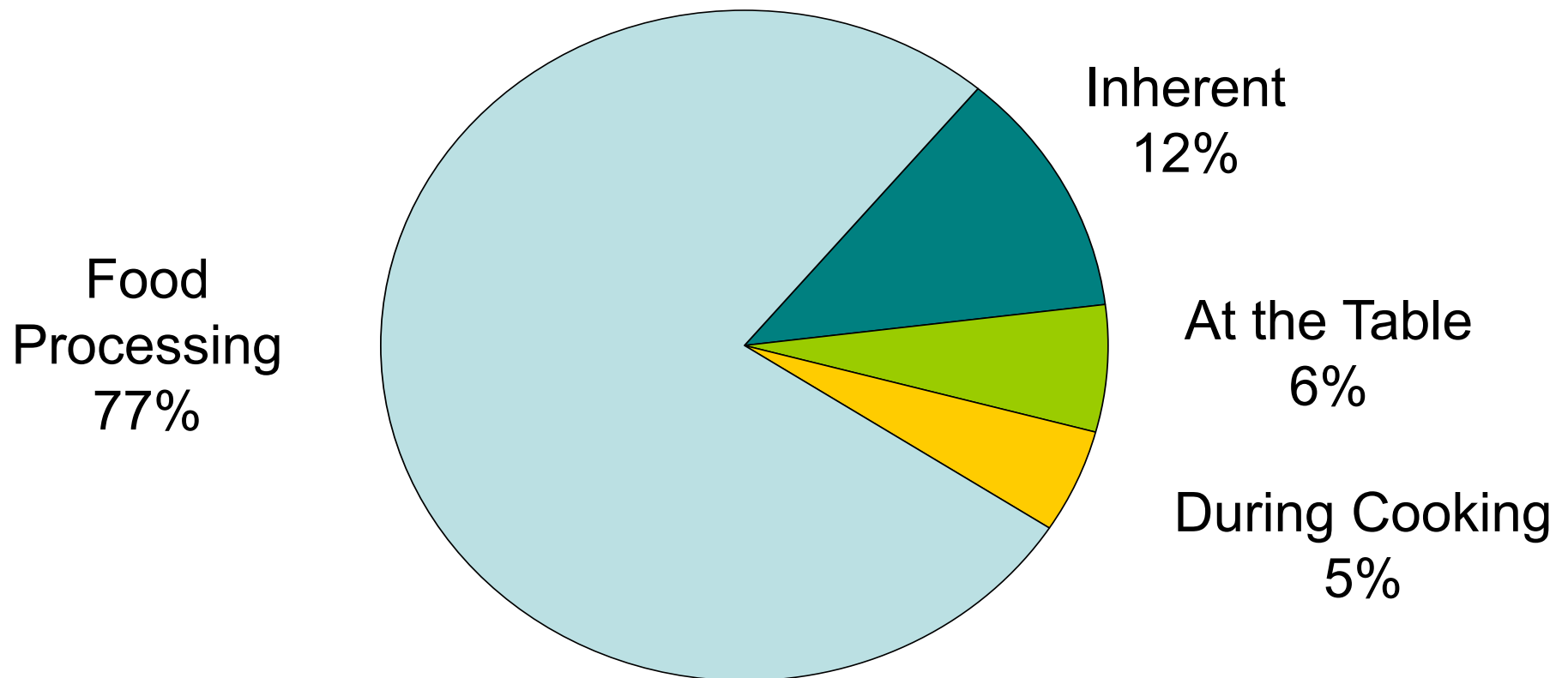
What is the biggest source of Sodium in the Diet?

- A) Inherent in the food
- B) Added at the table
- C) Added during food processing
- D) Added during cooking



Sources of Dietary Sodium

(62 adults who completed 7 day dietary records)



Mattes and Donnelly, JACN, 1991; 10: 383 – From a presentation given by Dr. Lawrence Appel to FDA on November 29, 2007.



Sources of sodium in diet

- Most sodium comes from Soups, Breads, Cheeses, and Processed Meat
- As caloric consumption goes up so does sodium intake



Salt vs Sodium

- Most sodium is consumed as sodium chloride (common table salt)
- Salt is 40% sodium
- Other forms of sodium: sodium bicarbonate, sodium citrate, sodium caseinate
- Sea salt is sodium chloride



Ways to reduce sodium in your diet

- Use the 5/20 rule 5% is low and 20% or more is high
- Use the label to compare sodium content of similar foods
- Use label claims to identify foods that are low or reduced in sodium
- Use herbs and spice to flavor food instead of salt



Nutrition Facts

Serving Size 1 cup (228g)
Servings Per Container 2

Amount Per Serving

Calories 250 Calories from Fat 110

% Daily Value*

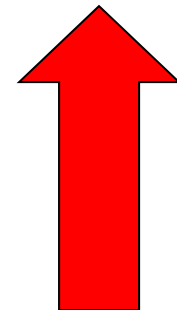
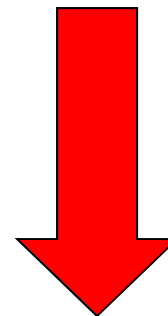
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

* Percent Daily Values are based on a 2,000 calorie diet.
Your Daily Values may be higher or lower depending on your calorie needs.

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Quick Guide to % DV

5% DV or less is Low



20% DV or more is High



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Sodium content of similar foods





Sodium content of similar foods

Hearty Pretzel

Nutrition Facts	
Serving Size 3 pretzels (30g)	
Servings Per Container 13	
Amount Per Serving	
Calories 120	Calories from Fat 10
% Daily Value *	
Total Fat 1g	2 %
Saturated Fat 0g	0 %
Trans Fat 0g	
Cholesterol 0mg	0 %
Sodium 120mg	5 %
Total Carbohydrate 24g	8 %
Dietary Fiber 1g	4 %
Sugars 1g	
Protein 3g	
Vitamin A	0 %
Vitamin C	0 %
Calcium	0 %
Iron	0 %

Pretzel Thins

Nutrition Facts	
Serving Size 1 oz (28g /About 17 pretzels)	
Servings Per Container 15	
Amount Per Serving	
Calories 110	Calories from Fat 10
% Daily Value *	
Total Fat 1g	2 %
Saturated Fat 0g	0 %
Trans Fat 0g	
Cholesterol 0mg	0 %
Sodium 560mg	23 %
Total Carbohydrate 23g	8 %
Dietary Fiber 1g	3 %
Sugars 1g	
Protein 2g	
Vitamin A	0 %
Vitamin C	0 %
Calcium	0 %
Iron	1 %

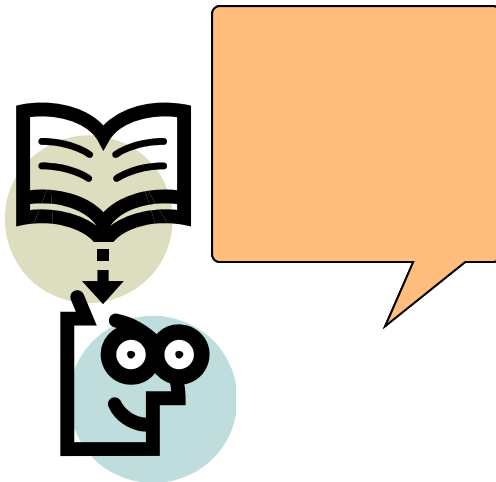


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Let's Pause Two Minutes for Questions





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Section II

Nutrient Content and Health Claims



Expressed Claims for Sodium

21 CFR 101.61

- Free
 - < 0.5 mg per RACC (Reference Amount Customarily Consumed) and labeled serving
 - For meals and main dishes: < 5 mg per labeled serving
 - “Salt free” must meet criteria for “sodium free”
- Very Low Sodium
 - ≤ 35 mg per RACC and per 50 g if reference amount is small
 - For meals and main dishes: ≤ 35 mg per 100g
- Low
 - ≤ 140 mg per RACC and per 50 g if reference amount is small
 - For meals and main dishes: ≤ 140 mg per 100g



Expressed Claims for Sodium

21 CFR 101.61

- Reduced (lower, fewer):
 - At least 25% reduction for the nutrient per RACC compared to an appropriate reference food
 - For meals and main dishes, at least 25% reduction per 100 g of food compared to an appropriate reference food
- No salt added/Unsalted
 - Declaration: “This is not a sodium free food” if food is not sodium free
- Salt Free
 - Must meet criteria for “sodium free”



Expressed Claims for Sodium

21 CFR 101.61

- Lite in sodium/Light in sodium
 - 50% reduction in sodium
- Lightly Salted
 - 50% less sodium than normally added to reference food
 - If not low in sodium, so labeled on the information panel.



Criteria for use of “healthy”

	Individual Food* (RACC is \geq 30 g)	Seafood/Game Meat	Main Dish/Meal Product
Total Fat	3 g or less /RACC (low)	Less than 5 g per RACC & 100g	3 g or less/100g & no more than 30% of calories (low)
Saturated Fat	1 g or less/RACC & 15% or less calories (low)	Less than 2 g per RACC and 100g	1 g or less/100 g & <10% of calories (low)
Sodium	480 mg or less/RACC & /labeled serving	480 mg or less/RACC & /labeled serving*	600 mg or less per labeled serving
Cholesterol	60 mg or less/RACC & /labeled serving	Less than 95 mg/RACC & 100g	90 mg or less per labeled serving
Beneficial Nutrients	At least 10% RDI or DRV per RACC for one or more of vitamins A, C, iron, calcium, protein, or fiber [‡]		Main dish: 2 nutrients; Meal: 3 nutrients

*For foods with a RACC of 30 g or less or 2 tablespoons or less, the criteria refer to the amount per 50 g of food.

[‡]Except raw fruits and vegetables; frozen or canned single ingredient/mixture fruits and vegs, except that ingredients whose addition does not change the nutrient profile of the fruit or veg may be added; enriched cereal-grain products that conform to a standard of identity.

RACC = Reference amount customarily consumed, which is the basis of serving size on food labels.



Health claims related to sodium, potassium, and blood pressure

- Authorized Health Claims
 - Diets low in sodium may reduce the risk of high blood pressure, a disease associated with many factors.
- FDAMA Claims
 - Diets containing foods that are good sources of potassium and low in sodium may reduce the risk of high blood pressure and stroke.



Use of disclosure and disqualifying statements with claims

- Requirement for disclosure levels with nutrient content claims.
 - If a product exceeds certain levels for fat, saturated fat, cholesterol, or sodium
 - “See nutrition information for _____ content.”
- For use of health claims, a product must meet certain criteria, including:
 - Food contains, without fortification, 10% or more of the DV for one or more of vitamin A, vitamin C, iron, calcium, OR fiber
 - Food contains less than a specified level for total fat, saturated fat, cholesterol, or sodium.

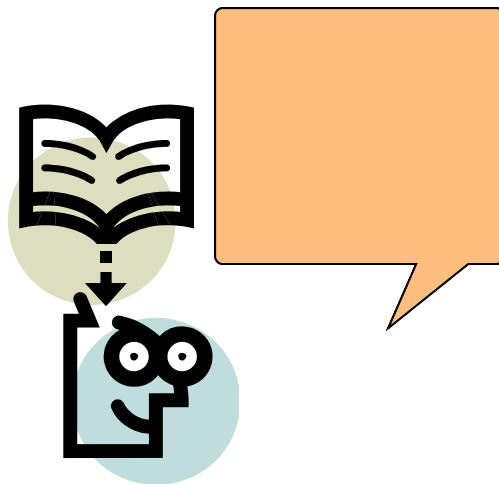


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Section III

Education Initiatives



Education Initiatives

- Make Your Calories Count
 - interactive learning program that provides consumers with information to help plan a healthful diet while managing calorie intake
 - Focuses on four nutrients
 - Calcium and fiber
 - Saturated fat and sodium

<http://www.fda.gov/Food/Labelingnutrition/ConsumerInformation/ucm114022.htm>





Education Initiatives

- Spot the Block
 - FDA/Cartoon Network public education campaign to encourage "tweens," youth ages 9 to 13 to use the Nutrition Facts information on the food labels.
 - What is the "The Block"? The Nutrition Facts Label on the food package

<http://www.cfsan.fda.gov/~dms/spotov.html>

http://www.cartoonnetwork.com/promos/200804_fda/index.html





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Section IV

Current Activity



Current Activity

- Restaurant Labeling
 - The Patient Protection and Affordable Care Act give FDA the authority to require Calories to be posted on menus and menu boards
 - Restaurants with 20 or more outlets
 - Written information on sodium and other nutrients (i.e. total fat) must be available to consumers
 - FDA has one year to issue proposed regulations



Current Activity

- Public Hearing held November 29, 2007
 - The purpose of the hearing was for FDA to share its current framework of policies regarding salt and sodium and solicit information and comments from interested persons on this current framework and on potential future approaches.
- Modernization of the Nutrition Facts Label
 - revision of the Daily Values



Current Activity

- As part of an HHS-sponsored project, the IOM has convened a committee to examine strategies to reduce sodium intake to levels recommended by the Dietary Guidelines for Americans
 - The report is expected to be publicly released by April 21, 2010.

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