

# Food Wars:

Traversing the Myths, Facts and Future of Healthy Eating in Schools



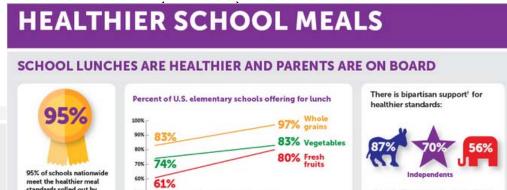


# Objectives:

- Review the science of salt, sugar and fat and how this relates to school meal programs
- Hear how school food service directors are meeting the nutritional and financial challenges of running their meal programs
- Participate in the discussion

# School Meals getting lots of attention

- Child Nutrition Reauthorization underway
- Focus is on obesity prevention, equity
- Sodium and whole grain flexibility major topics
- Food waste concerns, with focus on F/V
- School Breakfast and Summer Foodservice Programs support for increasing participation
- Nutrition education vs. behavioral economics







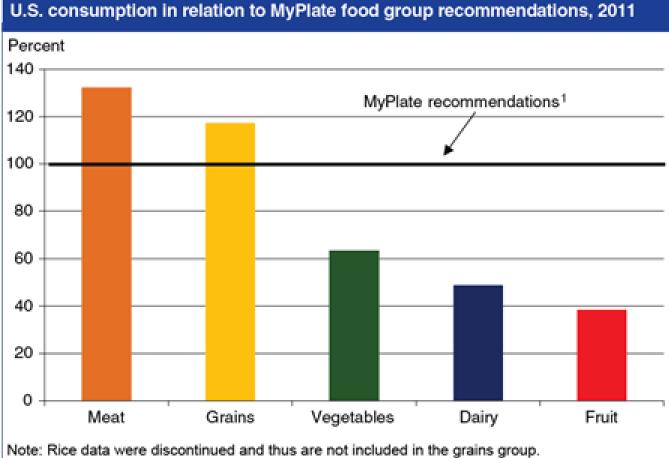


#### School Meals Building Blocks for Healthy Children





# US Consumption Compared to MyPlate

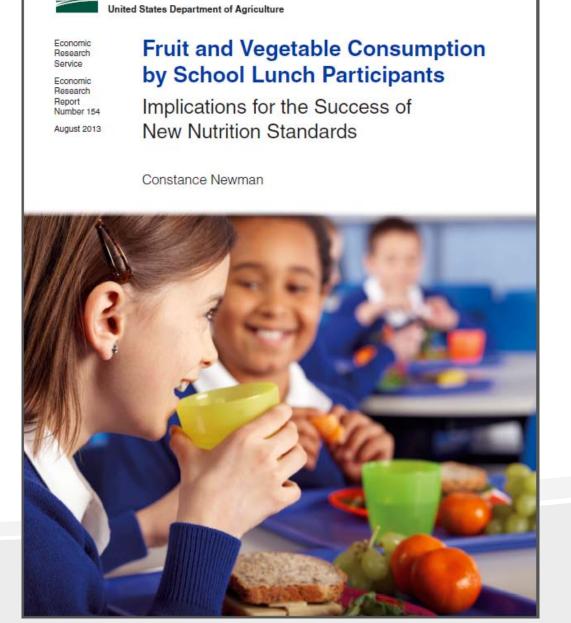


<sup>1</sup>Based on a 2,000-calorie diet.

Source: USDA, Economic Research Service, Loss-Adjusted Food Availability Data. Data as of February 2013.

# Report Conclusion:

"...Other efforts will be needed to encourage more students to try the new fruit and vegetable offerings. Multiple strategies for encouraging consumption—such as in-class educational efforts and altering the food environment...are probably needed."



USDA



#### Food Wars: Traversing the Myths, Facts and Future of Healthy Eating in Schools Lori Hoolihan, Ph.D., R.D.N.

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CSNA's 63<sup>rd</sup> Annual Conference November xx, 2015 Ontario, CA

## Nutrition Science: Fat, Salt & Sugar



# Myth #1: Dietary fat, especially saturated fat, is bad for you.

Facts:

- People need some fat in their diets
  - Essential fatty acids
  - Fat-soluble vitamins
- AMDR for fat for children 4 yr & up: 25-35% of energy intake
  - For a 2000-kcal diet, this is 56 78 g/day
  - For a 3000-kcal diet, this is 83 117 g/day
- Children need fat!
  - normal growth and brain development
  - nervous tissue insulation
  - synthesis of hormones
  - satiety

# Fat (cont)

- Mono- and polyunsaturated fats should comprise ~2/3 of total fat intake
  - Vegetable oils, nut oils, olive and canola oils, fish, avocados, nuts, seeds and peanut butter.
- Saturated fat should be limited to ~1/3 of total fat intake
  - High-fat meats
  - Fried foods
  - Shortening & lard
  - New research is showing dairy fats may be beneficial
- Trans fats should be minimized
  - Margarine, shortening, pastries, baked goods, chips, fried foods

# Fat: Bottom Line

- A moderate fat intake is healthy & necessary for growing children and active teenagers
- 50 120 g/day depending on age, body size, activity level
- Focus on healthy fats mono and polyunsaturated
- Ask:
  - If a food is high in fat, what kind of fat?
  - What nutrients does it provide?



# Myth #2: Salt raises blood pressure, even in children, and should be minimized.

Facts:

- The current Dietary Guideline for sodium is 1500-2300 mg/day (about 1 tsp)
- The current sodium intake in the U.S. is 3500 mg/day
- There is wide variation in how people react to sodium
  - About 1/3 can reduce their BP on a low-sodium diet = saltsensitive
  - Other 2/3 a low sodium diet may be harmful
  - Public health recommendations do *not* consider individual variation, in effect putting many people at higher risk.

# Sodium (cont)

- 2013 Expert Panel convened by IOM concluded that "there is insufficient evidence to support the current DGAs for dietary sodium."
- Various studies have shown that the most OPTIMAL sodium intakes are 3000-6000 mg/day
  - Below this, risk for heart attack or stroke increases 27%
- Emerging research suggests that sodium intake is regulated by our brains, and we will consume enough food until our sodium needs are met
  - Neuro-regulation theory
  - Sodium appetite theory

# Sodium (cont)

• There is very little data in children, yet they are held to the same recommendations as adults



- Recent longitudinal study found sodium had NO impact on BP in adolescent girls, and
- Potassium intake was protective
- Other factors play a big role in BP:
  - Body weight, activity levels, smoking and alcohol
  - The real problem may not be excess sodium but the lack of fruits, vegetables, dairy foods and physical activity

# Sodium: Bottom Line



- There is considerable controversy over the dietary soaum recommendation
  - The current low levels are not healthy for everyone
  - The current levels may not be possible, nor sustainable
- Other factors beyond sodium likely play a bigger role in blood pressure regulation, particularly in children
  - Activity, body weight, potassium intakes
- The DASH diet, high in fruits, vegetables, low fat dairy and whole grains, is a dietary pattern found to reduce blood pressure without demonizing any food component.

https://www.nhlbi.nih.gov/health/health-topics/topics/dash

# Myth #3: Sugar is the culprit in our obesity epidemic

Facts:

- Sugars are carbohydrates, the body's preferred fuel source
- AMDR for carb for children: 50 60% of total calories
  - For a 2000-kcal diet, this is 250 300 g/day
  - For a 3000-kcal diet, this is 375 450 g/day
- Two types of carbs are:
  - Simple carbohydrates (or simple sugars): fructose, glucose, and lactose—found in whole fruits & milk
  - Complex carbohydrates (or starches): starchy vegetables, grains, rice, breads and cereals
- All carbs are broken down into simple sugars and absorbed into the bloodstream

# Sugar (cont)

- Some simple sugars are easy to get, come in large portions, taste good and aren't satiating.
  - Children tend to overeat them
  - Many provide 'empty calories' e.g. sodas, candy, fruit drinks
  - Sweetened drinks are the largest source of added sugar in the diets of U.S. children.
  - Each 12-oz serving of a carbonated, sweetened soft drink contains the equivalent of 10 tsp of sugar and 150 calories.
  - Consuming one 12-ounce sweetened soft drink per day increases a child's risk of obesity.



# Sugar (cont)

- Other simple sugars are found in nutritious foods
  - Fruits, vegetables and dairy products
  - Provide a range of essential nutrients that support growth and health
- Sugar is sometimes added to foods to enhance their appeal
  - Yogurt
  - Cereal
  - Flavored milk





# Sugar – Bottom Line

- Some sugar, in moderation, can enhance a child's diet & nutritional intake
- Need to look at overall diet
- Limit or avoid simple sugars that provide empty calories & no nutrition
- Recognize that overweight and obesity are the result of a multitude of factors, not any single factor
  - Physical activity
  - Screen time
  - Portion sizes
  - Overall calorie intake
  - Social interactions

# Consider the Unintended Consequences:

- Taking foods that are high in sodium off the plate:
  - Pizza
  - Grilled cheese
  - Macaroni & cheese
  - Soup
- Minimizing high-fat foods in school lunches:
  - Peanut butter
  - Nuts
  - Meats
- Avoiding sources of added sugar:
  - Ketchup
  - Chocolate milk

## 2015 Dietary Guidelines

- Who publishes them?
  - The U.S. Department of Health and Human Services (HHS) and the U.S. Department of Agriculture (USDA)
- How often are they updated?
  - Every 5 yrs
- What is their purpose?
  - To provide evidence-based food and beverage recommendations for Americans ages 2 and older to:
    - Promote health
    - Prevent chronic disease
    - Help people reach and maintain a healthy weight

### 2015 Dietary Guidelines

- Who uses them?
  - Public health agencies, health care providers, educational institutions
- How do they impact nutrition in the U.S.?
  - Form the basis of federal nutrition policy and programs
  - Help guide local, state, and national health promotion and disease prevention initiatives
  - Inform various organizations and industries (e.g., products developed and marketed by the food industry)

## 2015 Dietary Guidelines (cont)

- When will they be released?
  - "HHS and USDA will release the 2015 Dietary Guidelines later this year."
  - DG Report was released in Feb 2015, forming the basis of the Guidelines

http://health.gov/dietaryguidelines/

## What will the 2015 DGs likely focus on?

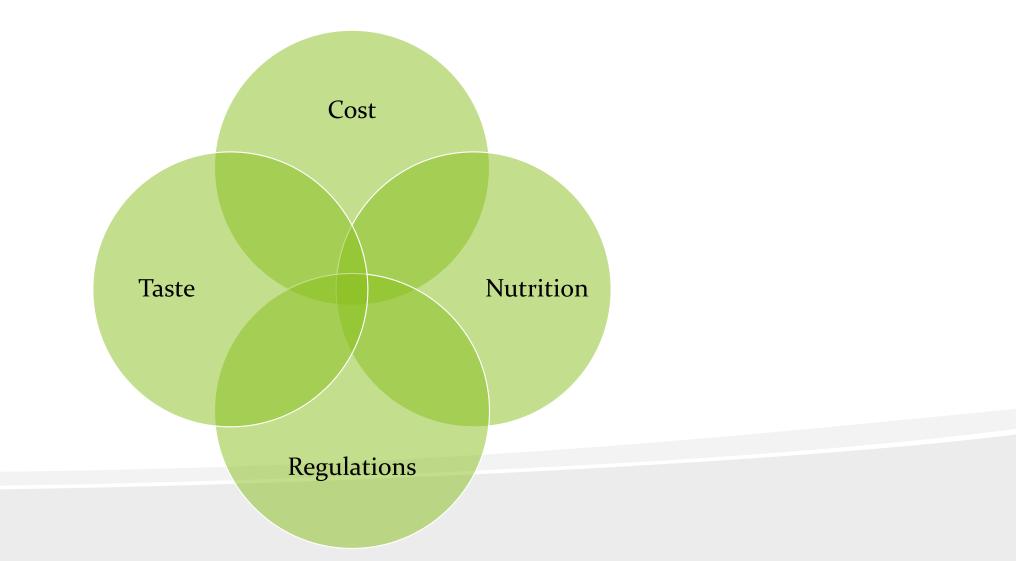
- Prevention of chronic disease obesity, diabetes, heart disease
- Dietary patterns deemed healthy:
  - Healthy U.S.-style Pattern
  - Healthy Mediterranean-style Pattern
  - Healthy Vegetarian Pattern
  - These patterns are rich in vegetables, fruit, whole grains, seafood, legumes, and nuts; moderate in low- and non-fat dairy products and alcohol (among adults); lower in red and processed meat; and low in sugar-sweetened foods and beverages and refined grains

# What will the 2015 DGs likely focus on?

- Shortfall nutrients of public health concern: calcium, vitamin D, fiber and potassium
  - also iron in adolescent girls and premenopausal women
- Over consumption of sodium and sat fat
- Sugar-sweetened beverages
- Importance of regular physical activity
- Access to sufficient, nutritious and safe food sustainable diets

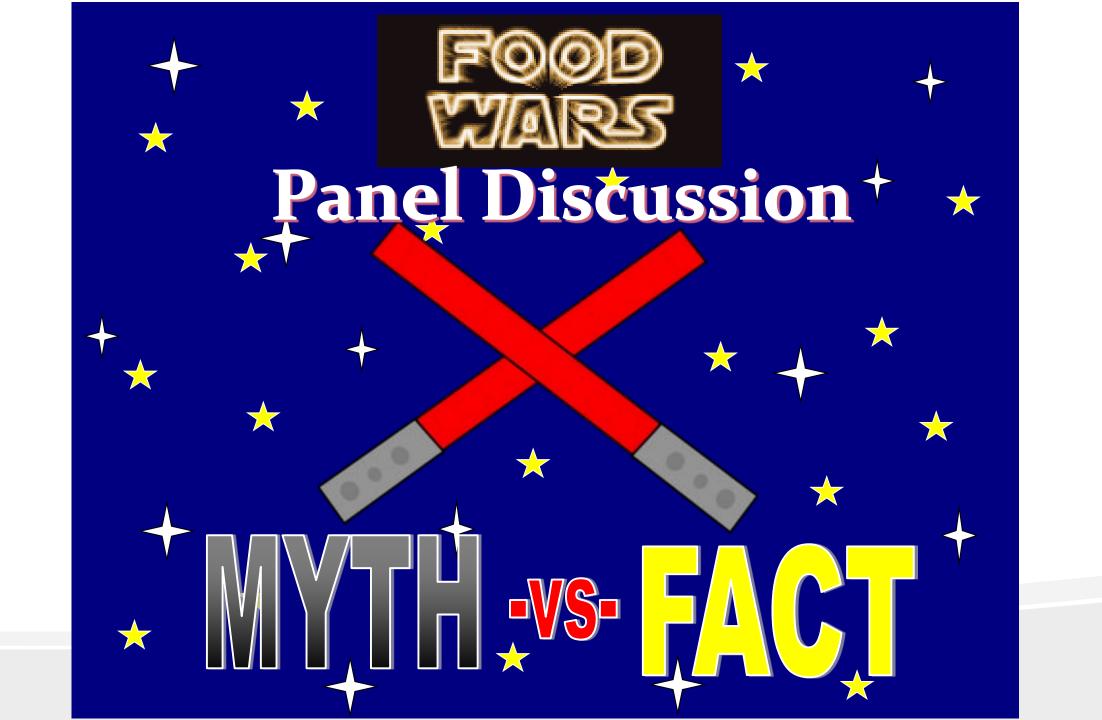
→ These goals will require changes at all levels of the social-ecological model through coordinated efforts among health care and social and food systems from the national to the local level.

# A Balancing Act: Considerations for the SFS Director





# Thank You Lori Hoolihan, Ph.D., R.D.N.





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