

# Welcome

Office for State, Tribal, Local and Territorial Support  
*presents . . .*

**CDC Vital Signs**

**School's in Session: Taking Steps to Reduce  
Sodium in Children's Diets**

September 9, 2014

2:00–3:00 pm (EDT)



Centers for Disease Control and Prevention  
Office for State, Tribal, Local and Territorial Support

# Agenda

<b>2:00 pm</b>	<b>Welcome &amp; Introductions</b>	<b>Dan Baden, MD</b> Associate Director for External Partner Outreach and Connectivity, Office for State, Tribal, Local and Territorial Support, CDC
<b>2:04 pm</b>	<b>Presentations</b>	<b>Mary E. Cogswell, RN, DrPH</b> Senior Scientist, Epidemiology and Surveillance Branch, Division for Heart Disease and Stroke Prevention, National Center for Chronic Disease Prevention and Health Promotion, CDC  <b>Robert S. Lewis, DPA, MPA, SNS</b> Director, Nutrition Services, El Monte City School District  <b>Heather Plain, SNS</b> Child Nutrition Director, Bonneville School District 93
<b>2:30 pm</b>	<b>Q&amp;A and Discussion</b>	<b>Dan Baden, MD</b>
<b>2:55 pm</b>	<b>Wrap-up</b>	
<b>3:00 pm</b>	<b>End of Call</b>	



**CDC**  
**Vital**signs™ Teleconference  
to support STLT efforts and build  
momentum around the monthly  
release of CDC *Vital Signs*



# School's in Session: Reducing Sodium in Children's Diets

**Mary E. Cogswell, RN, DrPH**

Senior Scientist

Division for Heart Disease and Stroke Prevention  
Centers for Disease Control and Prevention

*Vital Signs* Town Hall Teleconference  
September 9, 2014

National Center for Chronic Disease Prevention and Health Promotion  
Division for Heart Disease and Stroke Prevention



## Cardiovascular Disease

- ❑ Each year, nearly **800,000 people** in the United States die from cardiovascular disease (CVD)<sup>1</sup>
  - That's **1 in every 3 deaths**
- ❑ About 150,000 Americans who died from CVD in 2010 were **younger than age 65**<sup>1</sup>
- ❑ About **1 in every 6 health care dollars** is spent on CVD<sup>2</sup>
  - Total costs each year: **\$315.4 billion**<sup>3</sup>
- ❑ High blood pressure is a major risk factor for CVD<sup>4</sup>

<sup>1</sup> Murphy SL, Xu JQ, Kochanek KD. Deaths: Final data for 2010. *Natl Vital Stat Rep.* 2013;61(4).

<sup>2</sup> Heidenreich PA, Trogdon JG, Khavjou OA, Butler J, Dracup K, Ezekowitz MD, et al. Forecasting the future of cardiovascular disease in the United States: a policy statement from the American Heart Association. *Circulation.* 2011;123(8):933–44.

<sup>3</sup> Go AS, Mozaffarian D, Roger VL, Benjamin EJ, Berry JD, Blaha MJ, et al. Heart disease and stroke statistics—2014 update: a report from the American Heart Association. *Circulation.* 2014;129:399-410.

<sup>4</sup> Yang Q, Cogswell ME, Flanders WD, Hong Y, Zhang Z, Loustalot F, et al. Trends in cardiovascular health metrics and associations with all-cause and CVD mortality among US adults. *JAMA* 2012;307:1273–1283.

# Overview of Vital Signs

- ❑ A high sodium diet can lead to high blood pressure
- ❑ About 1 in 6 children ages 8–17 years has raised blood pressure
- ❑ About 9 in 10 US children ages 6–18 years eat too much sodium before salt is added at the table

**CDC Vital signs™**  
September 2014

## Reducing Sodium in Children's Diets

The pressure is on to keep blood pressure down

About 9 in 10 US children eat more sodium than recommended. Most sodium is in the form of salt, as a part of processed foods. A high sodium diet can lead to high blood pressure. About 1 in 6 children ages 8–17 years has raised blood pressure. High blood pressure is a major risk factor for heart disease and stroke. Lowering sodium in children's diets today can help prevent heart disease tomorrow, especially for those who are overweight.

The taste for salt is established through diet at a young age. Parents and caregivers can help lower sodium by influencing the way foods are produced, sold, prepared, and served.

**As a parent and caregiver, you can:**

- Compare Nutrition Facts labels to choose the lowest sodium option before you buy.
- Model healthy eating for your children by having a diet rich in fruits and vegetables without added sodium.
- Request restaurant nutrition information to make lower sodium choices.
- Ask your grocery manager to provide more low sodium options of your family's favorite foods.

→ See page 4  
Want to learn more? Visit  
<http://www.cdc.gov/vitalsigns/children-sodium/>

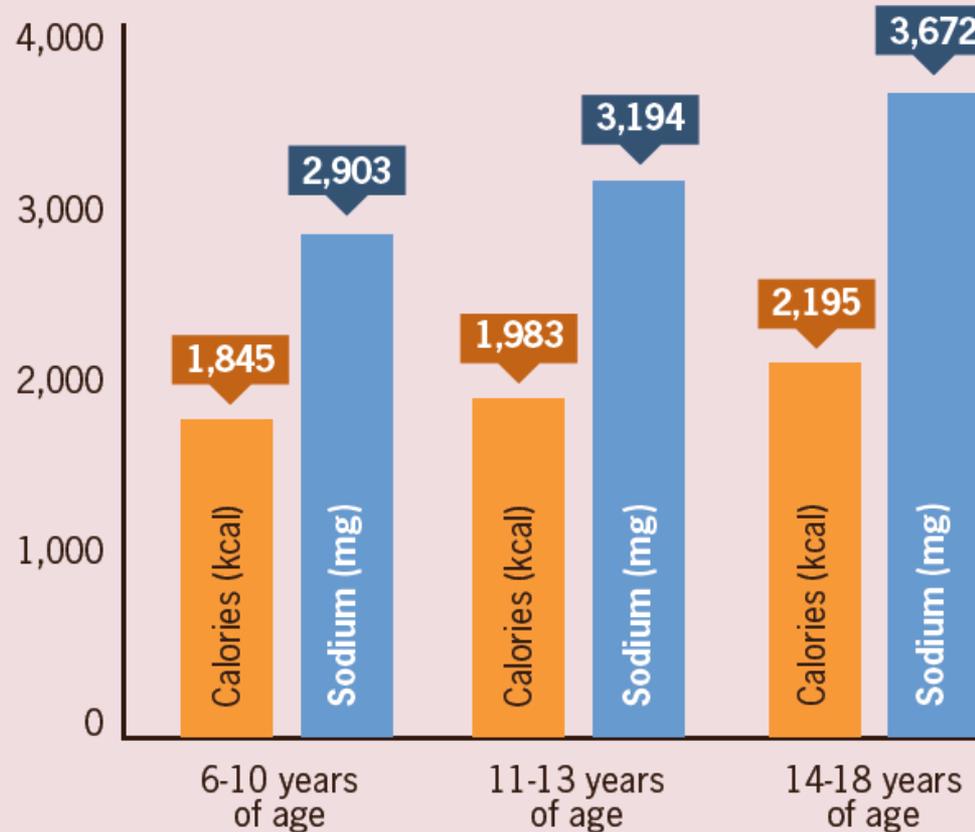
National Center for Chronic Disease Control and Health Promotion  
Division for Heart Disease and Stroke Prevention

## How Much Sodium Is Too Much?

- ❑ 2010 Dietary Guidelines for Americans recommends less than 2,300 mg/day
  - Children in these groups should eat 1,500 mg/day
    - African Americans
    - Hypertension
    - Diabetes
    - Chronic kidney disease
- ❑ A Healthy People 2020 objective is to reduce average US sodium intake to 2,300 mg daily
- ❑ US children 6–18 years eat 3,300 mg/day on average

# A Salty Generation

All children are eating too much sodium daily, and teens are consuming foods higher in sodium than younger children.

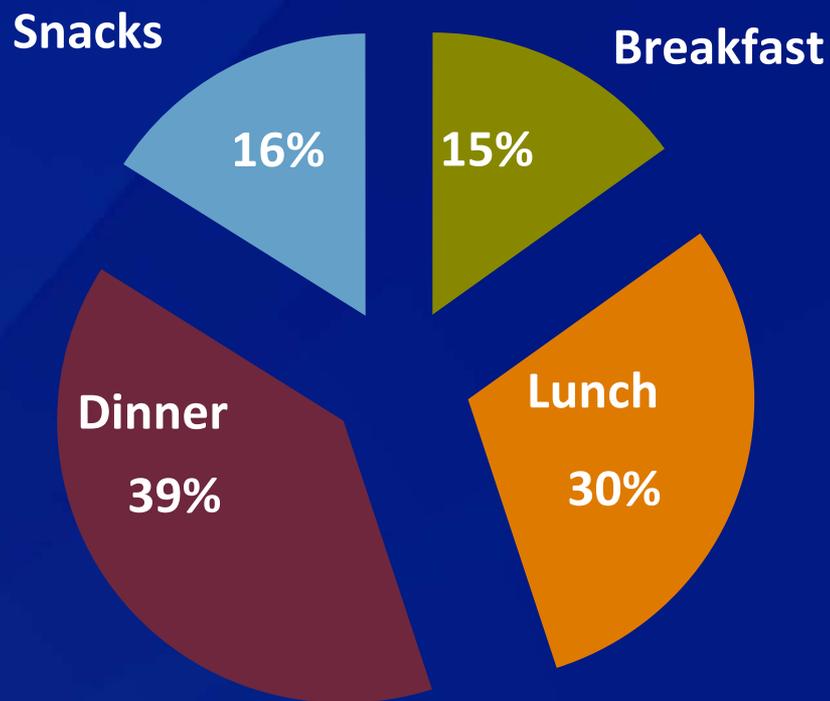


SOURCE: National Health and Nutrition Examination Survey, United States, 2009–2010.

# Where Does Sodium Come From?



# Meals and Snacks



Source: What We Eat in America, National Health and Nutrition Examination Survey, 2009–10, US Children aged 6–18 years

## Common Foods

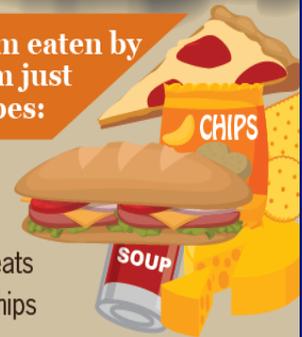
□ About 43% of sodium eaten by children comes from just 10 common food types

- Pizza
- Bread and rolls
- Cold cuts and cured meats
- Snacks, such as chips
- Sandwiches, like cheeseburgers
- Cheese
- Chicken patties, nuggets, tenders
- Pasta mixed dishes, spaghetti w/sauce
- Mexican mixed dishes, burritos, and tacos
- Soup

### 10 sources of sodium in children's diets

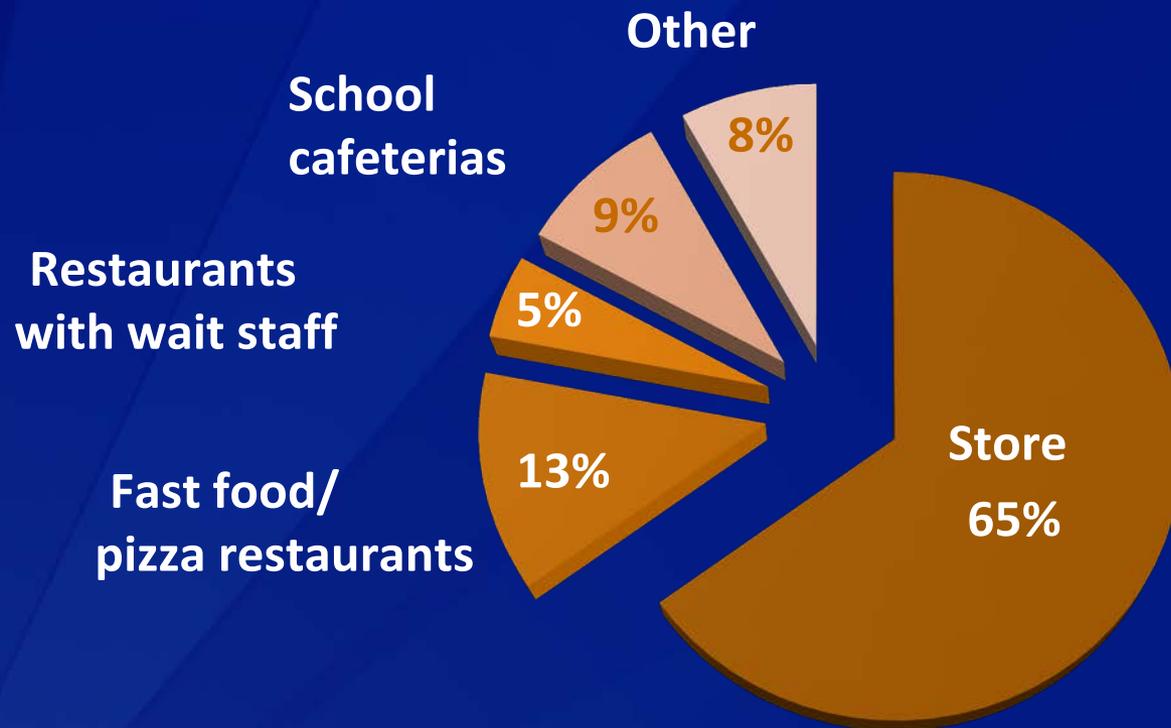
About 43% of sodium eaten by  
children comes from just  
10 common food types:

- Pizza
- Bread and rolls
- Cold and cured meats
- Snacks, such as chips
- Cheese
- Sandwiches like cheeseburgers
- Chicken patties, nuggets, and tenders
- Pasta mixed dishes, like spaghetti with sauce
- Mexican mixed dishes, such as burritos and tacos
- Soup



SOURCE: What we eat in America, National Health and Nutrition Examination Survey, United States, 2009–2010.

# Store, Restaurant, and School Cafeteria Foods



Source: What We Eat in America, National Health and Nutrition Examination Survey, 2009-10, US Children aged 6-18 years

## What Can Be Done?

- ❑ **Parents and caregivers can help by**
  - Modeling healthy eating, comparing Nutrition Facts labels, and asking for lower sodium options at stores and restaurants
- ❑ **Schools and school districts can help by**
  - Following USDA's Nutrition Standards for National School Lunch and School Breakfast Programs

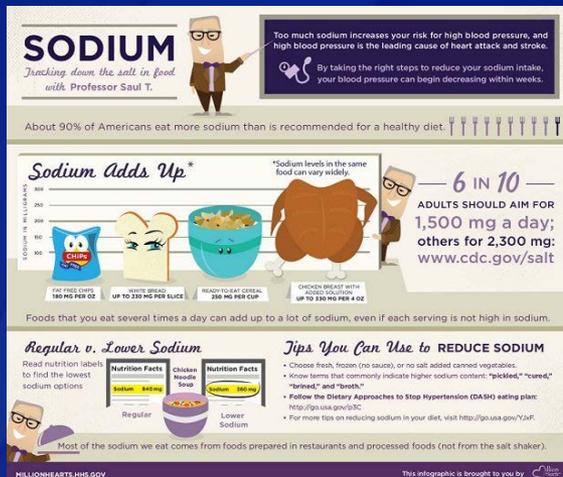


## What Can Communities and Health Departments Do?

- ❑ Support sodium reduction standards and strategies in restaurant meals, manufactured foods and school meals and snacks
- ❑ Increase access to healthful, affordable foods in communities and worksites
- ❑ Adopt comprehensive organizational and programmatic nutrition standards
- ❑ Heighten awareness of healthful food and beverage choices for consumers
- ❑ Support policies and programs that promote healthful eating and increased access to healthful foods

## Other Resources

- ❑ Salt/Sodium and cardiovascular disease: [www.cdc.gov/salt](http://www.cdc.gov/salt)
- ❑ Sodium Reduction in Communities Program (SRCP) [http://www.cdc.gov/dhdsp/programs/sodium\\_reduction.htm](http://www.cdc.gov/dhdsp/programs/sodium_reduction.htm)
- ❑ Million Hearts: [millionhearts.hhs.gov](http://millionhearts.hhs.gov)



**Thank you!**

**Mary E. Cogswell, RN, DrPH**

**Senior Scientist**

**Epidemiology and Surveillance Branch**

**Division for Heart Disease and Stroke Prevention**

**National Center for Chronic Disease Prevention and Health  
Promotion**

**[sodium@cdc.gov](mailto:sodium@cdc.gov)**

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E-mail: [cdcinfo@cdc.gov](mailto:cdcinfo@cdc.gov) Web: [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



# Sodium Reduction in School Meals: *Successful Strategies*

Robert Lewis, DPA, MPA, SNS  
Director of Nutrition Services  
*El Monte City School District*



# Recent Awards

## USDA Healthier US Schools Challenge

- All 14 EMCSD Schools received Silver Awards



*HealthierUS School Challenge*  
Recognizing Excellence in  
School Nutrition and Physical Activity

## Alliance for a Healthier Generation

- 9 Bronze Schools
- 6 Silver Schools
- 4 Gold Schools



# Coordinated School Health Team

- Teachers
- Administrators
- Principals
- Nutrition Educators
- School Board Members
- Coaches
- Nutrition Services Director
- Students
- City Personnel
- After School Groups
- Local Hospitals
- American Cancer Association
- Charity Organizations
- Dairy Council
- County Department of Education
- Walking and Biking Clubs



# Student Input

- District-sponsored Student Wellness Expo
- Taste-testing at Expo
- Students attend State Conference and sampled healthy foods
- Student art contests
- Annual essay contests
- Nutrition Advisory Clubs
- Student-led nutrition lessons



# Vendors + Commodities = Partners in Student Health



# El Monte City School District

- Changed menu items for healthier options
- Added more fresh fruits and vegetables
- Added more lean meats and proteins
- Fewer breaded entrées
- Increased fiber and whole grains
- **REDUCED SODIUM**



# Featured Fruits and Vegetables

- Baby carrots
- Unsweetened applesauce
- Side salads (romaine-based)
- Bananas
- Kiwi
- Tangelos
- Pears, fresh
- Persimmons
- Plums, fresh
- Strawberries, fresh
- Broccoli florets
- Beet and mandarin salad
- Jicama sticks
- Gala apples
- Raisins
- Green beans
- Cucumber coins
- Celery sticks
- Nectarines
- Grapes
- Baked potato wedges
- Peaches, fresh
- Zucchini sticks
- Corn on the cob (no butter)





# Entrées

- Unbreaded chicken patty sandwich
- Homemade spaghetti sauce with turkey
- Healthier pizza
- Teriyaki chicken and teriyaki beef
- Unbreaded New Orleans chicken
- Healthier bean and cheese burrito
- Lean hamburger patty
- Chicken hot dogs
- Chili con carne (Turkey)—Low sodium
- Unbreaded Chinese orange chicken
- Mac & cheese—Low sodium
- Toasted cheese sandwich—Low sodium



# Recent Success

- Comprehensive joint use agreement
- Dance-a-thons
- Nonfood fundraisers
- Healthy carnival
- Jog-a-thons
- Wellness jog
- Nutrition Expo with city





# Thank you!

Robert Lewis, DPA, MPA, SNS  
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El Monte City School District  
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Heather Plain, SNS Child Nutrition Director  
Bonnevillle School District 93  
Idaho Falls, Idaho

**"Growing Together, Creating Quality Meals"**

Bonnevillle School District Child Nutrition  
Department

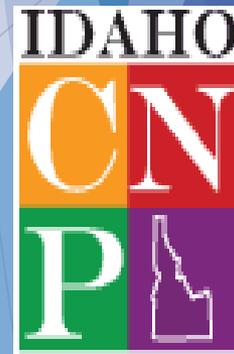
*"Leaders of Child Nutrition committed to providing  
tools for growth and learning."*

# January 2009



## SODIUM

2 mg per  
Calorie



NUTRIKIDS Menu Planning - Version: 15.0 - User plainh - [Menu Planning]

Ingredients Recipes Menus Production Costing Conversion Charts Tools Help

Close Save Prod Qty Gp Selection Defaults View Recipe Reim. Meal Groups

Search Open Up Down Insert Clear Delete Prev Day Next Day

**Tue, Oct 31, 2006**      **B - K-6 Lunch**      Portion Size Weighted Values

	Recipe Name	Portion Size	Reim- burse	Ala Carte	CALS	mg Sodm	Tot Fat Grams	Tot Fat CAL5%
1	Must Choose Only One	1	0	0	0	0	0.0	0.0%
2	BSD Hamburger	SERVING	800	0	286	600	12.0	37.7%
3	BSD Condiment Bar:HHS	.5 cup	770	0	28	219	1.4	46.0%
4	LASAGNA W/ GARLIC BREAD	SERVINGS	680	0	471	882	7.8	15.0%
5	BSD Salad, Chef Ham:Elem	1 each	755	0	163	472	9.7	53.4%
6	May Choose Three	1	0	0	0	0	0.0	0.0%
7	MACARONI AND CHEESE	2/3 CUP	1320	0	350	1003	21.5	55.4%
8	Chocolate Pudding	1/2 Cup	2080	0	406	632	1.3	2.8%
9	FRUIT ASSORTED CANNED	.5 CUP	835	0	35	3	0.0	0.5%
10	May Choose	Desc.	0	0	0	0	0.0	0.0%
11	BSD Milk, 1 % White	HALF PINT	2235	0	100	125	2.5	22.5%
12								
13								
14								
15								
<b>Meal Totals :</b>			<b>2235</b>		<b>1008</b>	<b>2025</b>	<b>26.8</b>	<b>24.0%</b>

\* - asterisk denotes nutrients with either missing or incomplete nutrient data.

\*N/A\* - denotes a nutrient that is missing or incomplete for an individual ingredient.

<sup>2</sup> - Trans Fat value is provided for informational purposes only, not for monitoring purposes.

NUM CAPS 7/2/2014 1:21 PM 7/2/2014



# Where we began...

- ▶ Step 1
- ▶ Make sure all ingredients are entered correctly and match what is actually being purchased/served
  
- ▶ Step 2
- ▶ Identify days and items that have high sodium



# Tricks we learned

- ▶ Remove the dill pickle spear from the salad
  - ▶ Saved 320 mg sodium (1 oz serving size)
- ▶ Don't add margarine or salt to the veggies
  - ▶ Saved 220 mg sodium per serving
- ▶ Hamburger instead of cheeseburger
  - ▶ Saved 145 mg sodium per cheese slice
- ▶ Fresh or frozen veggies instead of processed: Fresh broccoli w/ranch instead of tater tots w/ketchup
  - ▶ Saved 225 mg sodium
- ▶ Baked beans made with USDA vegetarian beans
  - ▶ Saved 400 mg sodium
- ▶ Switched to a lite ranch pc instead of making our own
  - ▶ Saved 88 mg Sodium
- ▶ Salad dressing is choice instead of serving it with every salad
  - ▶ Reduced consumption by 25%



Chef Brenda Thompson

Bonneville School District #93  
K-6 Lunch

# Before

Jul 2, 2014

Monday	Tuesday	Wednesday	Thursday	Friday	Nutrients
Mon - 10/30/2006	Tue - 10/31/2006	Wed - 11/1/2006	Thu - 11/2/2006	Fri - 11/3/2006	Avg Nutrients Target Sodium. 1428 mg
Must Choose Only One Golden Chicken Nuggets W/ Hot Roll with BBQ sauce Chili Dog Ham Sandwich May Choose Three RAISINS Green Beans Fruit Ambrosia May Choose	Must Choose Only One Hamburger Condiment Bar Lasagna W/ GARLIC BREAD Chefs Ham Salad May Choose Three Macaroni and Cheese Chocolate Pudding Chilled Fruit May Choose	Must Choose Only One BURRITO, BEAN Soft Shell Taco PB & J Sandwich* May Choose Three Chilled Sliced Peaches SPANISH RICE Tater Tots May Choose	Must Choose Only One Grilled Cheese with Soup Sloppy Joe Chef's Turkey Salad May Choose Three Potato Wedges Pears Chocolate Cake May Choose		

# After

Bonneville School District #93  
K-6 Lunch  
HHFKA - K-8

Aug 21, 2014

Monday	Tuesday	Wednesday	Thursday	Friday	Nutrients
Mon - 9/1/2014	Tue - 9/2/2014	Wed - 9/3/2014	Thu - 9/4/2014	Fri - 9/5/2014	Avg Nutrients Target Sodium. 1099 mg
Teriyaki Chicken w/Rice Bean & Cheese Burrito Corn California Vegetable Pears Graham Bear Cookie	Hamburger Rotini Lasagna Baked Potato Green Peas Tropical Fruit Salad	Macaroni and Cheese Hot Dog Chicken Burger Green Beans Steamed Broccoli Watermelon Chunks	BBQ Pork Sandwich Chicken Nuggets Breadstick Baked Beans Rosemary & Garlic Potato Red Grapes	Cheese Ripper Turkey Sandwich Fresh Celery Baby Carrots, Raw Applesauce	



# Eat School Meals!



We need to market our program more than ever before!



# Thank you!

Heather Plain, SNS  
Child Nutrition Director  
Bonnevillle School District 93  
Idaho Falls, Idaho  
[plainh@d93.k12.id.us](mailto:plainh@d93.k12.id.us)



# CDC *Vital Signs* Electronic Media Resources

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Syndicate *Vital Signs* on your website

<http://tools.cdc.gov/syndication/search.aspx?searchURL=www.cdc.gov%2fvitalsigns>

*Vital Signs* interactive buttons and banners

[www.cdc.gov/vitalsigns/SocialMedia.html](http://www.cdc.gov/vitalsigns/SocialMedia.html)

# Public Health Practice Stories from the Field

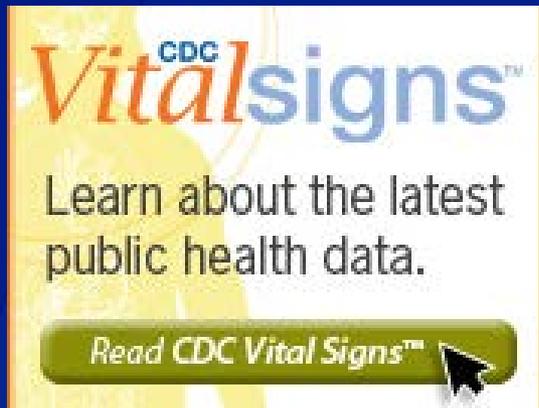
- Stories about the implementation of Public Health Practice Stories from the Field



[www.cdc.gov/stltpublichealth/phpracticestories](http://www.cdc.gov/stltpublichealth/phpracticestories)

Provide feedback on this teleconference:

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Please mark your calendars for the next  
***Vital Signs Town Hall Teleconference***

**October 14, 2014**

**2:00–3:00 pm (EDT)**

**For more information, please contact Centers for Disease Control and Prevention.**

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