

Creating Healthy Environments to Promote Healthy Behaviors and Prevent Childhood Obesity

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Prevalence in the State & Nation

- **20%** of children ages 2-5 are overweight or at risk of becoming overweight (up to 28% in low income)
- **30%** of kids ages 6-11
- **30%** of adolescents ages 12-19
- Blacks and Hispanics up to double that of whites

Prevalence has tripled over the past 40 years

*From the National Center for Health Statistics, CDC, 1999-2002
CDC YRBSS, 2003, CDC PedNSS, 2002*

Definitions

For Youth:

Plot BMI on CDC sex-specific BMI-for-age-growth charts for the United States

- **Overweight = >95%**
- **At-risk for overweight = 85-95%**

In children, there is no definition of "obesity"

$$\text{BMI} = \text{weight/height}^2 \text{ (kg/m}^2\text{)}$$

For adults:

- Overweight: BMI 25-30
- Obesity: BMI >30

From the National Center for Health Statistics, CDC

Risk Factors in Michigan Children

- <50% of adolescents get minimum daily servings of 5 fruits & vegetables
- 1/3 do not get adequate physical activity
- Elementary children reported watching an average of 3+ hours of TV per day
- <25% participate in daily physical education classes

MDCH, CDC Youth Behavior Risk Survey, Michigan Summary Results 2001

Risks and Complications

- Social stigmatization
- Increased risk of becoming overweight adults
- Economic consequences
- Binge eating in up to 30% overweight adolescent females
- Risk of developing:
 - Type II Diabetes, high cholesterol, hypertension, heart disease, asthma, sleep apnea, bone and joint problems

Fowler-Brown, A. and Kahwati, L. *Prevention and Treatment of Overweight in Children and Adolescents*. American Family Physician, June 2004.

Binns, H. and Ariza, A. *Guidelines Help Clinicians Identify Risk Factors in Overweight Children*. Pediatric Annals, Jan 2004.

Advocate for a Healthier Environment

*From Kelly Brownell, PhD, in Food Fight, 2004,
on our toxic environment...*

Not every one of us will become overweight. Some:

- "Have protective biology
- Are not particularly interested in food
- Will be active enough to stay thin
- Want to resist the environment"

***...The rest (the majority by adulthood)
will not fair so well.***

Prevention is KEY!

However, reviews of the current literature show that there is **little experimental evidence** on the effectiveness of specific interventions to prevent childhood overweight.

Institute of Medicine Report, 2004, Focus on Childhood Obesity

Institute of Medicine Report, 2004 Focus on Childhood Obesity

... need to focus on factors that effect **energy balance**.
These factors result from complex interactions across a number of social, environmental and policy contexts.

IOM Recommendations span:

- Federal, State, and Local Governments
- Industry and Media
- Health-care Professionals
- Community Organizations
- Education Authorities and Schools
- Parents and Families

Contributing Factors & Issues

Availability of healthy food choices
Opportunities for physical activity

- Individual choice
- Parental & Family choices
 - Role models
 - Purchaser of foods
- School environment
- Transportation
- Public safety
- Media
- Healthcare
- Manufactured foods
- Restaurants
- Agriculture
- Recreation

Health Message as part of a broader community effort:

“Health at Any Weight”

- Promote positive self-esteem, self image, body image
- Focus on feeling healthy and feeling good
- Grow an affinity for sports and activity
- Grow an affinity for healthy foods
- Ensure opportunities for good choices abound
- Make it FUN!

Grow into their weight – NOT weight loss

Health Message 5,2,1,0...

- **5+** servings of fruits and vegetables per day
- Less than **2** hours per day of TV/video games
- **1** or more hours per day of physical activity
- **0** pop or sugared foods a day

BCBS Maine, Massachusetts Community Collaboratives

Local Efforts Abound

Healthy Families Community Collaborative

Supported by the Greater Flint Health Coalition and funded by the Ruth Mott Foundation, Apr 2005-Sept 2006

- Joint program improvement efforts
- Consensus methodology to establish “key elements” for effective programs to reduce childhood overweight
- Flint River Trail

Key Program Elements Identified

- **Interaction with Participants:** Simplicity... trust...affirming...tailored communication...fun and creative activities...active listening...realistic participant expectations...incentives...ongoing support
- **Curriculum Content:** Increased physical activity...decreased sedentary behavior...increased healthy food intake...goal setting... developing a healthy body image...advocacy for a healthy environment
- **Inclusiveness of Participants:** Children... parents and caregivers...siblings...family...friends...other key adult figures
- **Program Logistics:** Marketing...evaluation... sustainability...data-based program improvements... expectations based on project capacity

Local Efforts Abound

- Genesee Intermediate School District
- Flint Community Schools
- CRIM Fitness Foundation
- Mott Children's Health Center
- Hurley Medical Center