

Under Pressure!

Reducing Sodium in School Meals



Arkansas Department of Education
Child Nutrition Unit
November 2014



Objectives

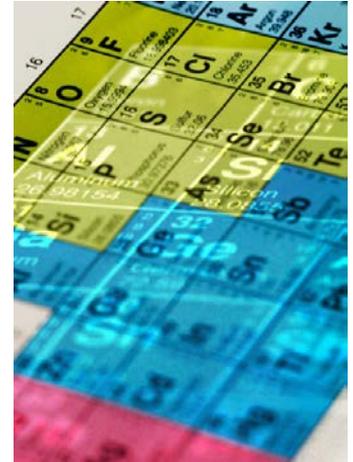
- Define sodium and salt
- Discuss how sodium affects the body
- Identify sodium reductions for SY 2014-15
- Evaluate labels for sodium content
- Discuss sodium levels for “entrée” and “side” items defined in USDA SMARRT Snacks
- Discuss sodium labeling
- Identify techniques for reducing sodium when purchasing and preparing foods
- List strategies for reducing sodium in recipes
- Discuss soliciting bids from manufacturers
- Discuss additional resources

Why a focus on sodium?

- USDA Nutrition Standards have been updated to include phased-in sodium reductions
- A requirement by the Healthy Hunger-free Kids Act of 2010
- Recommendations were made by the Institute of Medicine
- Part of the 2010 Dietary Guidelines for Americans

What's the difference?

- Sodium – an **element** that exists in combined forms such as sodium chloride or sodium bicarbonate that is present in or added to foods or beverages as a seasoning or preservative
- Salt - a crystalline **compound**, sodium chloride, occurring as a mineral, a constituent of seawater, etc., and used for seasoning food, as a preservative, etc.



Sodium Good or Bad?

Good...

- The body uses sodium to control blood pressure and blood volume.
- Sodium is also needed for your muscles and nerves to work properly.
- 2010 Dietary Guidelines for Americans recommends limiting sodium to less than 2,300mg per day.

Not So Good...

- Too much sodium can lead to increase blood pressure.
- High blood pressure increases the risk of heart disease, stroke, and kidney disease.
- The average American consumes more than 3,400mg of sodium per day.

How We Can Help

- Cutting back on sodium in school meals can help children learn to enjoy the natural tastes of foods
- A lower sodium intake may provide health benefits that last a lifetime

Weekly Sodium Targets SY 2014-15

Grade	Lunch	Breakfast
K-5	≤1,230mg	≤540mg
6-8	≤1,360mg	≤600mg
9-12	≤1,420mg	≤640mg

The Future of Sodium

- Schools may be required to meet lower sodium targets in future years.
- USDA will complete research and additional analyses before those targets are implemented in 2017.

Reading a Food Label for Sodium

Nutrition Facts

Serving Size 1 cup (228g)

Amount Per Serving

Calories 250

Calories from Fat 110

% Daily Value*

Total Fat 12g 18%

Saturated Fat 3g 15%

Trans Fat 0g

Cholesterol 30mg 10%

Sodium 140 mg 5%

Total Carbohydrate 31g 10%

Dietary Fiber 0g 0%

Sugars 6g

Protein 5g

Vitamin A 4%

Vitamin C 2%

Calcium 20%

Iron 4%

Comparing Products

Nutrition Facts

Serving Size 1 cup (228g)

Amount Per Serving

Calories 250 Calories from Fat 110

% Daily Value*

Total Fat 12g 18%

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Trans Fat 0g

Cholesterol 30mg 10%

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Vitamin A 4% • Vitamin C 2%

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Nutrition Facts

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 Saturated Fat 3g 15%

Trans Fat 0g

Cholesterol 30mg 10%

Sodium 300mg 11%

Total Carbohydrate 31g 10%

 Dietary Fiber 0g 0%

 Sugars 6g

Protein 5g

Vitamin A 4% • Vitamin C 2%

Calcium 20% • Iron 4%

Comparing Products

Nutrition Facts	
Serving Size 1 cup (228g)	
Amount Per Serving	
Calories 250	Calories from Fat 110
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 30mg	10%
Sodium 1225mg	44%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 6g	
Protein 5g	
Vitamin A 4%	• Vitamin C 2%
Calcium 20%	• Iron 4%

Nutrition Facts	
Serving Size 1 cup (228g)	
Amount Per Serving	
Calories 250	Calories from Fat 110
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 30mg	10%
Sodium 740mg	26%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 6g	
Protein 5g	
Vitamin A 4%	• Vitamin C 2%
Calcium 20%	• Iron 4%

Adding Products Together

If we were counting sodium for each meal...

Or if you watch your sodium for health reasons...

For one meal...add all food labels for sodium together...to get 750mg

Nutrition Facts	
Serving Size 1 cup (228g)	
Amount Per Serving	
Calories 250	Calories from Fat 110
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 30mg	10%
Sodium 300mg	
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 6g	
Protein 5g	
Vitamin A 4%	• Vitamin C 2%
Calcium 20%	• Iron 4%

Nutrition Facts	
Serving Size 1 cup (228g)	
Amount Per Serving	
Calories 250	Calories from Fat 110
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 30mg	10%
Sodium 100mg	
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 6g	
Protein 5g	
Vitamin A 4%	• Vitamin C 2%
Calcium 20%	• Iron 4%

Nutrition Facts	
Serving Size 1 cup (228g)	
Amount Per Serving	
Calories 250	Calories from Fat 110
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 30mg	10%
Sodium 200mg	
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 6g	
Protein 5g	
Vitamin A 4%	• Vitamin C 2%
Calcium 20%	• Iron 4%

Nutrition Facts	
Serving Size 1 cup (228g)	
Amount Per Serving	
Calories 250	Calories from Fat 110
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 30mg	10%
Sodium 150mg	
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 6g	
Protein 5g	
Vitamin A 4%	• Vitamin C 2%
Calcium 20%	• Iron 4%

Child Nutrition Programs

Consider the weekly average of sodium per meal...

Total the amount of sodium for each lunch for the entire week...

Divide by the number of days that week...

Find the AVERAGE sodium content for lunch...

Compare to weekly sodium targets.

Repeat for breakfast.

Day of the Week	Amount of Sodium	Average Sodium at Breakfast K-5
Monday	544mg	
Tuesday	554mg	
Wednesday	533mg	
Thursday	579mg	
Friday	475mg	
Total for Week	2,685mg	537mg per day

2,685mg sodium for week / 5 serving days = 537mg average per day

A la Carte Food Items

- Per USDA Smart Snacks Regulations
 - Entrée items must have ≤ 480 mg sodium per serving
 - Side items must have ≤ 230 mg sodium per serving
 - Exemptions: an entrée that does not meet the Smart Snacks requirements may be sold as an a la carte item on the day or day after it was part of the reimbursable menu

Recommendation

- We recommend striving to achieve the Smart Snacks sodium reductions for entrée and side items on the reimbursable tray
 - Second trays may be served when all items meet the Smart Snacks regulations

Sodium Labeling

- **Salt/Sodium-Free** → Less than 5 mg of sodium per serving
- **Very Low Sodium** → 35 mg of sodium or less per serving
- **Low Sodium** → 140 mg of sodium or less per serving
- **Reduced Sodium** → At least 25% less sodium than in the original product
- **Light in Sodium or Lightly Salted** → At least 50% less sodium than the regular product
- **No-Salt-Added or Unsalted** → No salt is added during processing, but not necessarily sodium-free. Check the Nutrition Facts Label to be sure!

Planning Menus for Reduced Sodium

- Choose more fresh foods
- Choose less processed foods
- Most fresh and single-ingredient frozen fruits and vegetables are naturally low in sodium
- Minimally processed foods are typically lower in sodium compared to more processed foods

“Closer to the Ground”

- Choose foods “closer to the ground”
 - Less processing
 - Usually less sodium
 - Examples:
 - old-fashioned rolled oats vs instant oatmeal
 - Fresh apples instead of apple sauce
 - Baked fish instead of fried fish sticks

Offer High Sodium Foods Less Often

- Pre-prepared meals typically have much more sodium than freshly prepared meals
 - Frozen pizza vs homemade pizza
 - Chicken nuggets vs baked chicken breast
 - These two items are the top sources of sodium in children's diets
 - Cold cuts and cured meats (bacon, sausage, hotdogs, ham) vs grilled chicken breast

Tips for Reducing Sodium

- Choose low sodium beans
- Choose low sodium vegetables
- Use reduced sodium cheese
- Opt for frozen vegetables over canned vegetables
- Choose meats without salt
- Compare labels on popular items...choose the product that is lowest in sodium...conduct a taste test

Altering Recipes for Less Sodium

- Cut the salt in a recipe...by a quarter...by a half...or all of it (unless the recipe includes yeast)
- Replace salt with fresh or dried herbs and spices
- Try lemon or orange zest instead of salt
- Try black or red pepper, basil, curry, ginger, or rosemary to use as seasoning

Altering Recipes for Less Sodium

- Use lower sodium or no-salt-added versions or use less of the following products:
 - Canned soups
 - Tomato sauce or paste
 - Spaghetti sauce
 - Canned vegetables
 - Chips
 - Taco shells

Salt Cheat Sheet

2325mg sodium	1 teaspoon
6,975mg sodium	1 Tablespoon
27,900mg sodium	$\frac{1}{4}$ cup
55,800mg sodium	$\frac{1}{2}$ cup
111,600mg sodium	1 cup

Condiments

- Soy sauce, ketchup, barbeque sauce, hot sauce, salad dressings, etc. are typically high in sodium
- Choose low-sodium varieties
- Use less or none at all
- Section G

Procurement

- Specify that products be labeled “low-sodium” or “no-salt-added”
- Read nutrition facts labels to compare products. Choose foods with the lowest amount of sodium.

Procurement

- Look at ingredient lists for other sources of sodium such as MSG, baking soda, baking powder, disodium phosphate, sodium alginate, and sodium nitrate
- Check the ingredient statement and request any additional documentation from the manufacturer if needed

Nutrition Education

- May help you implement sodium reductions
 - Taste tests
 - Posters / Bulletin Boards
 - Art Class – have students create catchy messages and posters about sodium
 - Have a sodium display (may request sodium test tubes from CNU)
 - Educate teachers at meetings
 - Educate parents at Open House events

Lunchroom Tricks

- Make the low-sodium targeted entrée the first entrée option available
- Position low-sodium vegetables in front of the higher sodium vegetables on the serving line
- Refer to the New Meal Deal Marketing Toolkit
- Educate your Wellness Committee

Resources

- Sodium Estimator Tool
- USDA Healthier School Day: Tools for Schools
 - Reducing Sodium found at:
<http://www.fns.usda.gov/healthierschoolday/tools-schools-sodium>
- CDC's Sodium: the facts

Weekly Average Sodium Estimator Tool

2 GRADES _____ Breakfast _____ Lunch _____

3 Dates: _____

4 _____

5 **Monday**

6 Menu Item/Recipe	Serving Size	mg of Sodium per Serving	Daily Total
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			0
18			

19 **Tuesday**

20 Menu Item/Recipe	Serving Size	mg of Sodium per Serving	Daily Total
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			0

61	Friday			
62	Menu Item/Recipe	Serving Size	mg of Sodium per Serving	Daily Total
63				
64				
65				
66				
67				
68				
69				
70				
71				
72				
73				0
74				
75	Weekly mg of Sodium	0		
76	Enter # Serving Days	5		
77	Average mg of Sodium per Day	0		
78				
79	*** Please note that this estimator tool is not a nutrient analysis and does not figure based on			
80	Weighted Nutrient Analysis. The tool is simply an estimator for sodium.			
81	*** It is recommended that schools complete a Sodium Estimator Tool for each menu/line. If each			
82	line meets nutrient standards, then the Weighted Nutrient Analysis should be "in the ballpark."			
83				
84	2014-15 Sodium Guidelines			
85	Breakfast			
86	K-5 ≤ 540mg			
87	6-8 ≤ 600mg			
88	9-12 ≤ 640mg			
89				
90	Lunch			
91	K-5 ≤ 1,230mg			
92	6-8 ≤ 1,360mg			
93	9-12 ≤ 1,420mg			

Weekly Average Sodium Estimator Tool

GRADES _____ Breakfast _____ Lunch _____

Dates:

4				
5	Monday			
6	Menu Item/Recipe	Serving Size	mg of Sodium per Serving	Daily Total
7	super donut	2 oz eq	250	
8	pears	1/2 c	10	
9	juice	4 oz	0	
10	milk	8 oz	140	
11				
12				
13				
14				
15				400
16				
17	Tuesday			
18	Menu Item/Recipe	Serving Size	mg of Sodium per Serving	Daily Total
19	sausage	1 patty	410	
20	biscuit	1.5 oz eq	390	
21	peaches	1/2 c	10	
22	juice	4 oz	0	
23	milk	8 oz	140	
24				
25				
26				
27				950

29	Wednesday			
30	Menu Item/Recipe	Serving Size	mg of Sodium per Serving	Daily Total
31	whole wheat sticky bun	2.75 oz eq	360	
32	peaches	1/2 c	10	
33	juice	4 oz	0	
34	milk	8 oz	140	
35				
36				
37				
38				
39				510
40				
41	Thursday			
42	Menu Item/Recipe	Serving Size	mg of Sodium per Serving	Daily Total
43	French Toast Sticks	2 oz eq	200	
44	Syrup	1 each	36	
45	Mixed Fruit	1/2 c	10	
46	Juice	4 oz	0	
47	Milk	8 oz	140	
48				
49				
50				
51				386

52				
53	Friday			
54	Menu Item/Recipe	Serving Size	mg of Sodium per Serving	Daily Total
55	Peanut Butter	1 pack	54	
56	WGR Bread	1 oz eq	132	
57	Applesauce	1/2 c	5	
58	Juice	4 oz	0	
59	Milk	8 oz	140	
60				
61				
62				
63				331
64				
65	Weekly mg of Sodium		2577	
66	Enter # Serving Days		5	
67	Average mg of Sodium per Day		515.4	
68				
69	*** Please note that this estimator tool is not a nutrient analysis and does not figure based on			
70	Weighted Nutrient Analysis. The tool is simply an estimator for sodium.			
71	*** It is recommended that schools complete a Sodium Estimator Tool for each menu/line. If each			
72	line meets nutrient standards, then the Weighted Nutrient Analysis should be "in the ballpark."			
73				