Nutrition, Physical Activity and Obesity

Michigan Strategic Planning Meeting
October 13-14, 2009
Genoa Woods Conference Center
Brighton, Michigan

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Project Officer
Division of Nutrition, Physical Activity and Obesity
Strategic Planning Process

- Mission, Goals and Objectives
- Planning Tools
- Six Target Areas
- Partners and Partnerships
- Settings
- Disparities
- Socio-ecological approaches
Goals and Objectives

• Mission – Healthy Michigan's) (Lifestyle)
• Goals – incorporate six target areas
• Objectives- (SMART)
  – Health disparities
  – Data/Surveillance
• Strategies/Methods
Program Impact Objectives

• Increase the number, reach and quality of policies and standards set in place to support healthful eating and physical activity in various settings.

• Increase access to and use of environments to support healthful eating and physical activity in various settings.

• Increase the number, reach and quality of social and behavioral approaches that complement policy and environmental strategies to promote healthful eating and physical activity.
Planning Tools

• DNPAO State Plan Index

• Other State Plans (Chronic Diseases- Diabetes, Cancer Control, Heart Disease and Stroke, Healthy Communities, Achieve and etc.)
Principle Target Areas

• Increase breastfeeding initiation, duration, and exclusivity
• Increase physical activity
• Increase consumption of fruits and vegetables
• Decrease consumption of sugar sweetened beverages
• Reduce consumption of high energy dense foods
• Decrease television viewing
Partners/Partnerships

- Nutrition
- Physical Activity
- Departments of Education, Transportation, Natural Resources, Environmental Health, Parks and Recreation, Housing, CDC and Agriculture
- Community-based organizations
- Food industry (grocers, restaurants, beverage, markets)
- Growers, Farmer markets, food policy
Partners/Partnership

- Health Care Providers
- Early Child Care/Day Care
- Seniors/Seniors Programs
- Media
- Foundations
- Schools/Universities
- City Planners
- Minority Health Organizations
Settings for the Prevention and Control of Obesity

• Community
• Medical
• School
• Work Site
Community Settings

- Faith-based
- Child care
- After school
- Restaurants
- Grocers/markets
- Recreational facilities
Program Philosophy

1. Long term
2. Social change
3. Health disparities
4. Policy and environmental changes
5. Social Ecological Model
6. Social marketing planning approach
7. Evidence-based portfolio (policies and intervention strategies)
8. Partnerships and resources
Program Philosophy

1. Commit to long-term accomplishments
Shifts in Food Practices in the US

- Increased caloric intake when eating out
- Increased consumption of soft drinks
- Continued low consumption of fruits and vegetables
- Reduced frequency of family meals
Breastfeeding Trends

- 74% of U.S. infants are breastfed at birth; 43% at 6 months
- Only 32% of infants are exclusively breastfeeding at 3 months of age; 12% at 6 months
Shifts in Food Environments

- Increased portion size
- Increased media advertising
- Increased availability of energy-dense foods
- Increased cost of fruits and vegetables
Program Philosophy

2. Address factors needed for social change
Elements Common to Social Movements

- Identify a “crisis”
- Base strategies on sound science and many disciplines
- Identify the economic cost of unhealthful behaviors
- Use coalitions to move efforts forward

Elements Common to Social Movements

- Use media advocacy
- Involve all levels of government
- Raise public awareness and support for community programs
- Use policy and environmental change to sustain systemic changes

Program Philosophy

3. Decrease health disparities
Forming and maintaining diverse partnerships is critical:

- Develop a system for receiving input from diverse stakeholders to aid in the identification and elimination of disparities
- Collaborate and coordinate with state and local partners that have access to and have well-developed and established relationships with specific populations with disparities
Forming and maintaining diverse partnerships is critical:

- Capitalize on existing initiatives at the state and local levels
- Utilize community competent approaches in interventions, taking into account communities’ culture, context, history, and geography
Program Philosophy

4. Emphasize policy and environmental changes
Making Healthy Choices Easier

Individual
- Culture
- Skills
- Knowledge
- Time

Environment
- Affordability
- Price/ Economic
- Access
- Policy
- Legislation
- Advertising

Healthy eating & physical activity
Program Philosophy

5. Use Social Ecological Model to design state plan and activities
The Ecological Perspective

Energy Balance
Prevention of Overweight and Obesity Among Children, Adolescents, and Adults

Social Norms and Values

Individual Factors

Sectors of Influence

Behavioral Settings

Food and Beverage Intake
Physical Activity

Energy Intake
Energy Expenditure
Energy Balance

Individual Factors

- Home and Family
- School
- Community
- Work Site
- Healthcare

- Genetics
- Psychosocial
- Other Personal Factors

Sectors of Influence

- Food and Beverage Industry
- Agriculture
- Education
- Media
- Government
- Public Health Systems
- Healthcare Industry
- Business and Workers
- Land Use and Transportation
- Leisure and Recreation

Note: Adapted from "Preventing Childhood Obesity." Institute of Medicine, 2005.
Obesity Prevention Requires All Sectors of Influence Working Together
Promoting Health Equity by Eliminating Health Disparities

Building Capacity to Achieve Equity in Health

Michael Sells MSPH, CHES

Program Development and Evaluation Branch
Division of Nutrition Physical Activity and Obesity
National Center for Chronic Disease Prevention and Health Promotion
Objectives

Participants will become familiar with:

• CDC/DNPAO’s approach to health disparities and health equity
• Working definitions
• A description of the increased focus on health equity
• Suggested criteria for identifying strategies
• DNPAO’s process/steps
CDC’s Health Protection Goals

CDC is committed to achieving true improvements in people’s lives by accelerating the impact of positive health practices and reducing health disparities...

Healthy People in Every Stage of Life
All people, and especially those at greater risk of health disparities, will achieve their optimal lifespan with the best possible quality of health in every stage of life.

Healthy People in Healthy Places
The places where people live, work, learn, and play will protect and promote their health and safety, especially those people at greater risk of health disparities.

Source:
www.cdc.gov/osi/goals/
Health Equity Initiative for DNPAO

Mission:
To achieve health equity in physical activity, nutrition, and healthy weight across the United States and abroad through the elimination of health disparities.

Goal:
to achieve health equity by developing and sustaining the capacity and resources of DNPAO to reduce and eventually eliminate disparities in nutrition, physical activity and obesity among different segments of the population in collaboration with the NCCDPHP, as well as internal and external partners.
Definitions

Health Disparities (working definition):

Health Disparities are preventable differences in the burden of disease and disability, or in lack of opportunities to achieve optimal health.
Health Disparities by:

- Geographic Location
- Gender
- Race
- Education
- Income
- Age
Definitions (Cont.)

Health Equity (working definition): Health equity is the fair distribution of health determinants, outcomes, and resources to individuals and communities, regardless of social standing resulting in optimal health for all members of society.

Source: CDC Health Equity Workgroup
Social Determinants of Health:

Social determinants of health, also referred to as the root causes, are life-enhancing resources whose distribution across populations effectively determines length and quality of life.

Source:
Promoting Health Equity: A Resource to Help Communities Address Social Determinants of Health
**Definitions (cont.)**

Environmental Determinants of Health: (Micro and Macro)

- **Micro-environments** are defined as environmental settings where groups of people meet and gather.
  - Examples of micro-environments are: homes, schools, work places, supermarkets, bars and restaurants, other recreational facilities and neighborhoods.

- **Macro-environments** include the broader, more anonymous infrastructure (sectors) that may support or hinder health behaviors.
  - Examples of macro-environments are: the town planning, the transport infrastructure, the health system, how products are marketed and distributed and the media.

Why Focus On Health Equity?

“Healthy People 2010 recognizes that communities, States, and national organizations will need to take a multidisciplinary approach to achieving health equity — an approach that involves improving health, education, housing, labor, justice, transportation, agriculture, and the environment, as well as data collection itself.”

Criteria for identifying Health Disparities

- The strategy targets one or more of the following indicators: low income, racial/ethnic minority group(s); persons with less than or equal to high school diploma; rural or urban geographic locations; and persons with disabilities.
Criteria for identifying Health Disparities (Cont.)

- It has been culturally adapted for use by a specified population who is experiencing health disparities (i.e.-Spanish translation and use of “plain language”).

- The strategy has been evaluated or piloted in the specified disparate population.

Sources:
State Nutrition, Physical Activity and Obesity Program’s Technical Assistance Manual and FOA; Healthy People 2010 Indicators; and DNPAO Health Equity Workgroup
**Process/Steps**

1. Establish capacity and/or infrastructure
2. Inventory of existing activities
3. Identify the disparities with data
4. Strategic planning
5. Prioritize activities
6. Baseline data for evaluation
7. Final strategic plan
8. Implement activities

Source: CDC’s Division of Nutrition Physical Activity and Obesity
**Recommended Tools and Resources**

- Social Determinants of Health Maps

- Community Health Resources Site

- Promoting Health Equity…Workbook

- Smart BRFSS: City and County Data

- The Guide to Community Preventive Services
  [http://www.thecommunityguide.org/index.html](http://www.thecommunityguide.org/index.html)

- REACH US Website
Thank You!

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Strategic Planning Meeting
October 13–14, 2009
Denise Cyzman, MS, RD
Cyzman Consulting
VMOSA

- Vision
- Mission
- Objectives
- Strategies
- Action Plans
Vision: Where we want to be!

- Reflects dream or ideal
- Long-term
- Clear
- Concise
- Positive
- Should mobilize and inspire
- Dream big – not “easy” to attain
Vision: Where we want to be!

Draft Statements

- A Michigan where regular physical activity, healthful eating, and healthy weight are part of everyone’s life

- Michigan = Communities with healthy eating habits and active lifestyles

- All Michiganders will have access to physical activity and healthful foods to maintain a healthy weight and be free of obesity-related diseases
Mission Statement: Here and Now

- Primary Purpose (we exist to....)
- Primary Clients or Customers
- Core Services
- Key Outcomes (determining our success)
Mission Statement: Here and Now

Draft Statements

› To make healthy foods and active lifestyles accessible to all of Michigan’s diverse populations to reduce obesity and overweight and eliminate related health disparities

› To promote policy, environmental and lifestyle changes that increase healthy eating and physical activity to prevent and reduce obesity and related chronic diseases in Michigan

› To decrease the prevalence of overweight and obesity and reduce the burden of obesity related diseases by improving healthy eating and increasing physical activity
Goals

- Are long-term, generally achievable in 8–10 years
- Link disease burden to activities and actions
- Focus on state-desired outcomes that are measurable
- Focus on statewide desired changes
- Populations of special interest could be specified
Goals

Draft Goals

› Stop the increase in the proportion of adults and children who are overweight and obese.

› Reduce rates of obesity related chronic diseases with particular emphasis on ethnic disparities.

› Increase lifelong physical activity and healthy eating.

(Targets to be proposed by MDCH at a later date)
Long–Term Objectives

- Should lead to the realization of the goals
- Ambitious and broad
- Usually focusing on changing health status indicators
- Built on the achievement of short–term and intermediate objectives
Long-Term Objectives

Draft Objectives

- Increase policies and environments to support physical activity and healthy eating, including breastfeeding.

- Increase the percentage of children and adults who consume healthy foods and are physically active.

- Improve the capacity of the healthcare system to prevent, detect and manage overweight and obesity.

(Targets to later be proposed by MDCH)
SWOT Analysis

- **Strengths**
- **Weaknesses**
- **Opportunities**
- **Threats**

**Purpose:** Reveal positive forces that work together and potential problems that need to be addressed or, minimally, recognized.
## SWOT Analysis – Modified Approach

<table>
<thead>
<tr>
<th>Positives</th>
<th>Negatives</th>
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<tbody>
<tr>
<td>Strengths</td>
<td>Weaknesses</td>
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<tr>
<td>Assets</td>
<td>Limitations</td>
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<td>Resources</td>
<td>Restrictions</td>
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<td>- Human</td>
<td>- Threats</td>
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<td>- Financial</td>
<td>- Challenges</td>
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<tr>
<td>- Physical</td>
<td>- External Factors</td>
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<td>Opportunities</td>
<td>- Economy</td>
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<td>Policies</td>
<td>- Demographics</td>
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<td>Activities and Processes</td>
<td>- Legislation and Policy</td>
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<tr>
<td>Prospects</td>
<td>- Unfulfilled need</td>
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<tr>
<td>Past Experience</td>
<td>- Regulations</td>
</tr>
<tr>
<td></td>
<td>- Environmental Threats</td>
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Overweight and Obesity in Michigan
2009 Surveillance Report
Outline

• Introduction to Obesity
• Data and Key Findings from the Report
  – Obesity
  – Physical Activity
  – Nutrition
  – Breastfeeding
Introduction

• Overweight and obesity have been shown to increase the risk of certain chronic diseases and other health problems such as coronary heart disease, stroke and diabetes.
• The prevalence of obesity in Michigan has risen over 65% among adults since 1995.
• Public health approaches are needed that can create change for populations and can help make health choices easy, affordable, and available.
6 Priority Areas

- The CDC DNPAO Program identified six principal target areas critical to the prevention of obesity:
  - Increase physical activity.
  - Increase consumption of fruits and vegetables.
  - Increase breastfeeding initiation, duration and exclusivity.
  - Reduce the consumption of high energy dense foods.
  - Decrease the consumption of sugar sweetened beverages.
  - Decrease television viewing.
Obesity
Obesity-Adults

<table>
<thead>
<tr>
<th>BMI</th>
<th>Weight Status</th>
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<tbody>
<tr>
<td>&lt;18.5</td>
<td>Underweight</td>
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<tr>
<td>18.5-24.9</td>
<td>Healthy Weight</td>
</tr>
<tr>
<td>25.0-29.9</td>
<td>Overweight</td>
</tr>
<tr>
<td>≥30.0</td>
<td>Obese</td>
</tr>
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</table>

Source: CDC, Department of Health and Human Services.
Prevalence of obesity among adults, 18 and over, in Michigan and the United States, 2001-2008

- Michigan had the 8th highest prevalence of obesity in the United States with 30.1% of adults, 2008.

- In 2008, 65.3% of Michigan adults were either overweight or obese; 35.2% were overweight.

- Blacks had a significantly higher obesity rate (39.8%) than whites (28.8%).

Source: Michigan Behavioral Risk Factor Survey
Overweight and Obesity - Adults

• The state prevalence for overweight and obesity between 2005 and 2007 was 63.9%.

• Twenty-seven local health departments were above this.

• Marquette (76.7%) had the highest prevalence and Shiawassee (58.3%) had the lowest.

Prevalence of overweight and obesity among adults, 18 and over, in Michigan by local health department jurisdictions, 2005-2007

Source: Michigan Behavioral Risk Factor Survey
Prevalence of health conditions among adults, 18 and over, by weight status in Michigan, 2008

- Obese adults had a higher prevalence of:
  - arthritis
  - high blood pressure
  - high cholesterol
  - asthma
  - coronary heart disease
  - stroke
  - heart attack
  - diabetes

Source: Michigan Behavioral Risk Factor Survey
## Obesity-Youth

### Body mass index chart of children, ages 2 to 19 years

<table>
<thead>
<tr>
<th>Percentile of Age/Sex</th>
<th>Weight Status</th>
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<tr>
<td>&lt;5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Underweight</td>
</tr>
<tr>
<td>5&lt;sup&gt;th&lt;/sup&gt; - 84&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Healthy Weight</td>
</tr>
<tr>
<td>85&lt;sup&gt;th&lt;/sup&gt; – 94&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Overweight</td>
</tr>
<tr>
<td>≥95&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Obese</td>
</tr>
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</table>

Source: CDC, Department of Health and Human Services.
In 2007, 28.9% of Michigan youth were either overweight or obese;
- 16.5% were overweight and
- 12.4% were obese

Black youth had a higher obesity rate (18.5%) compared with white youth (11.2%).

Source: Michigan Youth Risk Behavior Survey
Physical Activity
Physical Activity-Adults

• The prevalence of inadequate physical activity in Michigan from 2005 to 2007 was 50.1%.

• More than half of adults in 23 local health department areas were not meeting the physical activity recommendations.

• Van Buren-Cass Local Health Department had the highest prevalence of inadequate physical activity (61.3%) and Luce-Mackinac-Alger-Schoolcraft Local Health Department had the lowest or best (31.0%).

Prevalence of inadequate physical activity among adults, 18 and over, in Michigan by local health department jurisdictions, 2005-2007

Source: Michigan Behavioral Risk Factor Survey
Physical Activity-Adults

Prevalence of no leisure-time physical activity or inadequate physical activity, among adults, 18 and over by weight status in Michigan, 2008.

- Michigan adults who were obese reported significantly more inadequate physical activity and no leisure-time physical activity compared with adults that reported a BMI that was normal or overweight.

Source: Michigan Behavioral Risk Factor Survey
### Physical Activity-Youth

Prevalence of not achieving 60 minutes of physical activity five or more days in the past week, among youth grades 9 through 12 in Michigan and the United States, 2007.

<table>
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<tr>
<th>Measure</th>
<th>Michigan</th>
<th>United States</th>
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<tbody>
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<td><strong>Total</strong></td>
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<td>65.3</td>
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<tr>
<td><strong>Gender</strong></td>
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<tr>
<td>Male</td>
<td>47.3</td>
<td>56.3</td>
</tr>
<tr>
<td>Female</td>
<td>64.5</td>
<td>74.4</td>
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<td><strong>Race/Ethnicity</strong></td>
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<tr>
<td>Black</td>
<td>59.0</td>
<td>68.9</td>
</tr>
<tr>
<td>White</td>
<td>54.2</td>
<td>63.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>60.9</td>
<td>69.8</td>
</tr>
</tbody>
</table>

Source: Michigan Youth Risk Behavior Survey
Nutrition
The prevalence of inadequate fruit and vegetable consumption in Michigan from 2005 to 2007 was 77.8%.

More than 75% of adults in 38 of the 45 local health department areas reported inadequate fruit and vegetable consumption.

Muskegon Local Health Department had the highest reported inadequate fruit and vegetable intake (84.6%) and Benzie-Leelanau Local Health Department had the lowest (66.6%).

Source: Michigan Behavioral Risk Factor Survey
The prevalence of Michigan youth that haven’t met the minimum recommendations for fruits and vegetables fluctuated from 81.0% in 1999 to 83.0% in 2007.

Consumption among Michigan youth was similar among blacks (78.3%), Hispanics (82.1%) and whites (83.9%).

There was no difference between females (83.6%) and males (82.3%), 2007.

Prevalence of inadequate fruit and vegetable consumption among youth, grades 9 through 12, in Michigan and United States, 1999-2007

Source: Michigan Behavioral Risk Factor Survey
In 2006, 56.1% of women planned to breastfeed and an additional 17.2% thought they might breastfeed.

The prevalence of women who reported they thought they were going to breastfeed prior to delivery increased with educational attainment.

In 2006, 81.7% of women reported that during at least one of their prenatal care visits a health professional spoke with them about breastfeeding their baby.
Breastfeeding duration among women who breastfed for longer than a week, but discontinues before surveyed, by maternal race/ethnicity, Michigan 2006

- In 2006, Michigan women who breastfed for longer than a week, but discontinued before being surveyed, on average breastfed for 6.8 weeks.

- Breastfeeding duration did not significantly vary by race/ethnicity.

- Women with a college degree or higher breastfed their infants for the longest period (7.6 weeks).

Source: Michigan Pregnancy Risk Assessment Monitoring System
Questions?

The Overweight and Obesity in Michigan: Surveillance Report is available electronically at:

- [www.michigan.gov/preventobesity](http://www.michigan.gov/preventobesity)
- [www.michigan.gov/cvhepi](http://www.michigan.gov/cvhepi)
Resources

• CDC-Obesity
  – www.cdc.gov/obesity

• Risk Factor Data by Community
  – www.michigan.gov/brfs