What's for Breakfast?

Meeting the Meal Pattern Requirements for the School Breakfast Program

Connecticut State Department of Education
Bureau of Health/Nutrition, Family Services and Adult Education

Dietary Specifications (Nutrition Standards)

Dietary Specifications (Nutrition Standards) for Breakfast

School Years 2014-15 through 2016-17			
Daily Amount Based on Weekly Average			
NUTRIENTS	NUTRIENTS	NUTRIENTS	NUTRIENTS
Calories	350-500	400-550	450-600
Saturated Fat	< 10 %	< 10 %	< 10 %
Sodium *	≤ 540 mg	≤ 600 mg	≤ 640 mg
Trans Fat	Nutrition label or manufacturer specifications must indicate zero grams of trans fat per serving		
* First sodium target through June 30, 2017			

Four Dietary Specifications (Nutrition Standards)

- WEEKLY average requirements for calories, saturated fat and sodium
- DAILY requirement for trans fat (all foods)

Calorie Ranges

- MINIMUM and MAXIMUM calorie levels averaged over the week
- NUTRIENT-DENSE menus (more fruits, vegetables and whole grains)
  - Avoiding foods high in fats and added sugars

Saturated Fat

- Limit saturated fat to LESS THAN 10 PERCENT of total calories

Limit Saturated Fat (USDA, 2012)

Just the Facts!

Limit Saturated Fat *for Healthier School Meals*

KEY ISSUES:

- **To help lower saturated fat in school meals, serve lean meats; encourage more fruits, vegetables, dry beans and peas (legumes), and whole grains; and serve only fat-free (skim) or low-fat (1%) milk.**
- **Help protect students' hearts by serving foods containing or prepared with healthy oils rather than saturated fats or trans fats.**

Choose one of these:	Instead of any of these:
Soft tub margarine	Beef, pork, & chicken fat
Canola oil	Butter, cream, & milk fat
Corn oil	Coconut, palm, & palm kernel oils
Cottonseed oil	Hydrogenated oil
Olive oil	Partially hydrogenated oil
Safflower oil	Shortening
Sunflower oil	

Some foods are naturally high in healthy oils:

- Nuts
- Olives
- Some fish
- Avocados

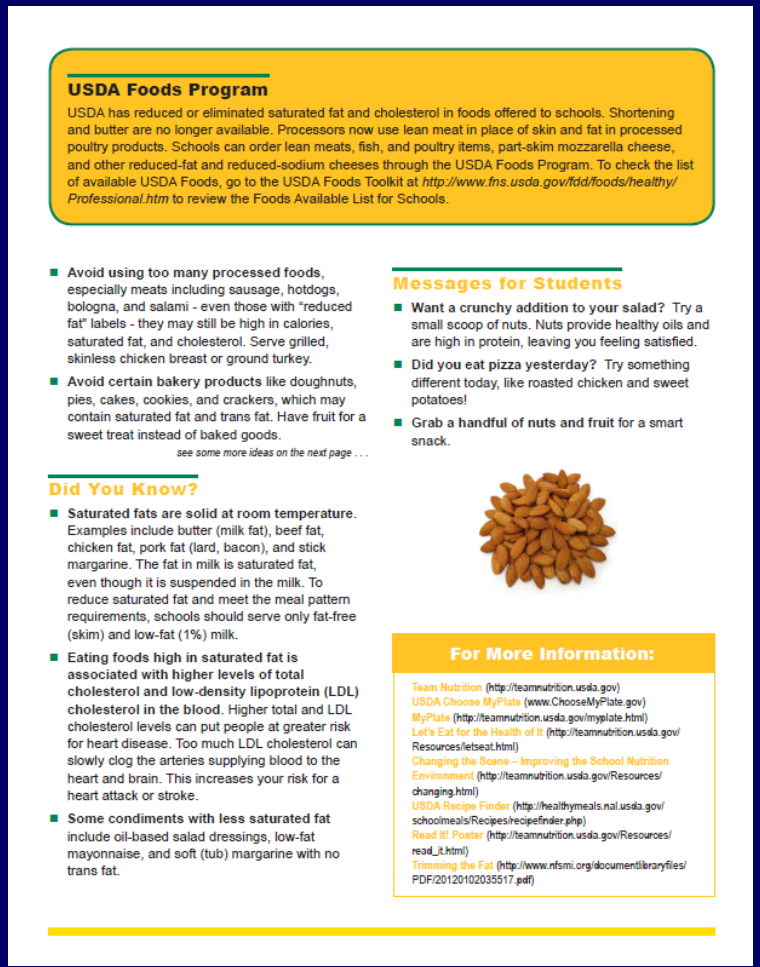
When it comes to heart health, the type and amount of fat we eat in food make a big difference. Most Americans need to decrease their intakes of foods containing saturated fat to lower the risk of heart disease. Most of the saturated fat in our diet comes from cheese and other higher fat dairy products, beef, and baked goods like cakes, cookies, and doughnuts. Foods higher in saturated fat usually contain more cholesterol, too.

Many students can fill up on the extra calories from saturated fats and then not get the nutrients they need to grow and be healthy. These extra calories from saturated fats also make it harder for students to grow at a healthy weight. You can help by offering students fewer foods that are high in saturated fats or replacing saturated fats with oils. Look for the amount of "saturated fat," "*trans* fat," and "cholesterol" per serving listed on the Nutrition Facts label. Choose foods that have the least amount of all three. The school meal patterns require that less than 10 percent of calories for both breakfast and lunch come from saturated fat.

Easy ways to follow the *2010 Dietary Guidelines for Americans*

Recipe for Success

- **Skip butter and cream in sauces** or as a seasoning for vegetables. Try herbs and spices to add more flavor without the fat. If you need to use some fat, try oils with healthier fats, such as olive or canola oils.
- **Choose lean cuts of meats with minimal visible fat.** Trim away all of the visible fat from meat and poultry before cooking. Remove the skin on poultry.
- **Prepare fish baked, broiled, or grilled** rather than breaded and fried.
- **Offer fat-free (skim) or low-fat (1%) milk and yogurt.** They're rich in protein, calcium, and other nutrients and lower in saturated fat and cholesterol.
- **Try low-fat cottage cheese**, part-skim mozzarella, ricotta, and other low-fat or reduced-fat cheeses.



USDA Foods Program

USDA has reduced or eliminated saturated fat and cholesterol in foods offered to schools. Shortening and butter are no longer available. Processors now use lean meat in place of skin and fat in processed poultry products. Schools can order lean meats, fish, and poultry items, part-skim mozzarella cheese, and other reduced-fat and reduced-sodium cheeses through the USDA Foods Program. To check the list of available USDA Foods, go to the USDA Foods Toolkit at *http://www.fns.usda.gov/fdd/foods/healthy/Professional.htm* to review the Foods Available List for Schools.

- **Avoid using too many processed foods**, especially meats including sausage, hotdogs, bologna, and salami - even those with "reduced fat" labels - they may still be high in calories, saturated fat, and cholesterol. Serve grilled, skinless chicken breast or ground turkey.
- **Avoid certain bakery products** like doughnuts, pies, cakes, cookies, and crackers, which may contain saturated fat and trans fat. Have fruit for a sweet treat instead of baked goods.

see some more ideas on the next page . . .

Did You Know?

- **Saturated fats are solid at room temperature.** Examples include butter (milk fat), beef fat, chicken fat, pork fat (lard, bacon), and stick margarine. The fat in milk is saturated fat, even though it is suspended in the milk. To reduce saturated fat and meet the meal pattern requirements, schools should serve only fat-free (skim) and low-fat (1%) milk.
- **Eating foods high in saturated fat is associated with higher levels of total cholesterol and low-density lipoprotein (LDL) cholesterol in the blood.** Higher total and LDL cholesterol levels can put people at greater risk for heart disease. Too much LDL cholesterol can slowly clog the arteries supplying blood to the heart and brain. This increases your risk for a heart attack or stroke.
- **Some condiments with less saturated fat** include oil-based salad dressings, low-fat mayonnaise, and soft (tub) margarine with no trans fat.

Messages for Students

- **Want a crunchy addition to your salad?** Try a small scoop of nuts. Nuts provide healthy oils and are high in protein, leaving you feeling satisfied.
- **Did you eat pizza yesterday?** Try something different today, like roasted chicken and sweet potatoes!
- **Grab a handful of nuts and fruit** for a smart snack.

For More Information:

Team Nutrition (http://teamnutrition.usda.gov)
USDA Choose MyPlate (www.ChooseMyPlate.gov)
MyPlate (http://teamnutrition.usda.gov/myplate.html)
Let's Eat for the Health of It (http://teamnutrition.usda.gov/Resources/letseat.html)
Changing the Scene – Improving the School Nutrition Environment (http://teamnutrition.usda.gov/Resources/changing.html)
USDA Recipe Finder (http://healthymeals.nal.usda.gov/schoolmeals/Recipes/recipefinder.php)
Read It! Poster (http://teamnutrition.usda.gov/Resources/read_it.html)
Trimming the Fat (http://www.nfsmi.org/documentlibraryfiles/PDF/20120102035517.pdf)

http://www.fns.usda.gov/sites/default/files/jtf_satfat.pdf

Sodium

New for School Year (SY) 2014-15
FIRST SODIUM TARGET

NEW

Sodium Reduction Timeline for Breakfast

grade Group	Target 1 (mg)	Target 2 (mg)	Final Target (mg)
	Meet by July 1, 2014 (SY 2014-15)	Meet by July 1, 2017 (SY 2017-18)	Meet by July 1, 2022 (SY 2022-23)
K-5	≤ 540	≤ 485	≤ 430
6-8	≤ 600	≤ 535	≤ 470
9-12	≤ 640	≤ 570	≤ 500

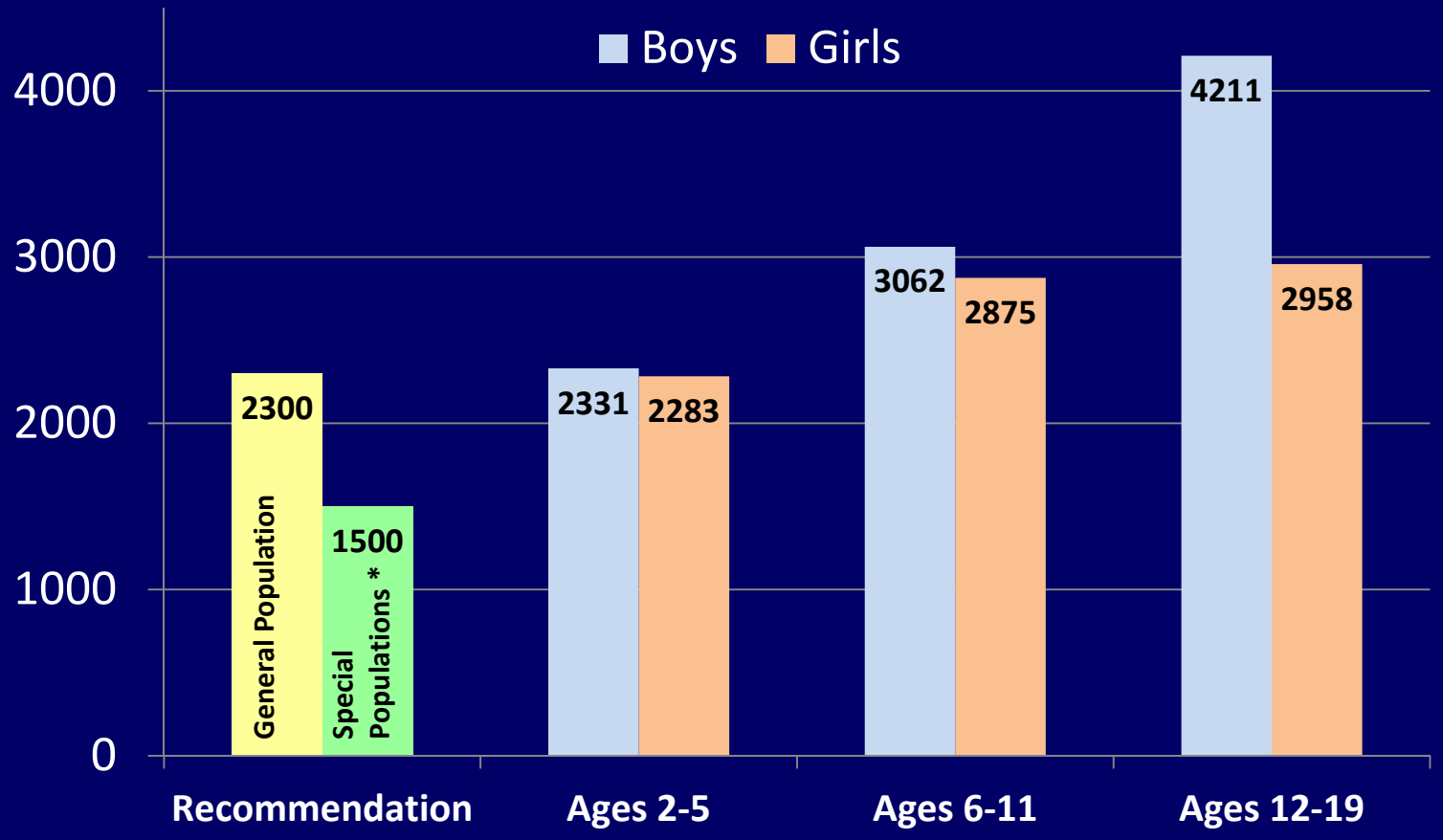
http://www.sde.ct.gov/sde/lib/sde/pdf/deps/nutrition/nslp/sodium_timeline.pdf

Sodium Intake

- **75%** from processed and prepared foods
- **12%** naturally occurring in foods
- **13%** added during cooking and at the table

Get the Facts: Sources of Sodium in Your Diet (CDC, 2012). http://www.cdc.gov/salt/pdfs/sources_of_sodium.pdf

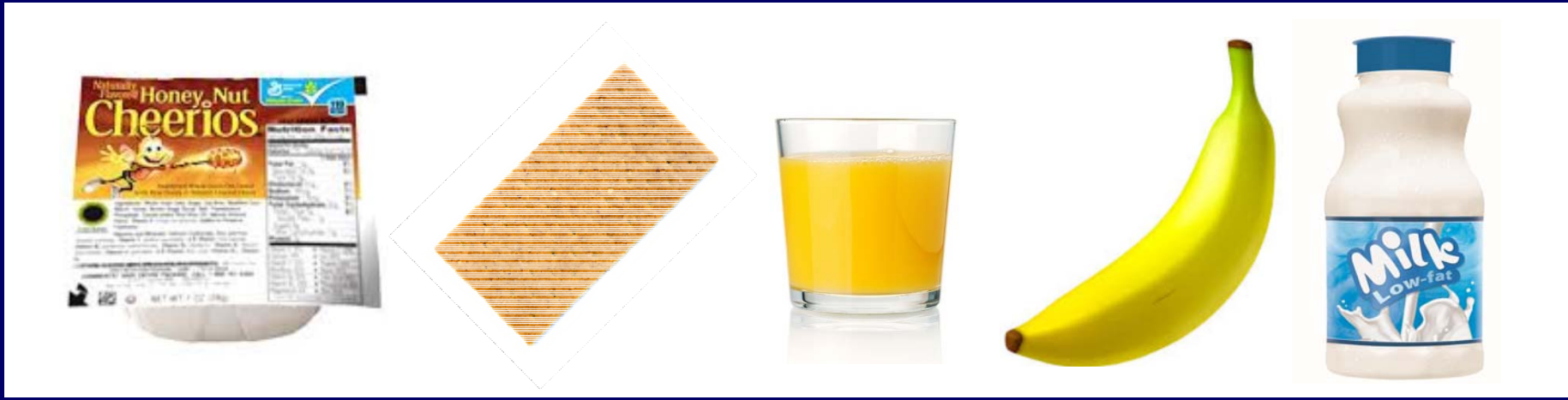
Children's Average Daily Sodium Intake



* Special populations include children who are African American and children who have hypertension, diabetes or chronic kidney disease

Source: U.S. Department of Agriculture, Agricultural Research Service and U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. What We Eat in America, NHANES 2009-2010. http://seprl.ars.usda.gov/SP2UserFiles/Place/12355000/pdf/0910/Table_1_NIN_GEN_09.pdf

Sodium Content of Typical Breakfast Menus



SODIUM LIMITS
(through June 30, 2017)

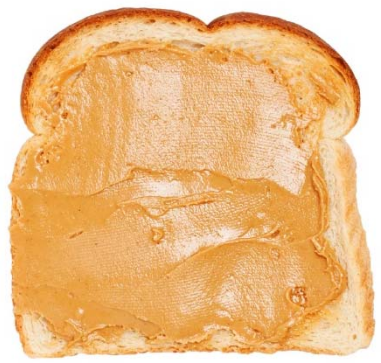
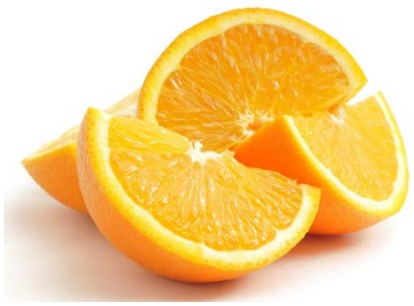
K-5	540
6-8	600
9-12	640

Food	Portion Size	Sodium (milligrams) *
Honey Nut Cheerios	1 ounce (1 cup)	160
Graham crackers	3 pack	100
Orange juice	½ cup	1
Fresh banana	1 medium	1
Fat-free milk	8 fluid ounces	130
	TOTAL	**392**

* Sodium values represent typical sodium content of these foods but are not valid for all varieties or brands
* When evaluating school menus, use sodium content of actual foods purchased and prepared

Source: Product labels and USDA National Nutrient database (http://ndb.nal.usda.gov/)

Sodium Content of Typical Breakfast Menus

SODIUM LIMITS
(through June 30, 2017)

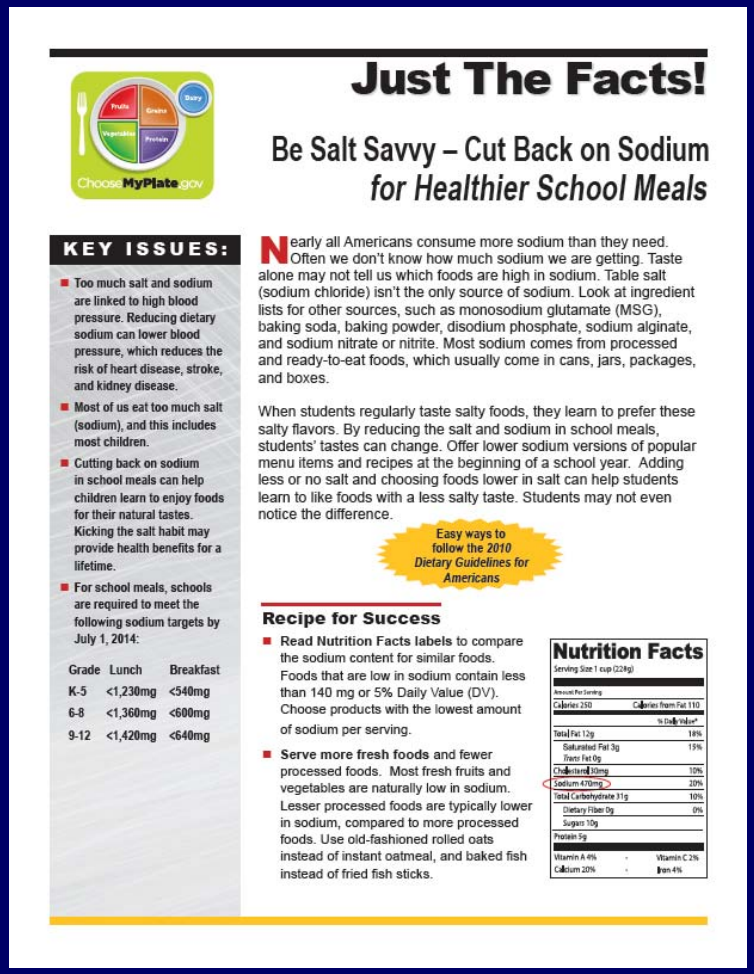
K-5	540
6-8	600
9-12	640

Food	Portion Size	Sodium (milligrams) *
Whole-wheat toast	2 slices	300
Peanut butter	2 tablespoons	150
Fresh orange, wedges	One 138-count	1
Apple juice	½ cup (4 fluid ounces)	5
Fat-free milk	8 fluid ounces	130
	TOTAL	**586**

* Sodium values represent typical sodium content of these foods but are not valid for all varieties or brands
* When evaluating school menus, use sodium content of actual foods purchased and prepared

Source: Product labels and USDA National Nutrient database (http://ndb.nal.usda.gov/)

Just the Facts! Be Salt Savvy (USDA, 2012)



Just The Facts!

Be Salt Savvy – Cut Back on Sodium *for Healthier School Meals*

KEY ISSUES:

- Too much salt and sodium are linked to high blood pressure. Reducing dietary sodium can lower blood pressure, which reduces the risk of heart disease, stroke, and kidney disease.
- Most of us eat too much salt (sodium), and this includes most children.
- Cutting back on sodium in school meals can help children learn to enjoy foods for their natural tastes. Kicking the salt habit may provide health benefits for a lifetime.
- For school meals, schools are required to meet the following sodium targets by July 1, 2014:

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

Nearly all Americans consume more sodium than they need. Often we don't know how much sodium we are getting. Taste alone may not tell us which foods are high in sodium. Table salt (sodium chloride) isn't the only source of sodium. Look at ingredient lists for other sources, such as monosodium glutamate (MSG), baking soda, baking powder, disodium phosphate, sodium alginate, and sodium nitrate or nitrite. Most sodium comes from processed and ready-to-eat foods, which usually come in cans, jars, packages, and boxes.

When students regularly taste salty foods, they learn to prefer these salty flavors. By reducing the salt and sodium in school meals, students' tastes can change. Offer lower sodium versions of popular menu items and recipes at the beginning of a school year. Adding less or no salt and choosing foods lower in salt can help students learn to like foods with a less salty taste. Students may not even notice the difference.

Easy ways to follow the *2010 Dietary Guidelines for Americans*

Recipe for Success

- **Read Nutrition Facts labels** to compare the sodium content for similar foods. Foods that are low in sodium contain less than 140 mg or 5% Daily Value (DV). Choose products with the lowest amount of sodium per serving.
- **Serve more fresh foods** and fewer processed foods. Most fresh fruits and vegetables are naturally low in sodium. Lesser processed foods are typically lower in sodium, compared to more processed foods. Use old-fashioned rolled oats instead of instant oatmeal, and baked fish instead of fried fish sticks.

Nutrition Facts

Serving Size 1 cup (228g)

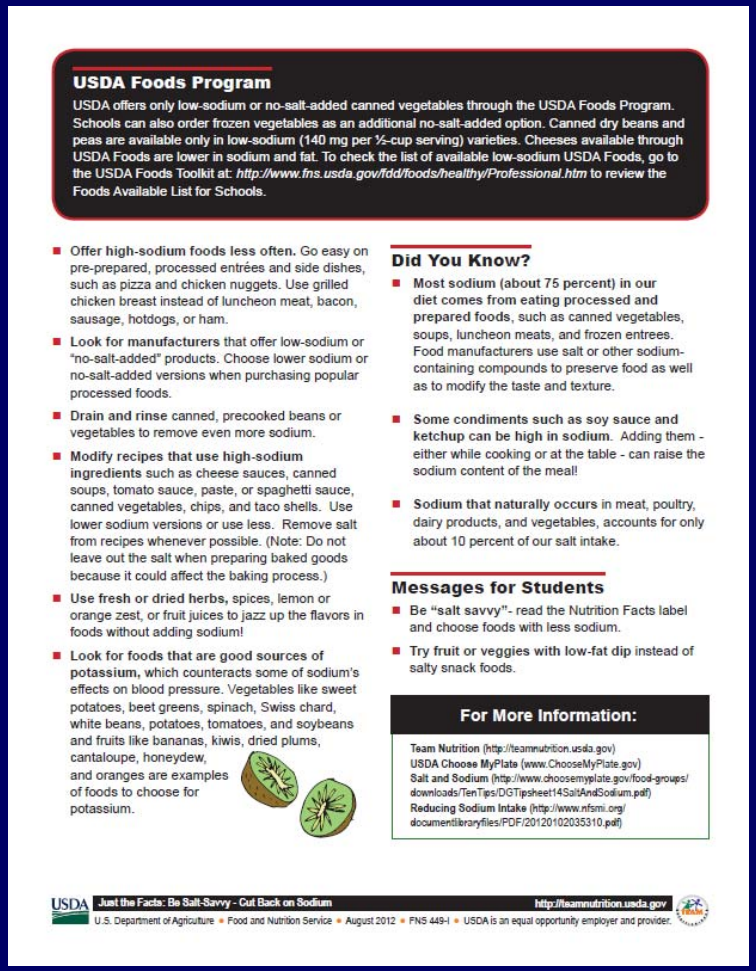
Amount Per Serving

Calories 250 — Calories from Fat 110

% Daily Value*

Total Fat 12g — 18%
Saturated Fat 3g — 15%
Trans Fat 0g
Cholesterol 30mg — 10%
Sodium 470mg — 20%
Total Carbohydrate 31g — 10%
Dietary Fiber 0g — 0%
Sugars 10g
Protein 5g

Vitamin A 4% · Vitamin C 2%
Calcium 20% · Iron 4%



USDA Foods Program

USDA offers only low-sodium or no-salt-added canned vegetables through the USDA Foods Program. Schools can also order frozen vegetables as an additional no-salt-added option. Canned dry beans and peas are available only in low-sodium (140 mg per ½-cup serving) varieties. Cheeses available through USDA Foods are lower in sodium and fat. To check the list of available low-sodium USDA Foods, go to the USDA Foods Toolkit at: *http://www.fns.usda.gov/fdd/foods/healthy/Professional.htm* to review the Foods Available List for Schools.

- **Offer high-sodium foods less often.** Go easy on pre-prepared, processed entrées and side dishes, such as pizza and chicken nuggets. Use grilled chicken breast instead of luncheon meat, bacon, sausage, hotdogs, or ham.
- **Look for manufacturers** that offer low-sodium or "no-salt-added" products. Choose lower sodium or no-salt-added versions when purchasing popular processed foods.
- **Drain and rinse** canned, precooked beans or vegetables to remove even more sodium.
- **Modify recipes that use high-sodium ingredients** such as cheese sauces, canned soups, tomato sauce, paste, or spaghetti sauce, canned vegetables, chips, and taco shells. Use lower sodium versions or use less. Remove salt from recipes whenever possible. (Note: Do not leave out the salt when preparing baked goods because it could affect the baking process.)
- **Use fresh or dried herbs,** spices, lemon or orange zest, or fruit juices to jazz up the flavors in foods without adding sodium!
- **Look for foods that are good sources of potassium,** which counteracts some of sodium's effects on blood pressure. Vegetables like sweet potatoes, beet greens, spinach, Swiss chard, white beans, potatoes, tomatoes, and soybeans and fruits like bananas, kiwis, dried plums, cantaloupe, honeydew, and oranges are examples of foods to choose for potassium.

Did You Know?

- **Most sodium (about 75 percent) in our diet comes from eating processed and prepared foods,** such as canned vegetables, soups, luncheon meats, and frozen entrees. Food manufacturers use salt or other sodium-containing compounds to preserve food as well as to modify the taste and texture.
- **Some condiments such as soy sauce and ketchup can be high in sodium.** Adding them - either while cooking or at the table - can raise the sodium content of the meal!
- **Sodium that naturally occurs** in meat, poultry, dairy products, and vegetables, accounts for only about 10 percent of our salt intake.

Messages for Students

- Be "salt savvy"- read the Nutrition Facts label and choose foods with less sodium.
- Try fruit or veggies with low-fat dip instead of salty snack foods.

For More Information:

Team Nutrition (http://teamnutrition.usda.gov)
USDA Choose MyPlate (www.ChooseMyPlate.gov)
Salt and Sodium (http://www.choosemyplate.gov/food-groups/downloads/TenTips/DGTipsheet14SaltAndSodium.pdf)
Reducing Sodium Intake (http://www.nfsmi.org/documentlibraryfiles/PDF/20120102035310.pdf)

USDA Just the Facts: Be Salt-Savvy - Cut Back on Sodium http://teamnutrition.usda.gov
U.S. Department of Agriculture • Food and Nutrition Service • August 2012 • FNS 449-I • USDA is an equal opportunity employer and provider.

http://www.fns.usda.gov/sites/default/files/jtf_sodium.pdf

Get the Facts: Sources of Sodium in Your Diet (CDC, 2012)

GET THE FACTS:
Sources of Sodium in Your Diet

All across the United States, high sodium intake is a major problem. On average, American adults eat more than 3,300 milligrams (mg) of sodium a day, more than double the recommended limit for most adults. The *Dietary Guidelines for Americans, 2010* recommend that Americans aged 2 and up reduce sodium intake to less than 2,300 mg per day. People 51 and older and those of any age who are African Americans or who have high blood pressure, diabetes, or chronic kidney disease—about half the U.S. population and the majority of adults—should further reduce sodium intake to 1,500 mg per day.

The vast majority of U.S. adults eat more sodium than they need. Having accurate information about where dietary salt comes from can help Americans stick to the recommendations.

The Salt Shaker Is Not to Blame

- More than 75% of the sodium Americans eat comes from restaurant, prepackaged, and processed foods.
- Only 5% of dietary sodium is added during home cooking and only 6% is added at the table.
- The remaining 12% of dietary sodium occurs naturally in foods.

Surprising Sources of Sodium

- Lots of packaged and processed foods can have high levels of sodium, and they may not even taste salty to many consumers.
- Breads and rolls, cold cuts/cured meats, and pizza are top contributors of sodium in the American diet.
- For example, one slice of bread can contain anywhere from 80 to 230 mg of sodium.
- Lunch meats are a major source—1 serving, around 6 thin slices, typically can contain 750 mg or more of sodium.

Food	Sodium Range (in milligrams)
1 slice white bread	80 - 230
3 oz turkey breast, deli or pre-packaged luncheon meat	450 - 1,050
4 oz slice frozen pizza, plain cheese, regular crust	370 - 730
4 oz slice restaurant pizza, plain cheese, regular crust	510 - 760
4 oz boneless, skinless chicken breast, fresh	40 - 330
3 oz chicken strips, restaurant, breaded	430 - 900
3 oz chicken nuggets, frozen, breaded	200 - 570
1 cup chicken noodle soup, canned prepared	100 - 940
1 corn dog, regular	350 - 620
1 cheeseburger, fast food restaurant	710 - 1,690
1 oz slice American cheese, processed (packaged or deli)	330 - 460
1 cup canned pasta with meat sauce	530 - 980
5 oz pork with barbecue sauce (packaged)	600 - 1,120
1 oz potato chips, plain	50 - 200

Sodium levels of the same food can vary widely, so choose wisely.

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

GET THE FACTS:
Sources of Sodium in Your Diet

Keeping an Eye on Labels as You Shop Is Important

- Frozen pizza typically contains between 370 and 730 mg of sodium in just 1 slice.
- Soup can also be high in sodium. For example, tomato soup can range from 700 to 1,260 mg of sodium in 8 ounces (1 cup).
- Many seemingly healthy foods, such as canned vegetables, often contain added sodium.
- Raw chicken and other meats can have sodium and flavor solutions added.
- Even foods labeled as "less sodium" or "reduced sodium" can contain significant amounts. One tablespoon of "less sodium" soy sauce typically contains more than 500 mg, and consumers often eat more than 1 serving at a time.

Why Cut Back? And How?

Eating too much sodium can lead to increased blood pressure, which can raise your risk for heart attack, stroke, and other cardiovascular conditions. Reducing sodium intake can help lower these risks. To help protect your heart, make a commitment to:

- **Try to eat more fruits and vegetables.** For canned and frozen vegetables, look for no salt added or low sodium versions, or choose frozen varieties without sauce.
- **Check nutrition labels on packaged foods.** Compare sodium in different brands for products like processed soups, dressings/sauces, breads, and frozen meals, and choose those with lower sodium.
- **Eat at home more frequently, and prepare more meals from scratch.** To boost flavor, use salt free herbs and spices rather than processed sauces, packaged broths, or condiments.
- **Ask restaurants not to add salt to your meal,** and use condiments in small amounts. Also ask your favorite restaurants, stores, and food manufacturers to offer more low-sodium options.
- **Re-train your taste buds.** Over time, the less sodium you eat, the less you'll want.

Learn more at www.cdc.gov/salt

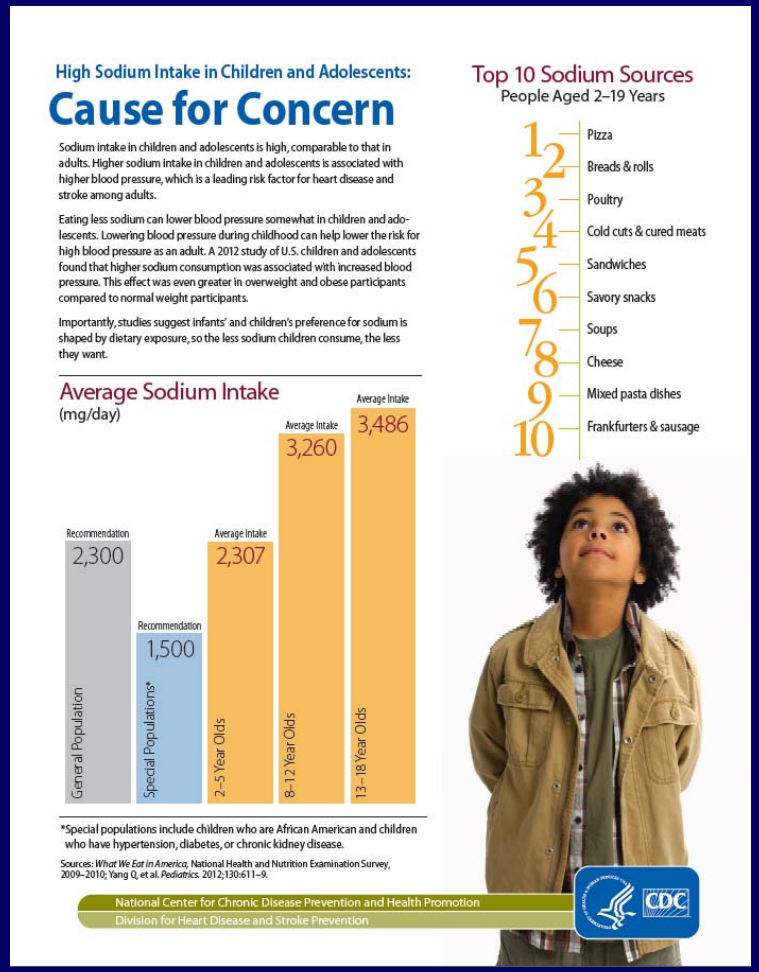
CHOOSE FRESH OR LOW SODIUM FOODS

FRESH TOMATOES	NO SALT ADDED CANNED TOMATOES	CANNED TOMATOES
		
6 mg (whole)	20 mg (per ½ cup)	220 mg (per ½ cup)

For more information please contact Centers for Disease Control and Prevention
1600 Clifton Road NE, Atlanta, GA 30333
Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov • Web: www.cdc.gov
Publication date: 06/2012

http://www.cdc.gov/salt/pdfs/sources_of_sodium.pdf

High Sodium Intake in Children and Adolescents: Cause for Concern (CDC, 2012)



High Sodium Intake in Children and Adolescents:

Cause for Concern

Sodium intake in children and adolescents is high, comparable to that in adults. Higher sodium intake in children and adolescents is associated with higher blood pressure, which is a leading risk factor for heart disease and stroke among adults.

Eating less sodium can lower blood pressure somewhat in children and adolescents. Lowering blood pressure during childhood can help lower the risk for high blood pressure as an adult. A 2012 study of U.S. children and adolescents found that higher sodium consumption was associated with increased blood pressure. This effect was even greater in overweight and obese participants compared to normal weight participants.

Importantly, studies suggest infants' and children's preference for sodium is shaped by dietary exposure, so the less sodium children consume, the less they want.

Average Sodium Intake (mg/day)

*Special populations include children who are African American and children who have hypertension, diabetes, or chronic kidney disease.

Sources: *What We Eat in America*, National Health and Nutrition Examination Survey, 2009–2010; Yang Q, et al. *Pediatrics*. 2012;130:611–9.

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

Top 10 Sodium Sources
People Aged 2–19 Years

1. Pizza
2. Breads & rolls
3. Poultry
4. Cold cuts & cured meats
5. Sandwiches
6. Savory snacks
7. Soups
8. Cheese
9. Mixed pasta dishes
10. Frankfurters & sausage

Help Your Family Consume Less Sodium with These Tips

At the grocery store

- Read food labels and compare the sodium amount in different products, then choose the options with the lowest amounts of sodium. Some varieties of bread can vary from 80 to 230 mg of sodium per slice! That can make a big difference in lunchtime sandwiches.

- Choose packaged foods labeled "low sodium" or "no salt added" when possible.
- Select fresh, frozen, or canned fruits and vegetables with no salt or sauce added.
- When buying prepared meals, look for those with less than 600 mg of sodium per meal.[1]
- Ask your grocer if they have a low sodium shopping list available.
- Ask to speak to the registered dietitian (RD) at your local grocery store to learn more about buying lower sodium products. If your grocer doesn't have an RD, ask your doctor for a referral. There may be a fee involved, but an RD can provide valuable guidance on reducing your family's sodium intake and managing blood pressure.

Similar to adults, children and adolescents consume most of their sodium from processed foods and meals eaten away from home.

At home

- When cooking, use alternatives to replace or reduce the amount of salt you use such as garlic, onion powder, citrus juice, or salt-free seasonings.
- Prepare rice, pasta, beans, and meats from their most basic forms (dry and fresh) when possible. If you don't have a lot of time, allow dry beans to soak overnight then drain and store them in the refrigerator so they are ready to cook for dinner the next day.
- Prepare healthful meals and snacks in advance so they are ready to eat during the week. Chop and pre-portion fruits and vegetables, prepare a salad for the week, and make dressings and sauces from scratch.
- Encourage your children to eat more healthful, lower sodium foods by making it fun.
  - Have your kids help you freeze fresh fruit for popsicles.
  - Create a low-fat or nonfat yogurt and herb dip for vegetables.
  - Make trail mix using unsalted nuts, dried fruit, and whole grain cereal.

On the go

- Ask for nutrition information before you order, then select a lower sodium meal.
- Ask that no salt be added to your meal.
- Split a meal with your child or another family member.
- Keep takeout and fast food—such as burgers, fried chicken, and pizza—to an occasional treat.

Learn more at
www.cdc.gov/salt

[1]600 mg of sodium is the criterion for the Food and Drug Administration's "healthy" label claim.

For more information please contact Centers for Disease Control and Prevention
1600 Clifton Road NE, Atlanta, GA 30333
Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov Web: www.cdc.gov
Publication date: 03/2013

http://www.cdc.gov/salt/pdfs/children_sodium.pdf

Reducing Sodium in the Diets of American Children (AHA, 2012)

American Heart Association | American Stroke Association

FACTS
Salt
Reducing Sodium in the Diets of American Children

OVERVIEW

Currently, children are consuming salt in amounts that far exceed the recommended daily limits for sodium – and with potentially deadly consequences. High blood pressure was once considered to be an illness that affected mainly middle-aged or older individuals.

However, now there is an increasing prevalence of high blood pressure in American children that is linked to increasing obesity rates[1], high sodium intake levels, and high calorie diets which often begin in infancy and childhood.[2,3,4] High blood pressure is one of the most common risk factors for cardiovascular disease, which is the leading cause of death and disability worldwide.[5] High blood pressure also increases the risk for stroke, osteoporosis, stomach cancer, and kidney disease.[6]

An estimated nine in ten Americans will develop high blood pressure during their lifetimes.[7] The American Heart Association (AHA) advocates for a stepwise reduction in sodium consumption in the U.S. diet for children and adults to less than 1,500 mg/day by 2020. This, combined with a nutritious diet that is high in fruits, vegetables, fiber-rich whole grains; includes low-fat or fat free dairy; and contains fish twice per week[4] can help to curb this growing epidemic.

THE CURRENT STATE OF AFFAIRS

Children currently consume most of their salt from processed foods like pizza, french fries, breads, chicken dishes, tacos, hot dogs and foods eaten away from home.[8,9] School lunches are also contributing to children's salty diets, providing an alarming average of 1,442 mg of salt in one meal.[10]

- Children ages 6-11 years old consume an average of more than 3,000 mg/day of sodium. Boys between the ages of 12 and 19 are particularly at high risk with an average daily sodium intake of over 4,000 mg/day.[8]
- The proportion of children and adolescents with pre-hypertension rose from 7.7 % to 10 % between 1988 and 2002, while the rate of hypertension increased from 2.7 % to 3.7 %.[11]
- Analysis of data from the Search for Diabetes in Youth Study, found the prevalence of elevated blood pressure among those with type 1 diabetes at 5.9% and the prevalence of elevated blood pressure among those with type 2 diabetes at 23.7%.[12]
- Non-Hispanic black children and Mexican Americans generally have a greater prevalence of high blood pressure and pre-hypertension than non-Hispanic white children, and the prevalence is greater in boys than in girls.[9]

- Children's salt preference is influenced by their food choices and food marketing.[13] Their liking for salt may be reduced if they are exposed to lower sodium diets at a young age.[14,15]
- The positive effect of sodium reduction on blood pressure in children is so pronounced that it can be seen as early as infancy.[5,6]
- In one study, children consuming more fruits, vegetables, and low-fat dairy had an average systolic blood pressure that was 7 mm Hg lower than their counterparts who ate less healthy foods.[16]

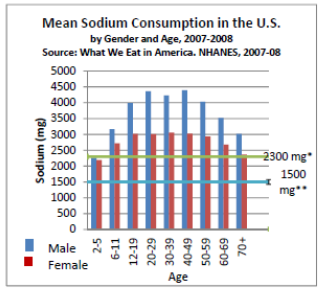
Unlike adults, there is no single reading that constitutes the threshold for high blood pressure and pre-hypertension for children. Normal blood pressure varies depending on age, sex, and height.

THE POPULATION AT RISK

Up to 74% of hypertensive children are not diagnosed with the condition because physicians have to assess age, sex and height in addition to the blood pressure measurement and they do not take time to do the calculations.[17] Several studies have shown that children with high blood pressure show signs of enlargement of the left ventricle in the heart, blockage in the arteries, and diastolic dysfunction, all warning signs for heart disease.[18,19] Additionally, hypertension in childhood is correlated with high blood pressure in adulthood.[14-15]

American Heart Association • Advocacy Department • 1150 Connecticut Ave. NW • Suite 300 • Washington, DC 20036
Phone: (202) 785-7900 • Fax: (202) 785-7950 • www.heart.org/advocacy

FACT SHEET: **Salt: Reducing Sodium in the Diet of American Children**



*The Upper Limit (UL) of 2300 mg per day refers to the highest daily level of sodium that is likely to pose no risk of adverse health effects to almost all individuals in the general population. The UL is not a recommended intake and there is no apparent benefit to consuming levels of sodium above the Adequate Intake (AI).
**The Adequate Intake (AI) of 1500 mg per day is the recommended average daily sodium intake level. The IOM set the AI for sodium for adults at 1500 mg per day to ensure that the overall diet provides sufficient amounts of other nutrients and to cover sodium sweat losses in physically active individuals.

ECONOMIC AND HEALTH BENEFITS

Reduction of sodium intake in children not only benefits the current generation of children, it also acts as a preventive measure against future cardiovascular disease in adulthood.[20] The annual cost of cardiovascular disease is in excess of $444 billion, with hypertension alone costing a total of $93.5 billion.[21] A 9.5% drop in sodium intake would likely result in one million fewer cardiac events a year and a savings of over $32 billion.[17] Reducing hypertension in children today would result in longer, healthier lives and may lower hospitalization costs in the future.

THE AHA ADVOCATES

The opportunity to address lower sodium levels for children can be found in a broad range of initiatives. The AHA will:

- Advocate for implementation of the new evidence-based USDA school meal standards.
- Continue to support robust nutrition standards for competitive foods and beverages in schools that are based on a target of less than1500 mg sodium per day by 2020.
- Advocate that the Interagency Working Group proposed nutrition principles for foods marketed and advertised to children be submitted to Congress.
- Support procurement standards for foods purchased by government agencies and employers that include criteria for strict sodium limits.
- Advocate for increasing availability of fruits and vegetables in schools through commodities, food purchasing, school gardens, and the Fresh Fruit and Vegetable Program.
- Support improving access to and affordability of fruits and vegetables in the community by providing various incentives. Examples include: incentives for small and mid-size farms to produce specialty crops that can be distributed locally and regionally; the Farmers' Market Promotion Program (FMPP), which fosters community-led approaches to improve consumer access to healthy and fresh foods in low income neighborhoods; and incentives in the Supplemental Nutrition Assistance Program (SNAP) which promote the purchase of healthy foods, especially fruits, vegetables, and high-fiber, whole grains.
- Advocate for other privately- or publicly-funded initiatives that support the purchase of healthy foods such as Double Up Food Bucks[22] and Wholesome Wave.[23]

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AHA/HPFS/02/2012.

http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_433027.pdf

Sodium Reduction Resources

USDA United States Department of Agriculture

Healthy Meals Resource System

TEAM NUTRITION

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Menu Planning >

Sodium Reduction

Be Salt Savvy - Cut Back on Sodium (PDF | 1.20 MB)

USDA. FNS. Team Nutrition.

Part of the Fact Sheets for Healthier School Meals set. The fact sheets for school foodservice professionals offer strategies for purchasing, preparing, and serving meals consistent with the *Dietary Guidelines for Americans*.

Under Pressure: Strategies for Sodium Reduction in the School Environment (PDF | 1.83 MB)

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

Provides background on sodium in schools and offers a variety of approaches to reducing sodium in the school environment. Case examples accompany most approaches. Resources and references are available at the end of the document.

Salt and Sodium: 10 Tips to Help You Cut Back (PDF | 320 KB)

USDA. Center for Nutrition Policy and Promotion.

Ten general tips for reducing daily sodium intake. From the MyPlate Ten Tips Nutrition Education Series .

Reduce Sodium in School Meals (PDF | 412 KB)

Indiana Department of Education.

This two-page handout provides suggestions for limiting high-sodium foods, tips for modifying recipes that use high-sodium ingredients, and a chart of common seasonings to use in place of salt.

Guide for Reducing Salt and Other Sodium Containing Additives in School Meals (PDF | 68 KB)

Wisconsin Department of Public Instruction.

Provides tips for a variety of approaches to reducing sodium in meals, including menu planning, purchasing, preparation, and recipe modification. Included information about using salt substitutes.

Menus that Move: Cycle Menus and Recipes

Ohio Department of Education; Ohio State University.

Cycle menus for Fall, Winter, Spring, and Summer featuring local foods in season. Each season contains 5 weekly menus for grades K-8 and 9-12 with meal components and nutrient standards. Menus meet the **Target 1 sodium levels**. Resource also contains **50 standardized recipes** that use USDA foods.

Culinary Techniques for Healthy School Meals

National Food Service Management Institute.

This series of lessons is designed to help school nutrition teams prepare healthier school meals that appeal to the taste of today's students. Each lesson contains a print and video component.

Recipes for School Food Service

Browse through recipes from a variety of sources for low-sodium menu options.

Menu Planning

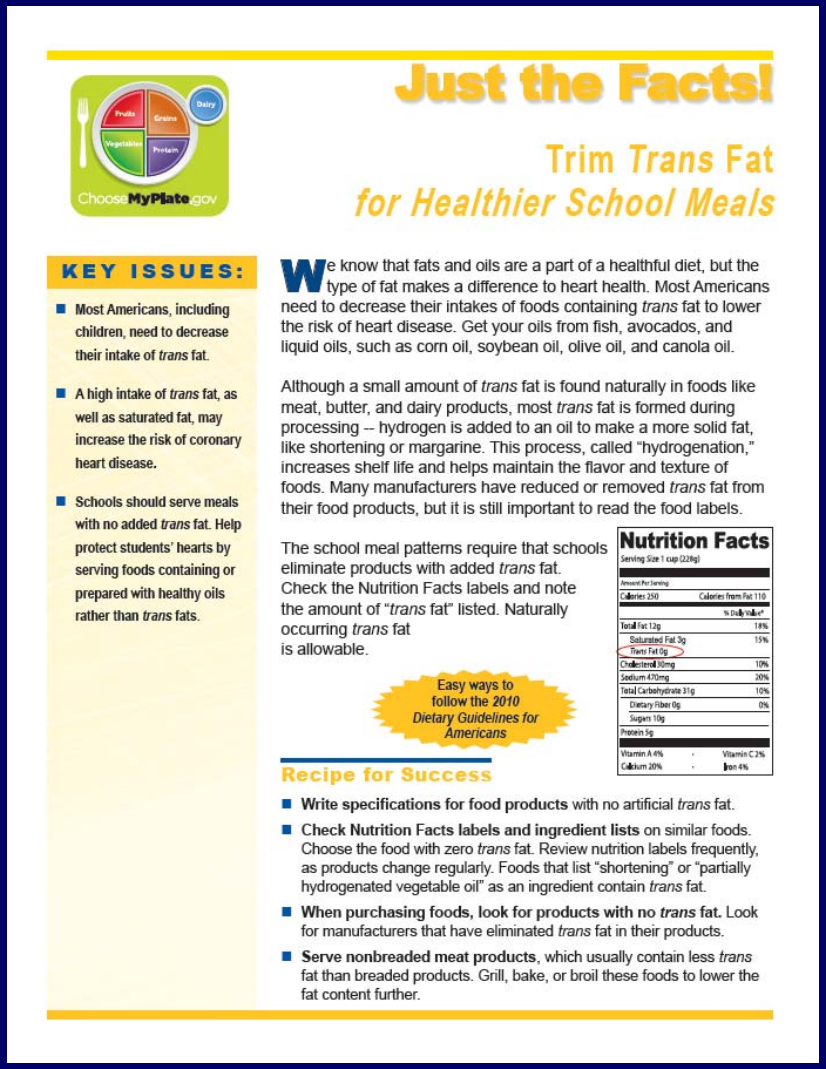
- Beans
- Fruits and Vegetables
- Menu Planning Tools
- Sodium Reduction
- USDA Food (Commodity) Resources
- What's in Season?
- Whole Grains
- Nutrition Standards for School Meals

http://healthymeals.nal.usda.gov/menu-planning/sodium-reduction

Trans Fat

- Restriction for ARTIFICIAL trans fat only
  - Excludes naturally occurring trans fat, e.g., beef, lamb, dairy products
- Nutrition label or manufacturer's specifications must indicate ZERO GRAMS of trans fat per serving (less than 0.5 gram)

Trim Trans Fat (USDA, 2012)



Just the Facts!

Trim *Trans* Fat *for Healthier School Meals*

KEY ISSUES:

- Most Americans, including children, need to decrease their intake of *trans* fat.
- A high intake of *trans* fat, as well as saturated fat, may increase the risk of coronary heart disease.
- Schools should serve meals with no added *trans* fat. Help protect students' hearts by serving foods containing or prepared with healthy oils rather than *trans* fats.

We know that fats and oils are a part of a healthful diet, but the type of fat makes a difference to heart health. Most Americans need to decrease their intakes of foods containing *trans* fat to lower the risk of heart disease. Get your oils from fish, avocados, and liquid oils, such as corn oil, soybean oil, olive oil, and canola oil.

Although a small amount of *trans* fat is found naturally in foods like meat, butter, and dairy products, most *trans* fat is formed during processing -- hydrogen is added to an oil to make a more solid fat, like shortening or margarine. This process, called "hydrogenation," increases shelf life and helps maintain the flavor and texture of foods. Many manufacturers have reduced or removed *trans* fat from their food products, but it is still important to read the food labels.

The school meal patterns require that schools eliminate products with added *trans* fat. Check the Nutrition Facts labels and note the amount of "*trans* fat" listed. Naturally occurring *trans* fat is allowable.

Nutrition Facts

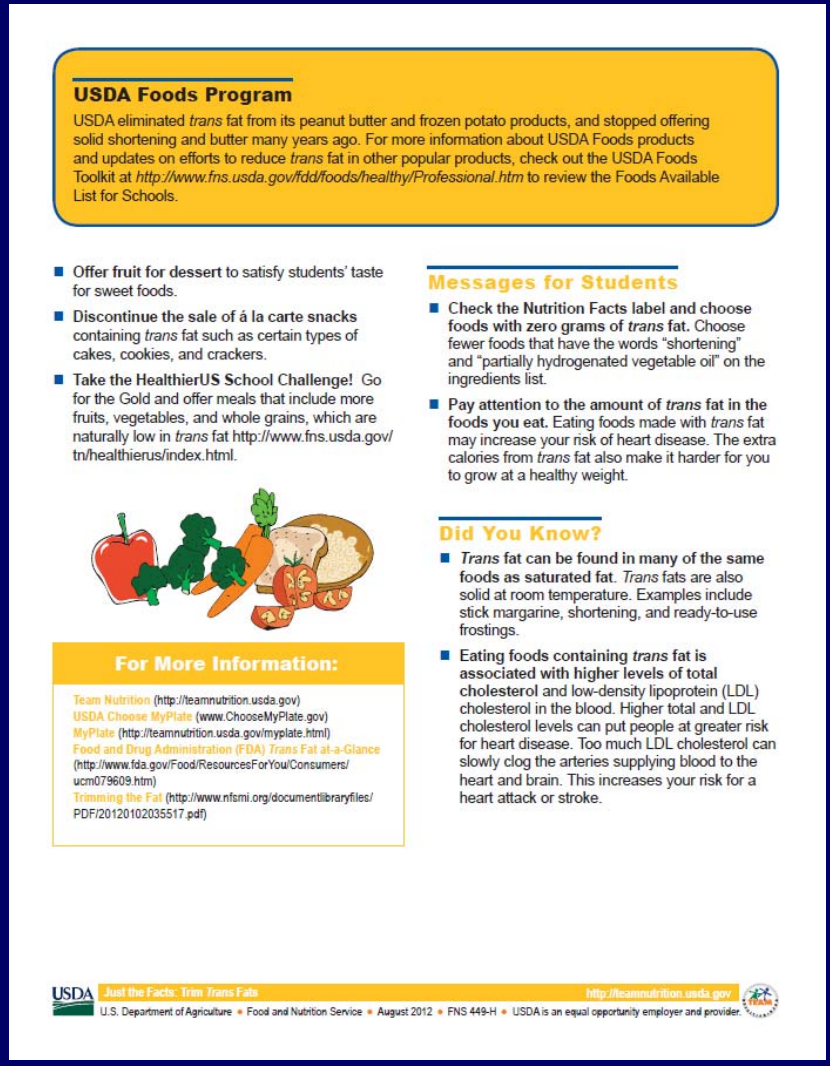
Serving Size 1 cup (228g)

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 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 10g	
Protein 5g	
Vitamin A 4%	Vitamin C 2%
Calcium 20%	Iron 4%

Easy ways to follow the *2010 Dietary Guidelines for Americans*

Recipe for Success

- **Write specifications for food products** with no artificial *trans* fat.
- **Check Nutrition Facts labels and ingredient lists** on similar foods. Choose the food with zero *trans* fat. Review nutrition labels frequently, as products change regularly. Foods that list "shortening" or "partially hydrogenated vegetable oil" as an ingredient contain *trans* fat.
- **When purchasing foods, look for products with no *trans* fat.** Look for manufacturers that have eliminated *trans* fat in their products.
- **Serve nonbreaded meat products**, which usually contain less *trans* fat than breaded products. Grill, bake, or broil these foods to lower the fat content further.



USDA Foods Program

USDA eliminated *trans* fat from its peanut butter and frozen potato products, and stopped offering solid shortening and butter many years ago. For more information about USDA Foods products and updates on efforts to reduce *trans* fat in other popular products, check out the USDA Foods Toolkit at *http://www.fns.usda.gov/fdd/foods/healthy/Professional.htm* to review the Foods Available List for Schools.

- **Offer fruit for dessert** to satisfy students' taste for sweet foods.
- **Discontinue the sale of á la carte snacks** containing *trans* fat such as certain types of cakes, cookies, and crackers.
- **Take the HealthierUS School Challenge!** Go for the Gold and offer meals that include more fruits, vegetables, and whole grains, which are naturally low in *trans* fat http://www.fns.usda.gov/tn/healthierus/index.html.

For More Information:

Team Nutrition (http://teamnutrition.usda.gov)
USDA Choose MyPlate (www.ChooseMyPlate.gov)
MyPlate (http://teamnutrition.usda.gov/myplate.html)
Food and Drug Administration (FDA) *Trans* Fat at-a-Glance (http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm079609.htm)
Trimming the Fat (http://www.nfsmi.org/documentlibraryfiles/PDF/20120102035517.pdf)

Messages for Students

- **Check the Nutrition Facts label and choose foods with zero grams of *trans* fat.** Choose fewer foods that have the words "shortening" and "partially hydrogenated vegetable oil" on the ingredients list.
- **Pay attention to the amount of *trans* fat in the foods you eat.** Eating foods made with *trans* fat may increase your risk of heart disease. The extra calories from *trans* fat also make it harder for you to grow at a healthy weight.

Did You Know?

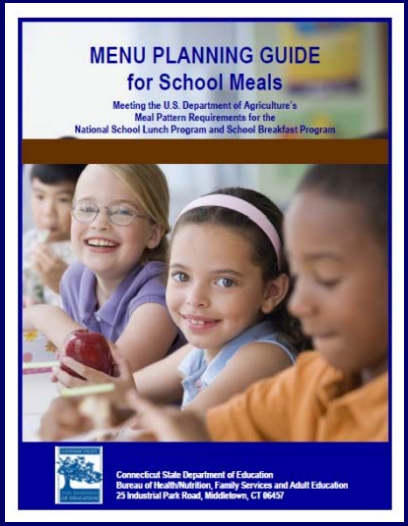
- ***Trans* fat can be found in many of the same foods as saturated fat.** *Trans* fats are also solid at room temperature. Examples include stick margarine, shortening, and ready-to-use frostings.
- **Eating foods containing *trans* fat is associated with higher levels of total cholesterol** and low-density lipoprotein (LDL) cholesterol in the blood. Higher total and LDL cholesterol levels can put people at greater risk for heart disease. Too much LDL cholesterol can slowly clog the arteries supplying blood to the heart and brain. This increases your risk for a heart attack or stroke.

USDA Just the Facts: Trim *Trans* Fats http://teamnutrition.usda.gov
U.S. Department of Agriculture • Food and Nutrition Service • August 2012 • FNS 449-H • USDA is an equal opportunity employer and provider.

http://www.fns.usda.gov/sites/default/files/jtf_transfats.pdf

Guidance on Saturated Fat, Sodium and Trans Fat

- Section 5 of CSDE's Menu Planning Guide for School Meals
- Resources for School Meals Handout



http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Nutrition/MPG/MPG5.pdf

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Dietary Specifications is the sixth section of the *What's for Breakfast* presentation available from the CSDE School Breakfast Program Web site

1. Meal Pattern Overview
2. Milk Component
3. Fruits Component (with Vegetable Substitutions)
4. Grains Component
   - Meat/Meat Alternate Substitutions
   - Grains Resources
5. Noncreditable Foods
6. Dietary Specifications (Nutrition Standards)
7. Offer versus Serve (OVS)
8. Meal or No Meal: Breakfast Edition
9. Menu Planning Resources

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