Rethinking Health: The Role of Environmental, Structural and Policy Change in the U.S. Food System

Anne Haddix, PhD
Definitions

- **Obesity**: Body Mass Index (BMI) of 30 or higher.

- **Body Mass Index (BMI)**: A measure of an adult’s weight in relation to his or her height, calculated using the adult’s weight in kilograms divided by the square of his or her height in meters.
Source of the Data

- The data were collected through the Behavioral Risk Factor Surveillance System (BRFSS), an ongoing, state-based, telephone interview survey conducted by CDC and state health departments. Height and weight data are self-reported.

- Prevalence estimates used for the map are the same as those generated for the states by BRFSS.

http://www.cdc.gov/obesity/data/adult.html
No state had a prevalence of obesity less than 20%.

Eleven states and the District of Columbia had a prevalence between 20–<25%.

Twelve states (Alabama, Arkansas, Indiana, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Oklahoma, South Carolina, Texas, and West Virginia) had a prevalence equal to or greater than 30%.

http://www.cdc.gov/obesity/data/adult.html
Prevalence* of Self-Reported Obesity Among U.S. Adults

*Prevalence reflects BRFSS methodological changes in 2011, and these estimates should not be compared to previous years.
Prevalence of Obesity Among U.S. Children: NHANES Findings


- Between 1999-2000 and 2009-2010, this upward trend in obesity prevalence slowed among boys; however, no significant change in the prevalence was seen among girls.
In 2009-2010, about 1 in 6 U.S. children (16.9%) aged 2-19 years were obese.

The prevalence of obesity was higher among boys (18.6%) than among girls (15.0%).

Non-Hispanic black children had the highest prevalence of obesity (24.3%), compared with Mexican Americans (21.2%), all Hispanics (21.2%), and non-Hispanic whites (14.0%).
Behavioral Targets for Childhood Obesity

- Breastfeeding
- Fruits and vegetables
- Healthy beverages/water
- Daily physical activity
- Sleep, Breakfast

- Energy dense (nutrient poor) foods - added sugars/solid fat
- Beverages with added sugars
- Television/Passive Screen Time
Inputs:
Selecting best population-level interventions for obesity prevention

Multi-Level Multi-Setting Model:
Applying population-level interventions in multiple levels and settings

Outputs:
Filling research gaps and sharing findings with stakeholders

Intervention Populations

Supportive Policies, Systems, Environments

Create Healthy Places for Children

Education, Social Support

- Health Care
- Early Care and Education
- School
- Community
- Home, Family
- Cross-Setting Linkages
Energy density

- Nutrition standards and food service guidelines in settings: child care, schools, recreation facilities
- Menu labeling and point of purchase information

Fruits and vegetables

- Increase access through retail stores, markets, stands
- Farm to where you are (farm to preschool, schools, hospitals)
- Food policy/advisory councils (hunger & obesity)

Sugars-sweetened beverages

- Ensure access to safe and good tasting water
- Differential incentives in schools, worksites
- Public and clinical education efforts
Settings for the Prevention and Control of Obesity

- Community
  - Park and Recreation
  - Food Retail (stores/markets)
- School/Afterschool
- Early Care & Education (child care)

- Medical
  - Hospitals
  - Clinics
- Work Sites
Let’s Move Child Care

- More than 12 million (or 60%) children aged <6 y spend an average of 30 hr/wk in some type of child care facility

- Let’s Move! Child Care is an effort to promote children’s health by encouraging and supporting healthier physical activity and nutrition practices for children in all early care and education settings

Sources:
http://nces.ed.gov/programs/digest/d09/tables/dt09_044.asp;
www.healthykidshealthyfuture.org;
Let’s Move Child Care Goals

**Beverages**
- Provide access to water during meals and throughout the day, and avoid serving sugars-sweetened drinks
- For children age 2 and older, serve low-fat (1%) or nonfat milk, and no more than one 4- to 6-oz serving of 100% juice per day

**Foods**
- Serve fruits or vegetables at every meal, eat meals family-style whenever possible, and don't serve fried foods

Based on Caring for our Children Standards
Let’s Move Child Care Goals

- Beverages
  - Provide access to water during meals and throughout the day, and don't serve sugar-sweetened drinks
  - For children (≥2 y), serve low-fat (1%) or nonfat milk, and no more than one 4- to 6-oz serving of 100% juice/day
- Nutrition
  - Serve fruits or vegetables at every meal
  - Eat meals family-style whenever possible
  - Do not serve fried foods

Based on Caring for our Children Standards
<table>
<thead>
<tr>
<th>Best Practice</th>
<th>Centers Achieving Best Practice (%)</th>
<th>Homes Achieving Best Practice (%)</th>
<th>Providers Achieving Best Practice (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water is available inside and outside, where it is visible for self-serve</td>
<td>27.5</td>
<td>26.2</td>
<td>26.5</td>
</tr>
<tr>
<td>100% fruit juice is offered no more than 4-6 oz. per day and parents are encouraged to support this limit</td>
<td>19.3</td>
<td>26.1</td>
<td>21.7</td>
</tr>
<tr>
<td>Sugary drinks are never offered</td>
<td>45.2</td>
<td>44.9</td>
<td>44.3</td>
</tr>
<tr>
<td>Milk served to children ages 2 years and older is always 1% of skim/non-fat</td>
<td>26.4</td>
<td>34.7</td>
<td>29.3</td>
</tr>
<tr>
<td>Fruit (not juice) and/or a vegetable is offered to toddlers at preschoolers at every meal</td>
<td>35.9</td>
<td>44.3</td>
<td>38.7</td>
</tr>
</tbody>
</table>
Let’s Move Salad Bars to Schools Launch
November 22, 2010

Riverside Elementary School, Miami
Let’s Move Salad Bars to School

- A comprehensive public health effort to mobilize and engage stakeholders at the local, state and national level to support salad bars in schools

- Goal – donate 6,000 salad bars in 3 yrs

- Progress – over 1,4000 salad bars donated
LMSB2S Founding Members

NFVA
National Fruit & Vegetable Alliance

Food Family Farming.org

United Fresh Foundation
Center for Nutrition and Health

Whole Foods Market
National Fruit & Vegetable Alliance
Why Salad Bars?

- Provides a variety of appealing F&V choices
- Easiest way to meet new school meal regulations
- Facilitates meeting HUSSC guidelines
- Compatible with “Half a Plate” message
Salad Bar Evaluation Data

  - Increase in frequency of fruits and vegetables consumed during the day
  - Better diet quality

- **Riverside Unified SD** [Center TRT  http://www.center-trt.org ]
  - Students who choose the salad bar eat more servings of F&V than students who choose the hot entrée

- **National Youth and Physical Activity and Nutrition Study** [Harris et al, APHA 2011]
  - HS students who usually get a school salad bar are more likely to eat both ≥2 F and ≥3 V/d
Beverage and Food Guidelines - Worksites and other settings

Health and Sustainability Guidelines for Federal Concession and Vending Operation, HHS/GSA

- Provide 100% fruit juice and freely available drinking water
- Offer incentives for using reusable beverage containers
- Provide seasonal vegetables and fruits, whole grain options, vegetarian entrees, lean meat entrees, high fiber/low sugar cereals, foods with low sodium, and foods with no trans fats
Facility Innovations Toward Wellness Environment Leadership (FIT-WEL)

- Commercial building certification program
- Similar to LEED (Leadership in Energy and Environmental Design) certification
- 5 components:
  - Healthy air quality
  - Healthy culture
  - Healthy Food Systems
  - Physical activity supports
  - Psychosocial wellbeing
Hospitals as Worksites

- > 5700 hospitals across the U.S.
- Employ 5.3 millions of employees
- Studies found 42–89% children's hospitals had fast food chains
- In addition to employees, visitors and patients can benefit from improved hospital environments

Sources: Lesser, JABFM, 2006; McDonald et al., Arch Pediatr Adolesc Med, 2006;
Healthy Hospital Practice to Practice Series (P2P)

- Hospitals can help establish strong community norms for promoting healthy and active living through nutritious food and beverage, opportunities for physical activity, and support for breastfeeding.
- Presents case studies of hospitals improving their environment to better support the health of their employees and embody the mission of their organization.
- Audience
  - Hospital Staff: management/leadership, wellness, food service
  - Public Health Professionals: state and local DNPAO

http://www.cdc.gov/nccdphp/dnpao/hwi/resources/hospital_p2p.htm
Healthy Hospital Practice to Practice Series (P2P)

• **Fairview Hospital in MA**
  – Removed drinks sweetened with sugars from the patient menu
  – Discontinued the traditional service of soda and cookies at staff meetings, substituting pitchers of filtered water, unsweetened ice tea and fresh fruit

• **Baptist Health South Florida**
  – Offers “Wellness Advantage Meal” daily
    • <600 calories, <30% calories from fat, <10% calories from saturated fat, and <800 mg of sodium/meal and all for $3

http://www.cdc.gov/nccdphp/dnpao/hwi/resources/hospital_p2p.htm
Food Policy Councils

CDC Definition

“support and advise residents and governments in developing policies and programs to improve the local food system, with the goal of increasing consumer access to and the availability of affordable, healthy foods such as fruits and vegetables”
Food Policy can relate to:

- Supply
- Quality
- Price
- Production
- Distribution
- Consumption
- Recycling
Food Policy Council Projects

- Farmers markets
- Community gardens
- SNAP access
- Emergency food plans
- Food deserts
- Governmental food sourcing
- Zoning for urban agriculture
- Food as a component of economic development
- Farm Bill principles
Benefits of Community Gardens

- Access to fresh fruits and vegetables
- Physical activity
- Skill building
- Green space
- Decrease violence
- Improve social well-being
- Beautify vacant lots
- Revitalize communities in industrial areas
- Revive public parks
- Green rooftops
- Incorporated into school yards
- Bridge ethnically and age diverse communities
- Strengthen community capacity
- Mitigate urban heat island
National Prevention Strategy

Increase the number of Americans who are healthy at every stage of life.

- Tobacco Free Living
- Preventing Drug Abuse and Excessive Alcohol Use
- Healthy Eating
- Mental and Emotional Well-being
- Active Living
- Empowered People
- Elimination of Health Disparities
- Clinical & Community Preventive Services
- Healthy & Safe Community Environments
- Injury and Violence Free Living
- Reproductive and Sexual Health
The Federal Government will
- Promote active transport
- Support active living principles in community design
- Support programs and policies to increase physical activity and physical education
- Develop and disseminate clinical guidelines, best practices and tools to increase physical activity to reduce overweight and obesity

National Physical Activity Plan - Multiple Sectors
National Prevention Strategy – Healthy Eating

The Federal Government will
- Ensure federal procurement is consistent with Dietary Guidelines (DGAs)
- Align agricultural policies with DGAs
- Strengthen food safety
- Increase access to healthy food in underserved communities
- Implement menu labeling
- Support breastfeeding
- Eliminate food insecurity (HHFK Act, HUSSC)
CDC Recommended Community Strategies and Measurements to Prevent Obesity in the US

Improving healthy eating and activity living opportunities is a shared responsibility. System changes are influenced by the efforts of many...