

# Michigan Healthy Eating and Physical Activity Strategic Plan: 2010-2020



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February 2011

Dear Friends and Colleagues,

We are pleased to present the *"Michigan Healthy Eating and Physical Activity Strategic Plan 2010-2020"* and would like to thank the members of Michigan's Healthy Weight Partnership advisory committee for the time spent working with us to set a vision for addressing Physical Activity, Nutrition, and Obesity Prevention in Michigan.

This plan represents the joint vision of partner organizations across the state of Michigan, committed to working together to ensure that Michigan can be a place where regular physical activity, healthy eating and healthy weight are part of everyone's life and community. It is a ten-year plan that will be our guiding document for working with you, our partners, to address the challenges that lie before us as a state. We are so pleased with the contribution that you have made to this effort and wish to acknowledge that. We believe the plan is "our plan", the plan of our statewide partners and stakeholders, without whom, any efforts to address this lifestyle challenge would be unsuccessful.

We hope that you will use the plan to reach out to others in your organization and discipline so that by aligning your activities with the goals and objectives in the plan, we can maximize the cumulative impact. Through the combined efforts of partners across Michigan, the health of people living in Michigan can be improved, alleviating the burden of chronic disease on families throughout the state.

Again, we thank you for your time in creating and implementing this physical activity, nutrition and obesity prevention state plan. A downloadable copy is available at [www.michigan.gov/preventobesity](http://www.michigan.gov/preventobesity).

Sincerely,



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## SECTION 1: INTRODUCTION

### 1A: OVERWEIGHT AND OBESITY IN MICHIGAN

#### Burden of Overweight and Obesity

Adult obesity is defined by a body mass index (BMI) of 30 or greater. Eighty percent of Michigan adults report that they are actively trying to either lose weight or maintain their weight. Higher weights are associated with chronic disease and long-term health problems such as heart disease, stroke, and cancer and osteoporosis. Michigan consistently has higher obesity rates than the U.S. median. In 2009, Michigan had the 10th highest obesity rate among all states; 35.7% of Michigan adults were overweight and 30.3% were obese. Males (30.8%) and females (31%) had similar trends of obesity prevalence, but males (42%) reported a significantly higher prevalence of overweight compared to females (29.3%). Black non-Hispanics (41.6%) and Hispanics (42.6%) have a higher prevalence than White non-Hispanics (28.7%). The proportion of adults who were obese in 2009 increased with age from 16.6% of those aged 18-24 years to 36.9% of those aged 55-64 years, and then decreased to 21.9% of those aged 75 years and older.

The Centers for Disease Control and Prevention (CDC) uses the term 'Obese' for children with a body mass index (BMI)-for-Age at or above the 95th percentile, and 'Overweight' for children between the 85th and 95th percentile, based on CDC BMI-for-Age growth charts.<sup>1</sup> Over the last forty years, the proportion of American children who are obese and overweight has increased dramatically. In 2008, 13.9% of low income children in Michigan, two to five-years-old, were at or above the 95th percentile or obese. There was another 16.6% that were overweight. Because childhood overweight often continues into adulthood, the long-term ramifications are significant.

In 2009, 11.9% of Michigan youth, grades 9 through 12 reported a weight that is classified as obese and an additional 14.2% reported a BMI as overweight. The prevalence of obese youth in Michigan has increased from 10.9% in 1999 to 11.9% in 2009; this however is not a statistically significant change.

(The *Overweight and Obesity in Michigan: Surveillance Report* can be accessed at <http://www.michigan.gov/preventobesity>)

#### Causes of Overweight and Obesity

Overweight and obesity can be caused by a combination of genetic, metabolic, behavioral, environmental, cultural, and socioeconomic influences. Behavioral and environmental factors contribute largely to overweight and obesity and provide the greatest opportunity for interventions designed for prevention and treatment. Healthy eating and physical activity are two important behaviors in preventing and treating overweight and obesity and are extremely helpful in maintaining weight loss.<sup>2</sup>

IN 2009, MICHIGAN  
HAD THE 10TH  
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RATE AMONG ALL  
STATES

## Consequences of Overweight and Obesity

Overweight and obesity have tremendous consequences on our nation's health and economics. This epidemic is linked to chronic diseases, like coronary heart disease, stroke, and diabetes, as well as increased health cost. Adult obesity also is associated with reduced quality of life, social stigmatization, and discrimination.<sup>3</sup> By 2018, 42.8% of American adults and 44.3% of Michigan adults will be considered obese. For 2008, medical costs associated with obesity in Michigan were estimated at as much as \$3 billion; obese persons had estimated medical costs that were \$1205 higher than persons of normal weight. Michigan is expected to spend \$12.5 billion on health care costs attributable to obesity in 2018 if rates continue to increase at their current levels. If obesity levels were held at their current rates, Michigan could save an estimated \$867 per adult in health care costs by 2018 \_ a savings of almost \$7 billion dollars.<sup>4</sup>

### 1B: STATE-WIDE ACTION FOR A HEALTHIER MICHIGAN

The absence of physical activity, healthy eating, and breastfeeding can contribute to overweight and obesity. However, if concerted action is taken to increase physical activity, healthy eating, and breastfeeding, the health of the population can dramatically improve.

Regular physical activity is one of the most important contributors to health and a key factor in maintaining a healthy weight. Regular physical activity decreases the risk of developing other chronic diseases including colon cancer and osteoporosis. Physical activity helps to achieve and maintain a healthy weight while contributing to the health of bones, joints, and muscles. It can also reduce feelings of anxiety and depression. Even though the benefits of physical activity are apparent, less than half of adults in the United States engage in physical activity regularly.

Research shows that healthy eating can contribute to maintaining a healthy weight or losing excess weight. This in turn can help lower the risk for chronic diseases, including heart disease, stroke, some cancers, diabetes, and osteoporosis. However, a large gap remains between healthy dietary patterns and what Americans actually eat.

Breastfeeding has many health and personal benefits for mothers and babies and is consequently recommended as the best start for life. Breast milk is easy to digest and contains antibodies that can protect infants from bacterial and viral infections. Since 1981 there have been a number of studies that have provided varying degrees of support that breastfeeding reduces the risk of obesity among children.

Physical activity, healthy eating, and breastfeeding can become routine activities that enhance the health and quality of life of Michigan residents. However, public health approaches are desperately needed to create change for populations by making healthy choices easy, affordable, and available. Behavioral, policy, and environmental factors contribute largely to overweight and obesity and provide the greatest opportunity for interventions designed for prevention and treatment. While many partners across Michigan are currently engaged in activities to support physical activity, healthy eating, and breastfeeding, there is a need for a cohesive state-wide strategy involving all partners.<sup>5</sup>

### 1C: INTRODUCTION TO THE STATE-WIDE STRATEGIC PLAN

The Michigan Healthy Eating and Physical Activity Plan: 2010-2020 serves as a guide for moving Michigan's population toward healthy eating and physical activity patterns in an effort to prevent and manage overweight and obesity. Through the commitment and input of diverse statewide stakeholders, the Plan has been developed as a collaborative, rather than a Michigan Department of Community

Health document. The involvement of a wide variety of stakeholders has been critical in the development of this document, and will ensure successful implementation.

This Plan is not intended to duplicate other initiatives or related plans within the state, but provides an opportunity to align state obesity reduction efforts with the six national target areas, establishing linkages to existing plans, as well as integration with other chronic disease and maternal/child health programs working toward similar goals. By doing this, our state will maximize resources, promote shared learning, collective thinking, and mutual problem-solving, limit duplication of effort and facilitate a coordinated and cohesive approach to obesity prevention.

Based on Centers for Disease Control and Prevention (CDC), Division of Nutrition, Physical Activity and Obesity recommendations, state strategic plans should ideally cover a period of 8-10 years. Time periods shorter than this do not allow time to measure success of outcomes. Therefore, the Michigan Strategic Plan covers a period of 10 years. This Plan is a living document and will be revised during the next ten years as the context for collaborative work changes.

Implementation Plans covering a period of 18 months will be developed throughout the life of the Strategic Plan in order to guide action by partners throughout the State (See Section 3). Progress in implementing the Plan will be tracked according to the Evaluation Plan included in Section 4. As Michigan does have some well-developed data sources related to behavior change, long-term targets have been set regarding behavior change objectives. These data sources will be enhanced to provide more sensitive measures related to targeting health disparities and appropriate targets set once baseline data is obtained. A state-wide system for tracking policy and environmental changes will also be developed in the next 10 years and targets set based on baseline data.

### **Focus of the Strategic Plan**

The Strategic Plan is designed to move Michigan's population towards healthy eating and physical activity patterns and to reduce health disparities, or differences in health status between groups based on factors such as race/ethnicity, socio-economic status, geography, sex and age, and disability status. For instance, in communities with a higher concentration of racial/ethnic minorities and lower socio-economic status, there are often significant environmental and policy barriers to being physically active, acquiring healthy foods, and maintaining a healthy weight (Gordon-Larsen et al 2006; Morland and Filomeno 2007; Taylor et al 2006).

The goals, objectives and implementation actions in the Plan are based on evidence-based strategies to address the six principal target areas CDC has identified as pillars of obesity prevention:

#### **Physical Activity**

- Increase Physical Activity
- Decrease Television Viewing

THE MICHIGAN  
CENTER FOR  
RURAL HEALTH  
LOOKS FORWARD  
TO UTILIZING THE  
MICHIGAN OBESITY  
PREVENTION  
STATE PLAN IN  
ADDRESSING THE  
STATE RURAL  
HEALTH PLAN  
GOALS AND TO  
HELP THE RURAL  
RESIDENTS OF  
MICHIGAN REACH  
THEIR HEALTHY  
LIFESTYLE GOALS.

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FOR RURAL HEALTH

## Healthy Eating

- Increase the Consumption of Fruits and Vegetables
- Decrease the Consumption of Sugar-Sweetened Beverages
- Decrease the Consumption of High Energy Dense Foods

## Breastfeeding

- Increase Breastfeeding Initiation, Duration and Exclusivity

The Social-Ecological Model is the theoretical foundation for obesity prevention and works to influence individuals and their social networks, organizations, community, and society. Obesity Prevention Plans uses this model as a framework to address behavior change, environmental change, and policy change for each of the six target areas listed above.

Research has shown that behavior change is more likely to last when the individual and his or her entire environment undergo change simultaneously. Thus, interventions that address individual behavior change as well as the social, physical, and environmental contexts of that change have the potential for population-wide impact. (CDC, DNPAO, Technical Assistance Manual, 2008).

Using policy and environmental change as the key to long-term investment in physical activity and nutrition in order to improve the public's health and decrease obesity is a focus of this Plan. Policy change is defined as modifications to laws, regulations, formal and informal rules, as well as standards of practice. It includes fostering both written and unwritten policies, practices and incentives that provide new or enhanced supports for healthy behaviors and lead to changes in community and societal norms. Environmental change describes changes to physical and social environments that provide new or enhanced supports for healthy behavior.

**FIGURE 1: SOCIAL-ECOLOGICAL MODEL**



*Credit: Centers for Disease Control & Prevention*

## 1D: DEVELOPMENT OF THE STRATEGIC PLAN

### Background

Michigan's first Strategic Plan was developed in 2005, *Preventing Obesity and Reducing Chronic Disease: the Michigan Healthy Eating and Physical Activity Plan, a Five-Year Plan to Address the Epidemic of Obesity*. Since that time, Michigan's Nutrition, Physical Activity and Obesity (NPAO) Program has developed several complementary documents that have informed implementation and evaluation of the plan.

These include *Implementation Plans*, a *Partnership Plan*, and the *Partnership Profile Form*. Building on this important work, the Michigan Healthy Eating and Physical Activity Strategic Plan: 2010-2020 will chart a new direction that draws upon the best of the past, present, and future.

## Overview of the Planning Process

The strategic planning process was completed over a course of one year, beginning in June 2009 through June 2010. The staff of Michigan's Nutrition, Physical Activity and Obesity (NPAO) Program initiated a structured and thoughtful planning process to create this ten-year plan, to shape its direction, engage new and strengthen existing partnerships, and guide its decisions on allocating resources. Members of the Healthy Weight Partnership (HWP), advisory group to the State Obesity Plan, actively participated throughout the process. Members represent state, local, public and private organizations with expertise in nutrition, physical activity, breastfeeding and other chronic diseases.

The planning process was divided into two phases: pre-planning and planning. During the pre-planning phase, key NPAO program staff compiled and reviewed existing sources of data, references, and other resources to inform the planning process. Information from existing plans in Michigan related to physical activity, healthy eating, and breastfeeding were reviewed to identify opportunities for program integration, collaboration, and resource sharing. National guidance documents issued by the CDC and national plans such as Healthy People 2020 (in its draft form) were taken into consideration throughout this process and helped to inform the development of the objectives.

Training opportunities were offered to state staff, local health department staff and state-wide partners to increase their knowledge of evidence-based strategies for obesity prevention. Surveys were executed to obtain feedback from state staff, contractors, and members of the Healthy Weight Partnership on what they would like to see in the revised plan.

The planning phase began with a two-day meeting in October 2009. Over fifty partners representing 21 organizations participated in the meeting. There was strong representation from the Centers for Disease Control and Prevention (CDC) with presentations on developing a state plan and on how to address health disparities. Meeting outcomes included voting and accepting of the 2010-2020 Plan vision, mission, goals, and drafting long-term objectives. Small work groups in the areas of nutrition, physical activity and breastfeeding were formed during this initial two-day meeting. Members of the Healthy Weight Partnership Advisory Group joined work groups (self-selected by topic area) and met over a course of four months to identify and decide on recommendations and strategies in their specific topic area. Additional members joined the workgroups over time, which increased the ability to be inclusive, involving those with particular areas of expertise and limited time. The workgroups created long-term and intermediate objectives and generated implementation actions to achieve the objectives. They also identified anticipated impact/

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INTER-TRIBAL  
COUNCIL OF  
MICHIGAN

outcomes, examined implications for current infrastructure and funding level and identified opportunities for integration. The formation of an Executive Leadership Committee was instrumental in reviewing and finalizing the Plan objectives, with particular focus on disparate populations.

In April 2010, over thirty partners met to review and refine the draft objectives. During this meeting, groups within the state presented related existing plans and linkages to the overall Strategic Plan and the work groups presented their proposed objectives to stakeholders (See Appendix 1). Through this forum, the Long-term Objectives were revised and the target-setting process begun. Discussions also covered effective ways of communicating and disseminating the Plan, partner involvement in the Implementation Planning process, and partner commitment to implement the objectives.

In June 2010, a three-week, on-line public comment period was launched during which all partners were invited to review a revised draft of the Plan and offer further input. An in-person meeting of the Healthy Weight Partnership was also conducted during this month to review the Long-Term Objectives and Targets and to provide partners with the opportunity to build consensus regarding the most appropriate targets and data sources. Comments and recommendations were used during final revisions of the Plan. A list of the partners who have participated in the development of the Plan can be found in Appendix 5.

### **Development of Accompanying Implementation Plans**

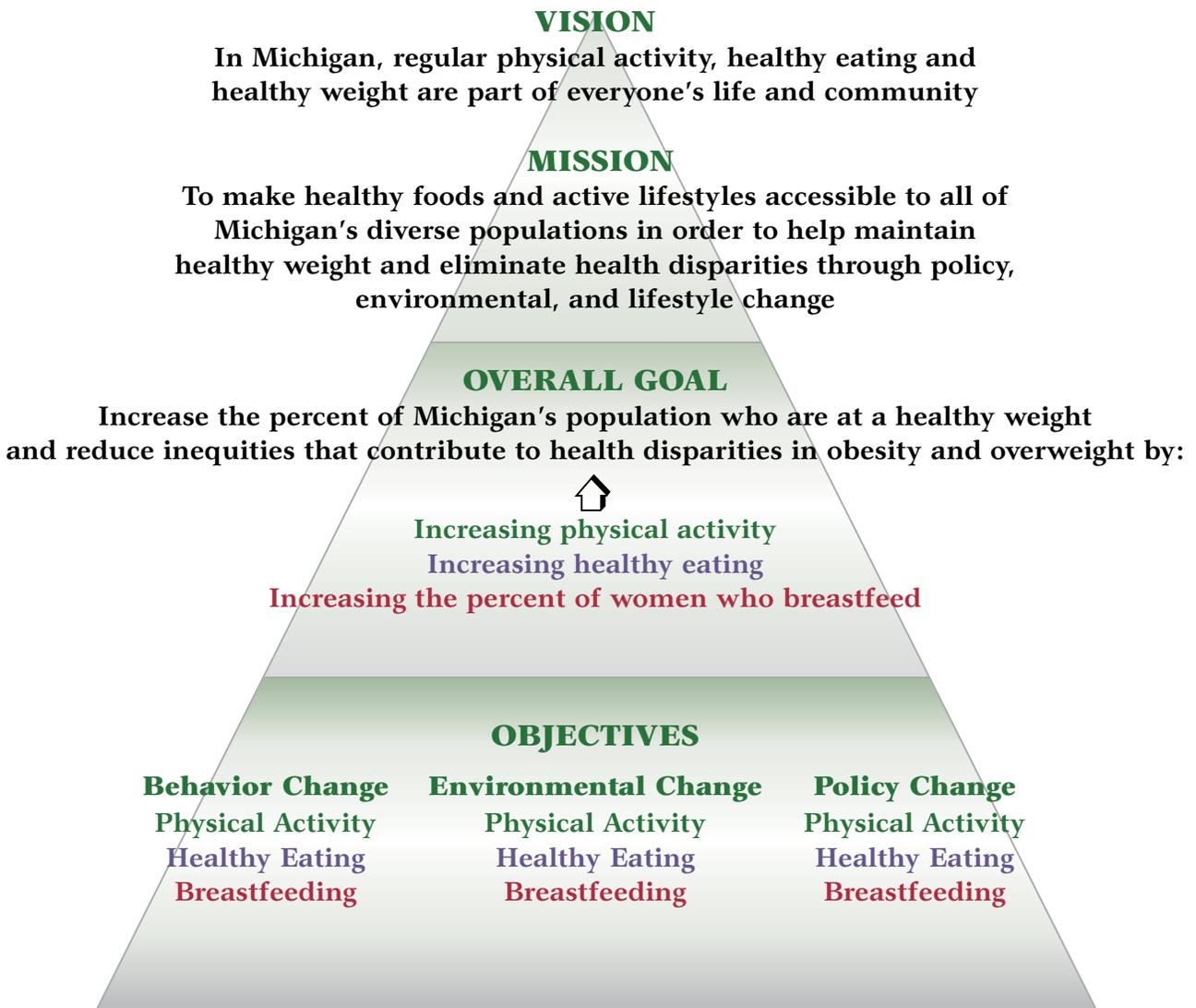
Shortly after the release of the Strategic Plan, an Implementation Plan will be developed which will prioritize the identified objectives and actions. A new Implementation Plan will be developed every 18 months and will determine the objectives to be implemented within that 18 month period as well as the partners and resources necessary to implement the objectives.

## SECTION 2: OVERVIEW OF THE STRATEGIC PLAN

### 2A: DIAGRAM OF THE STRATEGIC PLAN

The vision, mission, goals, and objectives of the Strategic Plan can be envisioned like a pyramid. The vision and mission are the pinnacle of the pyramid, the point toward which all actions are directed. Two overarching goals related to improving the health status of the population are supported by three color-coded topic-specific goals, related to physical activity, healthy eating, and breastfeeding. The objectives form the base of the pyramid and are designed to address behavior change, environmental change, and policy change for each of these topic areas. Actions to achieve these objectives will form the foundation of change to reach the vision.

**FIGURE 2: DIAGRAM OF THE STRATEGIC PLAN**



## 2B: VISION, MISSION, AND GOALS

The members of the Michigan Healthy Weight Partnership have united around a common vision and mission, as stated below.

### Vision

In Michigan, regular physical activity, healthy eating and healthy weight are part of everyone's life and community.

### Mission

To make healthy foods and active lifestyles accessible to all of Michigan's diverse populations in order to help maintain healthy weight and eliminate health disparities through policy, environmental and lifestyle change.

### Overall Goal:

Increase the proportion of Michigan's population who are at a healthy weight and reduce inequities that contribute to health disparities in overweight and obesity by:

Increasing physical activity

Increasing healthy eating

Increasing breastfeeding

There are two aspects of the overall goal that have been defined by the Healthy Weight Partnership members as cross-cutting elements related to health status:

1. Increase the proportion of Michigan's population who are at a healthy weight and
2. Reduce inequities that contribute to health disparities in overweight and obesity.

The three following elements, 1. Increasing physical activity; 2. Increasing healthy eating; and 3. Increasing breastfeeding, contribute to achieving the two over-arching health status goals. In order to successfully achieve each of these three elements, a general population-based approach and tailored approaches to eliminate health disparities will be needed.

## 2C: LONG-TERM OBJECTIVES

Long-Term Objectives have been developed for each component of the overall goal and represent what will ultimately be achieved by the end of the Strategic Plan in 2020. These objectives are broad and focus on changing health status through the creation of policy, environments and behavior change supports. They reflect the vision for the future held by the members of the Michigan Healthy Weight Partnership. The objectives were developed by work groups composed of members of the Healthy Weight Partnership. National guidance documents issued by the CDC and national plans such as Healthy People 2020 (in its draft form) and the National Physical Activity Plan were taken into consideration throughout this process and helped to inform the development of the objectives. Information from existing plans in Michigan related to physical activity, healthy eating, and breastfeeding was compiled and reviewed to identify opportunities for integration. (See Appendix 1 for more information on related plans in Michigan).

The Long-Term Objectives listed below serve as the roadmap to achieve each component of the overall goal. The objectives are included here in their simplest form. The actual targets for each objective specific to each population sub-group can be found in Section 4 of this document. SMART criteria have been used to develop the objectives (Specific, Measurable, Achievable, Realistic, and Time-framed).

The Long-Term Objectives relating to each component of the overall goal can be found below. Potential implementation actions required to achieve these objectives are included in Section 3. The targets, baseline data, and data sources are included Section 4 of this document

**■ Overall Goal Component 1: *Increase the proportion of Michigan's population who are at a healthy weight.***

**Long-term Objective:**

General Population

1. By 2020, decrease the prevalence of overweight and obesity among youth and adults in Michigan.

**■ Overall Goal Component 2: *Reduce inequities that contribute to health disparities in overweight and obesity.***

**Long-term Objective:**

Health Disparities

2. By 2020, reduce the disparities between groups in the prevalence of overweight and obesity among adults and youth.

**■ Overall Goal Component 3: *Increase physical activity.***

**Long-term Objectives:**

Behavior Change

3.1 By 2020, increase the percentage of Michigan youth and adults that get the recommended amount of moderate physical activity.

3.2 By 2020, decrease screen time among children and youth.

Environmental Change

3.3 By 2020, increase the number of environmental changes to support physical activity.

Policy Change

3.4 By 2020, increase the number of legislative and policy changes to support physical education and physical activity.

**■ Overall Goal Component 4: *Increase healthy eating.***

**Long-term Objectives:**

Behavior Change

4.1 By 2020, increase the percentage of Michigan youth and adults that consume the recommended amount of fruits and vegetables.

4.2 By 2020, decrease the amount of sugar-sweetened beverages consumed among youth and adults.

Environmental Change

4.3 By 2020, increase the number of environmental changes to support healthy eating.

Policy Change

4.4 By 2020, increase the number of legislative and policy changes to support healthy eating.

## ■ Overall Goal Component 5: *Increase breastfeeding.*

### Long-term Objectives:

#### Behavior Change

5.1 By 2020, increase breastfeeding initiation, duration, and exclusivity.

#### Environmental Change

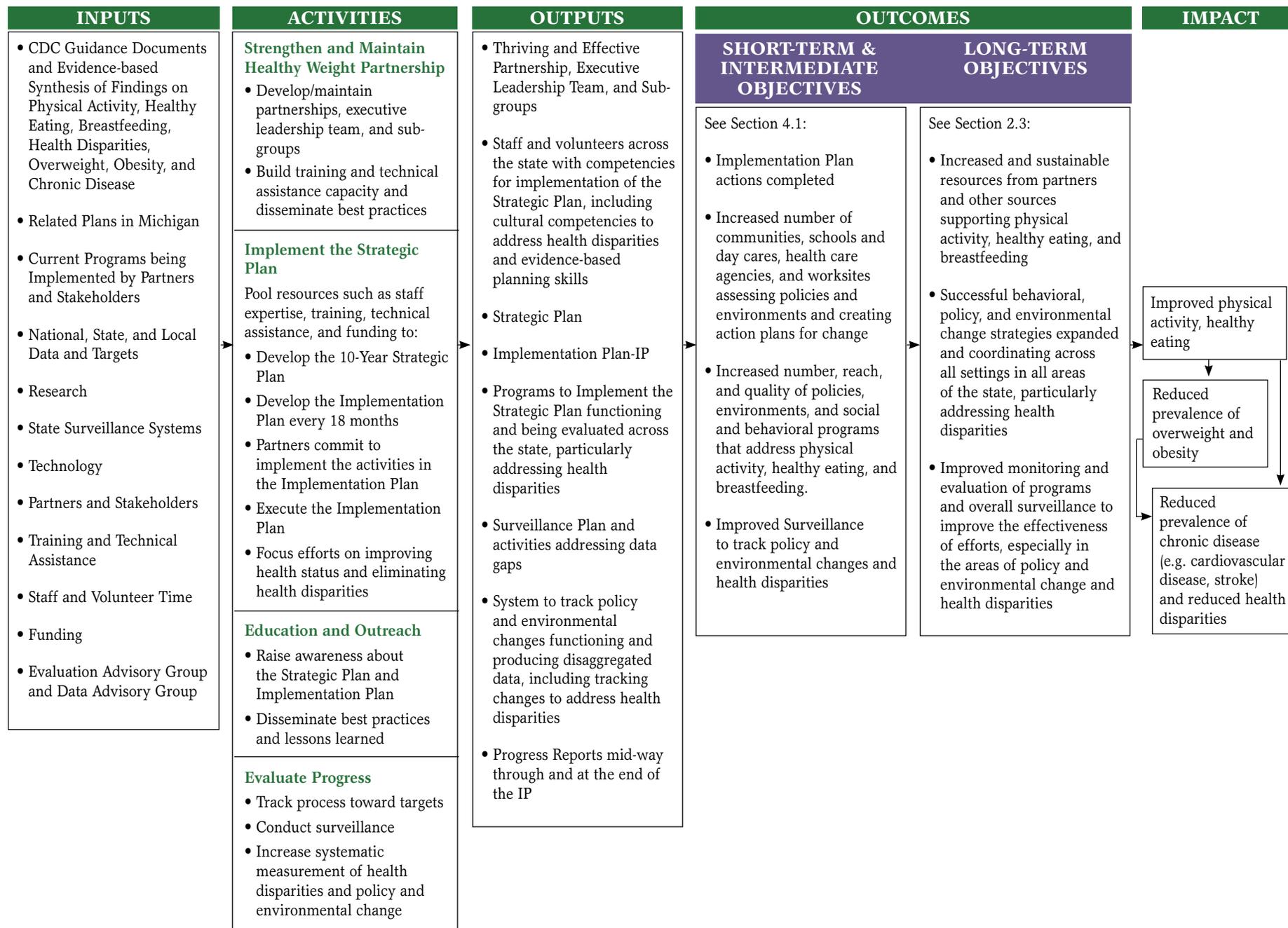
5.2 By 2020, increase the number of environmental changes to support breastfeeding.

#### Policy Change

5.3 By 2020, increase the number of legislative and policy changes to support breastfeeding.

## 2D: LOGIC MODEL

The elements of the Strategic Plan and the action required to achieve the desired impact can also be envisioned in the form of a logic model. The Logic Model is included below and incorporates the inputs and activities needed to obtain the necessary outputs to achieve the objectives (outcomes) that will ultimately lead to the desired impact that is represented in the mission and vision.



## SECTION 3: IMPLEMENTING THE STRATEGIC PLAN

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### 3A: OVERVIEW OF THE IMPLEMENTATION PROCESS

Implementation of the Strategic Plan will be a collaborative endeavor involving all partners in Michigan who are committed to working together to support physical activity, healthy eating, breastfeeding and healthy weight for everyone. As there are a number of existing initiatives in Michigan, the implementation planning process provides all partners with the opportunity to determine how the various initiatives and efforts can be united in a collaborative endeavor to contribute to the joint objectives articulated in this document, the Michigan Healthy Eating and Physical Activity Plan: 2010-2020.

To guide the achievement of the objectives in the Strategic Plan, an Implementation Plan will be developed every 18 months throughout the life cycle of the 10-year Strategic Plan. The Implementation Plan will provide a snapshot of the specific actions and collaboration that will occur within a given 18 month period to implement the objectives of the Strategic Plan and contribute toward the ultimate achievement of the 10-year targets. The Implementation Plan allows partners to come to agreement on what their combined efforts can do above and beyond what might be achieved if each member acted independently.

Each Implementation Plan will contain the priority objectives that will be addressed over its 18 month period, as well as the associated action steps, partners and resources necessary to carry out the actions. The following components will be included in each Implementation Plan: goals and objectives, responsible person and resources contributed, evaluation indicators, baseline, progress and targets. Partners will be able to use the Implementation Plan to track their progress throughout the year to review accomplishments.

The national report "F as in FAT, How Obesity Policies are Failing In America, 2009", has noted that it is uncommon for a State Plan to indicate the source of funding dedicated to implement an initiative, but that this is a fundamental step in ensuring that the plans become reality in a given state. Recognizing the importance of identifying resources to implement a plan, the Implementation Planning process in Michigan will be followed by a commitment process in which partner organizations throughout the state will have the opportunity to commit staff time, technical assistance, materials, and financial resources to the implementation of the Plan.

The following timeframe has been designated for the achievement of objectives associated with the development and use of 18month Implementation Plans throughout the 10-year period covered by this state-wide Strategic Plan:

**FIGURE 4: TIMEFRAME FOR THE ACHIEVEMENT OF STRATEGIC PLAN OBJECTIVES**

State surveillance and evaluation data will play a key role in tracking progress toward meeting the objectives. More details regarding targets and data sources can be found in Section 4 of this document.

The focus of this Strategic Plan is on the Long-Term Objectives articulated in Section 2. However, potential Intermediate Objectives and Implementation Actions required to achieve the Long-Term Objectives are included in this section to assist in guiding implementation planning. The Intermediate Objectives will be refined as SMART Objectives and targets set as a part of the consultative process associated with each successive Implementation Planning Period.

The first two components of the overall goal are focused on improving healthy eating and physical activity. These overarching components are incorporated into the development of Objectives and Implementation Actions under each of the subsequent components of the Overall Goal: Increasing Physical Activity, Increasing Healthy Eating, and Increasing Breastfeeding.

### 3B: PHYSICAL ACTIVITY

#### Increasing Physical Activity

Regular physical activity is one of the most important contributors to health and a key factor in maintaining a healthy weight. Regular physical activity helps to achieve and maintain a healthy weight while contributing to the health of bones, joints, and muscles. It can also reduce feelings of anxiety and depression.<sup>6</sup>

Physical inactivity is one of the six modifiable risk factors for heart disease and stroke identified by the American Heart Association (AHA) and is strongly correlated with increasing cardiovascular risk factors such as obesity, high blood pressure, high triglycerides, high cholesterol, and diabetes. Even though the benefits of physical activity are apparent, less than half of adults in the United States engage in physical activity regularly. The estimated cost of physical inactivity in 2000 was \$76.6 billion in the United States. In 2002, the direct and indirect costs were \$8.9 billion in Michigan alone.

*Healthy People 2010* aims to reduce the proportion of adults who engage in no leisure-time physical activity to 20%. As of 2005, 40% of adults in the United States were still not getting any physical activity.<sup>7</sup> The United States Department of Health and Human Services (DHHS) 2008 Physical Activity Guidelines for Americans recommends that adults engage in at least 150 minutes of moderate intensity physical activity, above usual activity at work or home, or 75 minutes of vigorous physical activity a week to reduce the risk of chronic disease. Activity should be performed in at least 10 minute intervals throughout the week. Adults should also do muscle-strengthening activities on two or more days a week.<sup>8</sup> DHHS 2008 recommended that children and adolescents ages 6 to 17 years do at least 60 minutes of physical activity each day. Most of this time should be spent doing either moderate-intensity (such as bicycle riding or brisk walking) or vigorous-intensity (such as running, jumping rope, or dancing) physical activity in intervals of 10 minutes or more. Vigorous-intensity activity should be done on at least three days per week. Muscle-strengthening activity (such as playing on playground equipment, climbing trees, and playing tug-of-war) and bone-strengthening activity (such as basketball or hopscotch) should also be done on at least three days per week. Physical activity should be enjoyable, varied, and appropriate for the child or adolescent's age.<sup>9</sup>

Television (TV) viewing creates an additional barrier to physical activity. TV viewing is associated with reduced resting metabolic rate, displaced physical activity, excess energy intake through snacking, and exposure to the marketing of high energy-dense foods through commercials. Research has shown that children and adults who watch a greater number of hours of television are more likely to be overweight or obese. In addition, children who watch more television are more likely to become obese when they are adults. The American Academy of Pediatrics recommends that children under two years of age not watch any TV and children two years old and above watch no more than one to two hours of TV per day. Decreasing TV viewing has been shown to have positive health effects.<sup>10</sup>

IT IS RECOMMENDED THAT ADULTS ENGAGE IN AT LEAST 150 MINUTES OF MODERATE PHYSICAL ACTIVITY OR 75 MINUTES OF VIGOROUS PHYSICAL ACTIVITY A WEEK. CHILDREN AND ADOLESCENTS SHOULD ENGAGE IN AT LEAST 60 MINUTES OF PHYSICAL ACTIVITY A DAY.

- In 2009, 48.6% of Michigan adults did not get the recommended amount of physical activity (i.e. moderate physical activity for a total of at least 30 minutes on five or more days a week or vigorous activity for a total of at least 20 minutes on three or more days per week while not at work).
- Physical inactivity increases with age and decreases with education and income.
- In 2009, obese Michigan adults had a significantly higher prevalence of inadequate physical activity and no leisure-time physical activity compared with adults who were not obese.
- Michigan youth had not yet reached the *Healthy People 2010* targets for vigorous or moderate physical activity (i.e. moderate physical activity for a total of at least 30 minutes on five or more days a week or vigorous activity for a total of at least 20 minutes on three or more days per week while not at work).
- Male youth (54%) were more likely to be physically active than female youth (40%) in 2009.
- Black youth had the highest prevalence of excessive television viewing (47.7%) and computer or video game use (27.8%) in 2009.

### **CDC Recommended Strategies**

Based on CDC guidance, effective public health strategies to support physical activity includes: community wide campaigns; point of decision prompts; individually adapted health behavior change programs; enhanced physical education in schools; social support interventions in community settings; increased and enhanced access to places for physical activity combined with informational outreach; street scale urban design and land use; community scale urban design and land use policies and practices; active transport to school; and transportation and travel policies and practices (CDC Guide to Strategies for Increasing Physical Activity).

### **Objectives and Implementation Actions**

#### **■ Behavior Change Objectives:**

**Long-Term Objective 3.1:** By 2020, increase the percentage of Michigan youth and adults that get the recommended amount of moderate physical activity.

**Intermediate Objective:** By 2015, increase awareness of the importance of regular physical activity and knowledge of evidenced-based programs.

#### **Implementation Actions:**

1. Implement the 54321Go! campaign targeting children and families.
2. Promote active transportation (bicycling/walking) for commuting and leisure.
3. Increase public awareness and educate motorists on pedestrian and bicycle safety.
4. Promote physical activity messages through Michigan Steps Up healthy lifestyle website.
5. Identify and implement adult-focused physical activity campaign messages.
6. Develop and implement a state-wide communication plan to increase awareness of the importance of physical activity.
7. Encourage distribution of the MAFKH (Michigan Action for Healthy Kids) Physical Activity tool-kit.
8. Integrate physical activity in Chronic Disease Programs as appropriate.

**Intermediate Objective:** By 2015, strengthen and encourage comprehensive educational programs to promote the importance of regular physical activity.

**Implementation Actions:**

1. Promote the adoption of culturally competent programs to increase physical activity in faith-based organizations.
2. Expand the utilization of parish nurses to strengthen physical activity programs in places of worship.
3. Promote the use of culturally competent patient education materials that address the health benefits of physical activity.
4. Work with Michigan After-School Partnership and other community programs to promote and implement after school programs.
5. Increase the awareness of the need for evidence-based and practice-based physical activity programs.
6. Publish a list and encourage use of physical activity programs and resources for schools.
7. Teach behavioral skills to help individuals incorporate physical activity into their daily routines.

**Intermediate Objective:** By 2015, implement physical activity social support programs

**Implementation Actions:**

1. Promote physical activity social support programs targeting disparate populations and underserved communities.
2. Establish and promote walking groups.
3. Promote community-wide physical activity programs for adults.
4. Promote physical activity programs and resources for children.
5. Expand worksite wellness programs that incorporate physical activity

**Intermediate Objective:** By 2015, strengthen and support state, local and community partners working in communities with disparate populations to increase levels of physical activity.

**Implementation Actions:**

1. Promote culturally competent messages that inform of the importance of physical activity in maintaining a healthy weight.
2. Support diversity initiatives of local government and community partnerships and coalitions working to address increased physical activity in disparate populations.
3. Partner with state, local and community efforts to increase the awareness of health inequity that perpetuate health disparities in our communities.
4. Increase opportunities for physical activity among tribal youth and adults within a minimum of seven tribal communities.

**Long-Term Objective 3.2:** By 2020, decrease screen time among children and youth.

**Intermediate Objective:** Intermediate Objective: By 2015, implement state and local campaigns and educational messages to increase physical activity in youth while decreasing T.V. viewing.

**Implementation Actions:**

1. Provide guidelines for limiting screen-time in after-school programs and childcare centers.
2. Promote the American Academy of Pediatrics Guidelines for TV viewing.
3. Promote self-monitoring of screen-time by families.
4. Promote and implement annual 'Turn TV Off' campaign.
5. Advocate for family-safe areas for physical activity in underserved areas as an alternative to TV viewing.

**Environment Change Objectives:**

**Long-Term Objective 3.3:** By 2020, increase the number of environmental changes to support physical activity.

**Intermediate Objective:** By 2015, create or enhance access to places for physical activity in communities.

**Implementation Actions:**

1. Promote the use of Michigan's Healthy Communities Checklist (HCC) and Promoting Active Communities (PAC) health tools to assess the physical activity environment of communities.
2. Encourage communities to develop and implement action plans to improve the physical activity environment based on community assessments.
3. Increase the number and miles of bike lanes and number of bike racks.
4. Promote the increase and enhancement of parks with walking paths, lighting and safe playground areas in underserved areas.
5. Create walking and biking trails with accompanying neighborhood signage.
6. Collaborate with diverse communities to locate safe and accessible physical activity venues in urban and rural areas.
7. Increase the number of side-walks and bike trails in urban and rural communities.
8. Promote maintenance of existing walking and biking trails.
9. Promote improved access to outdoor recreational facilities in safe environments.
10. Support state, local, and community efforts to identify and promote opportunities for safe, enjoyable, and low-impact physical activity.

**Intermediate Objective:** By 2015, develop and enhance environments supportive of physical activity in schools.

**Implementation Actions:**

1. Increase the number of schools using the Healthy School Action Tool (HSAT) to assess their physical education and physical activity environment and implement or make changes.
2. Encourage access to and use of schools to support physical activity in inclement weather.
3. Expand the number of schools implementing the Safe Routes To School (SRTS) Program.

## Policy Change Objectives

**Long-Term Objective 3.4:** By 2020, increase the number of legislative and policy changes to support physical education and physical activity.

**Intermediate Objective:** By 2015, enhance and maintain a state-wide infrastructure and public health workforce to support physical activity.

### Implementation Actions:

1. Continue to expand state-wide partnerships including policy makers, business and community partners.
2. Identify and work with partners with expertise, manpower and funding resources supportive of physical activity initiatives.
3. Continue to assess state-wide physical activity programs and gaps.
4. Support and enhance current state, local and community programs and recognize program success.
5. Establish a resource network including web-based resource links.
6. Integrate physical activity in Chronic Disease Programs as appropriate.
7. Collaborate with schools of higher education and health care professionals to incorporate physical activity and healthy lifestyle content into academic training curricula for health professionals.

**Intermediate Objective:** By 2015, expand the number of communities with policies, standards and practices that support physical activity.

### Implementation Actions:

1. Support state-level Complete Streets legislation and expand local Complete Streets policies.
2. Encourage local government to develop and implement non-motorized transportation plans.
3. Partner with local law enforcement departments to enhance personal safety in areas where residents could be physically active.
4. Encourage access to and use of community indoor facilities, including schools, to support physical activity in inclement weather.
5. Enhance traffic safety initiatives in urban and rural communities where residents could be physically active.

**Intermediate Objective:** By 2015, enhance physical education and activity in schools and physical activity in childcare.

### Implementation Actions:

1. Support policies to require daily quality physical education in schools.
2. Incorporate physical activity in after-school programs.
3. Increase the number of schools using the Healthy School Action Tool (HSAT) to assess their physical education and activity environment and make changes.
4. Increase access to indoor/outdoor recreation facilities for children.
5. Advocate for Recess Before Lunch schedule in schools.
6. Encourage schools to implement "Walking School Bus" programs.
7. Increase the number of schools with Safe Routes to School (SRTS) policies (i.e. remote drop off, walking school buses, etc.) and programs.

8. Promote and expand the use of the "Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC)" tool in childcare centers.
9. Support policy to require daily physical activity in childcare settings.

**Intermediate Objective:** By 2015, create and expand policies, standards and practices that support physical activity in worksites.

**Implementation Actions:**

1. Encourage businesses to assess their physical activity environments using the Designing Healthy Environments at Work (DHEW) assessment tool and implement changes.
2. Provide guidance for the development of worksite policies that encourage and support physical activity and healthy lifestyles.
3. Expand and promote worksite wellness programs that incorporate physical activity.

**Intermediate Objective:** By 2015, expand the number of healthcare agencies with practices that support physical activity.

**Implementation Actions:**

1. Promote provider compliance with US Preventive Services Task Force, American Academy of Pediatrics, and Healthcare Effectiveness Data and Information Set (HEDIS) recommendations that children and adults receive annual Body Mass Index (BMI) screening and weight counseling.
2. Promote the use of Michigan Quality Improvement Consortium Overweight and Obesity Prevention and Treatment guidelines.
3. Promote use of obesity prevention and treatment clinical decision support tools available to all providers through the Michigan Care Improvement Registry.
4. Promote 'pay for performance' measures from providers meeting HEDIS standards for BMI assessment and weight counseling.

### 3C: HEALTHY EATING

#### Increasing Fruits and Vegetables

Research shows that healthy eating can contribute to maintaining a healthy weight or losing excess weight. This in turn can help lower people's risk for chronic diseases, including heart disease, stroke, some cancers, diabetes, and osteoporosis. However, a large gap remains between healthy dietary patterns and what Americans actually eat.<sup>11</sup>

Consuming a diet high in fruits and vegetables is associated with a decreased risk of many chronic diseases including heart disease, stroke, high blood pressure, diabetes, and some cancers (CDC Guide to Fruit and Vegetables: Strategies to Increase Access, Availability, and Consumption). The 2005 Dietary Guidelines for Americans recommend that adults eat between 1.5 to 2.5 cups of fruit daily and 2.5 to 4 cups of vegetables daily, depending on age, gender, and amount of regular physical activity.<sup>12</sup> Within a week, adults are advised to choose options from all five of the vegetable subgroups (dark green, orange, legumes, starchy, and other vegetables). Eating a diet high in fruits and vegetables is associated with lowering your risk of developing diseases such as cancer.<sup>13</sup>

Although the 2005 guidelines recommend 4 to 6.5 cups of fruit and vegetables per day, data is still collected based on the *Healthy People 2010* goals.<sup>14</sup> These goals state that adults should get two servings of fruit and three servings of vegetables per day for a total of five servings.

The 2005 Dietary Guidelines for Americans recommend that children, ages 2 to 18 years, eat between 1 to 2.5 cups of fruit daily and 1 to 4 cups of vegetables daily, depending on calorie needs. These recommendations also encourage children to consume 2 to 3 cups of fat-free or low-fat milk products a day.<sup>15</sup>

- In 2009, 77.8% of Michigan adults consumed inadequate fruits and vegetables.
- Inadequate fruit and vegetable consumption decreased with increasing education. Females (25.9%) were more likely to get an adequate amount than males (18.1%).
- In 2009, 80% of Michigan youth consumed inadequate fruits and vegetables – there were no significant differences by race or gender.

#### CDC Fruits and Vegetables Recommended Strategies

Based on CDC guidance, strategies to increase fruit and vegetable access, availability and consumption include: promotion of food policy councils as a means to improve food environment at state and local level; improve access to retail venues that sell or increase availability of high quality fruits and vegetables in currently underserved communities; include or expand Farm-to-Where-You-Are programs in all possible venues; ensure ready access to fruits and vegetables in worksite foodservice and in food offered at meetings and events; support and promote community and home gardens; establish policies

CONSUMING A DIET HIGH IN FRUITS AND VEGETABLES IS ASSOCIATED WITH A DECREASED RISK OF MANY CHRONIC DISEASES.

to incorporate fruit and vegetable activities into schools and include fruits and vegetables in emergency food programs (CDC Guide to Fruit & Vegetable: Strategies to Increase Access, Availability and Consumption).

### **Decreasing Energy Dense Foods and Sugar-Sweetened Beverages**

The consumption of fast food, a recent trend in the American lifestyle, is a suggested contributor to the rise in obesity. Meals consumed away from home tend to be low in fruits and vegetables, generously portioned, served in combination packages, and offered with sugar-sweetened beverages. It stands to reason that today, eating away from home can make it difficult to follow the current evidence-based dietary advice.

Sugars can be found naturally in nutrient dense foods such as fruit or milk. Sugars can also be added to beverages such as soda; however, soda provides calories but few or no nutrients. The more sugar-sweetened beverages a person consumes, the more likely he or she is to be overweight.

- In 2009, almost 28% of youth drank at least one non-diet pop or soda a day. There was a significant difference in soda consumption between males (32.4%) and females (22.6%).
- In 2005, nearly one-in-four (24.9%) Michigan adults went to a fast food restaurant two or more times a week.
- The prevalence of obesity increased with increased number of visits to fast food restaurants in a week from less than once a week (24.0%) to more than three visits a week (32.9%).
- The odds of being obese were about 60% greater for those eating fast food two or more times a week compared to those consuming it less frequently.

### **CDC Recommended Strategies for Decreasing Energy Dense Foods and Sugar-Sweetened Beverages**

Strategies to reduce consumption of high energy dense foods include promoting menu labeling and other policy and environmental programs in restaurants; improve geographical accessibility of supermarkets and improve existing small stores in underserved areas; provide healthy food and beverage choices to students outside of the school meals program; expand childcare curriculum-based strategies that support nutrition standards; ensure childcare regulations, policies and legislation promote healthier foods; promote healthy foods in workplace cafeteria, vending machines, and meetings and conferences (CDC Guide to Strategies for Reducing the Consumption of Energy-Dense Foods).

Strategies to reduce sugar-sweetened beverage (SSB) consumption includes: ensure ready access to potable drinking water; limit access to SSB; limit marketing of SSB; promote access to and consumption of more healthful alternatives; decrease the relative cost of more healthful beverage alternatives through pricing of SSB; include screening and counseling about SSB consumption as routine medical care; and expand the knowledge and skills of medical providers to conduct SSB nutrition screening and counseling (CDC Guide to Strategies for Reducing the Consumption of Sugar-Sweetened Beverages).

### **Objectives and Implementation Actions**

#### **■ Behavior Change Objectives:**

**Long-Term Objective 4.1:** By 2020, increase the percentage of Michigan youth and adults that consume the recommended amount of fruits and vegetables.

**Intermediate Objective:** By 2015, conduct culturally appropriate community-wide campaigns to increase awareness of the value of eating fruits, vegetables and other healthy foods.

**Implementation Actions:**

1. Implement the 54321Go! campaign targeting children and families.
2. Implement campaigns through linkages with 54321Go! such as National Family Dinner Day.
3. Promote nationally recognized health promotion campaigns, including national fruit and vegetable month.
4. Develop formal relationships with media outlets to deliver campaign messages on the benefits of fruits and vegetable consumption.
5. Integrate campaign messages into other State Department efforts.
6. Promote Project Fresh.

**Intermediate Objective:** By 2015, implement comprehensive educational programs in schools, childcare centers, faith-based institutions and workplaces to improve the consumption of fruits, vegetables and other healthy food and beverage choices.

**Implementation Actions:**

1. Expand the use of the Michigan Model for Health® curriculum in schools.
2. Promote Coordinated School Health Programs in all Michigan schools.
3. Link the consumption of healthy foods to academic achievement.
4. Implement the Nutrition and Physical Activity Self Assessment for Child Care (NAPSACC) Program in childcare centers.
5. Implement nutrition education curricula in faith institutions or places of worship such as "Body and Soul".
6. Provide education on preserving fruits and vegetables.
7. Recognize the Michigan State Nutrition Action Plan (MISNAP) as the guiding document for nutrition education and promotion in Michigan.
8. Expand access and trainings for schools and educators on Grade Level Content Expectation (GLCE) aligned nutrition education curriculums.

**Long-Term Objective 4.2:** By 2020, decrease the amount of sugar-sweetened beverages consumed among youth and adults.

**Intermediate Objective:** By 2015, conduct culturally appropriate community-wide campaigns and education programs to increase awareness of the value of decreasing the consumption of sugar-sweetened beverages.

**Implementation Actions:**

1. Develop and promote media campaigns encouraging children, youth and adults to choose water over sugar-sweetened beverages.
2. Develop and implement a tribal culturally specific media campaign to encourage healthier beverage choice (countering sugar-sweetened beverages and promoting healthy choices).
3. Encourage dental and other health professionals to provide education on decreasing the consumption of sugar-sweetened beverages.

**Environment Change Objectives**

**Long-Term Objective 4.3:** By 2020, increase the number of environmental changes to support healthy eating.

**Intermediate Objective:** By 2015, increase the availability of healthy food outlets

**Implementation Actions:**

1. Develop community gardens and school gardens in underserved areas.
2. Support the development of farmer markets, farm stands, grocery stores and other fresh food retail outlets in communities with underserved and low-resource populations.
3. Increase the number of markets that can accept food stamps, Project Fresh and Senior Project Fresh through Electronic Benefit Transfer (EBT).
4. Conduct outreach and marketing to publicize the location of existing markets, gardens and Electronic Benefit Transfer (EBT).
5. Work with Women, Infants and Children Program (WIC) to address vendor authorization to ensure that fresh food grocers are receiving WIC licensing.
6. Promote Michigan Public Act 231 of 2008 tax abatement incentive to attract new healthy food outlets to underserved areas.
7. Improve the selection of healthy food choices in existing food outlets in underserved areas.
8. Recognize local excellence or improvement in community food access – a citywide/city level designation.
9. Increase the number of communities that have conducted the Nutrition Environment Assessment Tool (NEAT) assessment and make appropriate changes.
10. Increase the number of schools that assess building level environments through use of the HSAT (Healthy School Assessment Tool) and make appropriate changes.

**■ Policy Change Objectives:**

**Long-Term Objective 4.4:** By 2020, increase the number of legislative and policy changes to support healthy eating.

**Intermediate Objective:** By 2015, expand the number of schools, childcare settings and worksites implementing Nutrition Standards.

**Implementation Actions:**

1. Develop state-level legislation to implement Michigan Nutrition Standards in schools.
2. Support state-level policy to improve nutrition standards in childcare settings.
3. Promote the use of nutrition guidelines in worksites.
4. Develop local nutrition policies for food and beverages served or sold (including vending machines) in local government facilities.

THE MICHIGAN GOOD FOOD CHARTER ADVOCATES FOOD THAT IS HEALTHY, GREEN, FAIR AND AFFORDABLE. IT COMPLEMENTS THE STATE PLAN BY ADDRESSING OTHER AREAS OF THE FOOD SYSTEM – FARM VIABILITY, YOUTH ENGAGEMENT, INSTITUTIONAL PURCHASING AND FOOD SYSTEM INFRASTRUCTURE TO SUPPORT ACCESS TO GOOD FOOD FOR EVERYONE..

KATHRYN J. A. COLASANTI, C.S. MOTT GROUP FOR SUSTAINABLE FOOD SYSTEMS

**Intermediate Objective:** By 2015, increase the number of policies, ordinances and economic incentives supportive of healthy foods.

**Implementation Actions:**

1. Adopt a state level policy that all new food retail establishments in underserved areas carry a minimum stock of fresh and healthy foods with a non-compliance clause.
2. Encourage the development of local zoning and financial incentives to support healthy food retail in underserved areas.
3. Adjust zoning ordinances to allow for urban agriculture, seasonal extension and encourage greenhouse production while limiting the availability of fast food establishments.
4. Create local zoning ordinances to support the development of mixed-use neighborhoods and the creation of small markets that offer healthy foods.
5. Create local land-use policies and joint-use agreements that support the creation of community gardens in areas lacking supermarkets.
6. Promote Michigan Public Act 231 of 2008 tax abatement incentive to attract new healthy food outlets to underserved areas.
7. Develop local policies to allow local farms to distribute produce and sell directly to institutions.
8. Expand institutional purchase of local fruits and vegetables.
9. Provide incentives for the distribution of fresh produce in areas designated as "food deserts".
10. Work with the Michigan Food Policy Council (MFPC) and Michigan Department of Human Services (MDHS) to change once-monthly food assistance benefits distribution system to an extended distribution system throughout the month.
11. Address Women, Infants and Children Program (WIC) vendor authorization to ensure that fresh food grocers are receiving WIC licensing.
12. Support the development of sustainable Local Food Policy Councils to create long range action plan to meet needs of consumers, producers, distributors, & policy makers.
13. Support menu labeling policy requiring posting nutrition information on menu boards.

**Intermediate Objective:** By 2015, expand the number of state and local policies that limit the availability of unhealthy foods.

**Implementation Actions:**

1. Promote and support state legislation to impose a sales/excise tax on sugar-sweetened beverages and calorie-dense snack foods.
2. Promote development of local zoning policies to limit the number and density of fast food establishments allowed in underserved areas.
3. Support policies to require visible menu labeling in restaurants.
4. Revise procurement contracts for local government vending and concessions to limit less healthy foods.

### 3D: BREASTFEEDING

#### Increase Breastfeeding

Breastfeeding has many health and personal benefits for mothers and babies and is consequently recommended as the best start for life. Breast milk is easy to digest and contains antibodies that can protect infants from bacterial and viral infections.<sup>17</sup> Exclusive breastfeeding is sufficient to support optimal growth and development for approximately the first 6 months.<sup>18</sup> Some studies suggest that infants who are breastfed have decreased rates of sudden infant death syndrome in the first year of life, type 1 and type 2 diabetes, lymphoma, leukemia, and Hodgkin's disease. Research also indicates that women who breastfeed may have lower rates of certain breast and ovarian cancers.<sup>19</sup> Since 1981 there have been a number of studies that have provided varying degrees of support that breastfeeding reduces the risk of obesity among children. Three reports, which combined data from many studies over the past 30 years, suggest a 15% to 30% reduced risk for obesity in children who were breastfed. This relationship was stronger for exclusive breastfeeding than for breastfeeding combined with formula; and the longer the babies continued to breastfeed, the less likely they were to become obese.<sup>20</sup>

- In 2006, 56.1% of Michigan women who had a live birth reported that they planned to breastfeed before their delivery. Almost 70% of women who had a live birth initiated breastfeeding.
- White, non-Hispanics had a higher prevalence (71.7%) than black, non-Hispanics (55.7%) for breastfeeding initiation.
- The prevalence of breastfeeding initiation increased with education and income.
- Women whose Body Mass Index (BMI) was at a healthy weight had a higher prevalence of ever breastfeeding compared with women whose BMI was higher.

#### CDC Recommended Strategies

Based on CDC guidance, strategies to support breastfeeding include: institutional changes in maternity care practices; support for breastfeeding in the workplace; peer support; educating mothers; professional support; media and social marketing (The CDC Guide to Breastfeeding Interventions).

#### Objectives and Implementation Actions

##### ■ Behavior Change Objectives

**Long-Term Objective 5.1:** By 2020, increase breastfeeding initiation, duration, and exclusivity.

**Intermediate Objective:** By 2015, conduct five (5) culturally appropriate community-wide campaigns to increase public awareness and support of breastfeeding.

DECREASING THE BREASTFEEDING DISPARITY RATE IS THE RESPONSIBILITY OF THE COMMUNITY AT ALL LEVELS. WE MUST PROVIDE OUR VILLAGE WITH THE NURTURING AND NOURISHING THAT IS NEEDED THROUGH BREASTFEEDING BY GOING BEYOND CONVENTIONAL LIMITATIONS TO DO SO.

KIDDADA GREEN,  
MICHIGAN  
BLACK MOTHERS  
BREASTFEEDING  
NETWORK

**Implementation Actions:**

1. Implement state-wide breastfeeding awareness campaign.
2. Provide technical assistance and support to sustain the implemented Loving Support Programs.
3. Identify additional funding and resources to support the implementation of campaigns.

**Intermediate Objective:** By 2015, implement comprehensive breastfeeding education programs targeting breastfeeding mothers, family members, providers and educators.

**Implementation Actions:**

1. Provide comprehensive breastfeeding education programs targeting African American females.
2. Incorporate/support breastfeeding education in programs that target women and infants, (i.e., early childhood intervention programs, WIC, and local health departments).
3. Provide breastfeeding education to fathers and family support members.
4. Provide breastfeeding training for mothers, clinical hospital staff, peer counselors, and public health staff.
5. Develop/disseminate standardized evidence-based breastfeeding curricula for health care providers to use with patients.
6. Increase awareness of resources for breastfeeding professionals.
7. Support peer-to-peer physician breastfeeding education program.

**Intermediate Objective:** By 2015, develop and implement education and awareness programs for health care professionals that address action steps toward reduction of breastfeeding disparities.

**Implementation Actions:**

1. Develop educational program and materials.
2. Disseminate the training throughout the state in areas that service high populations of African American women.

**Intermediate Objective:** By 2015, develop, implement and expand programs that specifically address the breastfeeding initiation and duration rates of African American women.

**Implementation Actions:**

1. Support the expansion of Black Mothers' Breastfeeding Association (BMBFA) to host centers in local health clinics and WIC offices that serve a high population of prenatal and postnatal African American women.
2. Develop community outreach efforts that go beyond conventional limitations and into the communities where African American women reside.
3. Assist local breastfeeding coalitions efforts to write and include objectives in their action plans to address breastfeeding disparities.
4. Form state/local community grassroots collaborations that address breastfeeding disparities.

## ■ Environment and Policy Change Objectives

**Long-Term Objective 5.2:** By 2020, increase the number of environmental changes to support breastfeeding.

**Long-Term Objective 5.3:** By 2020, increase the number of legislative and policy changes to support breastfeeding.

**Intermediate Objective:** By 2015, support development of state-wide infrastructure to promote and support breastfeeding activities.

### Implementation Actions:

1. Expand partnerships that will provide knowledge, manpower, and funding resources supportive of breastfeeding activities.
2. Identify and support activities of a State Breastfeeding Coordinator.
3. Support expansion of local breastfeeding coalitions.
4. Identify and complete grant applications to support state breastfeeding efforts.
5. Support Michigan Breastfeeding Network activities.

**Intermediate Objective:** By 2015, support legislation to protect a mother's right to breastfeed in public.

### Implementation Actions:

1. Develop working relationships with established breastfeeding coalitions including the Michigan Breastfeeding Network.
2. Increase public officials' awareness of the need to support breastfeeding families in Michigan.
3. Promote policy for reimbursement of breastfeeding education and clinical services.

**Intermediate Objective:** By 2015, support legislation to support a mother's right to breastfeed at work.

### Implementation Actions:

1. Promote policy to provide support to breastfeeding mothers enrolled in the Michigan Work First program.
2. Increase public officials' awareness of the need to support breastfeeding families in Michigan.
3. Support policy to accommodate breastfeeding State of Michigan employees who breastfeed.
4. Develop breastfeeding proclamations/resolutions.

**Intermediate Objective:** By 2015, increase policies and practices in businesses supportive of breastfeeding.

### Implementation Actions:

1. Expand the number of work sites implementing the Business Case for breastfeeding.
2. Assess worksite assets and/or barriers to breastfeeding.
3. Develop and implement action plans to improve work site support of breastfeeding.
4. Develop/disseminate educational materials on how supporting breastfeeding can be beneficial to the employee and employer.

## SECTION 4: TRACKING PROGRESS

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### 4A: SETTING TARGETS AND TRACKING PROGRESS TOWARD THE LONG-TERM OBJECTIVES

In order to track progress toward achieving the Long-Term Objectives, 10-year targets were set through a consultative process involving the members of the Michigan Healthy Weight Partnership. Proposed targets can be found in the column on the far right of the table below. Data sources for specific populations and baseline data are also specified in the table below.

Most behavior change indicators have well-established data sources, which will require some enhancement to collect necessary data on health disparities. As in many states at this time, there are minimal data sources for policy and environmental change indicators. In particular, there is a need for a state-wide tracking system for monitoring policy and environmental changes related to physical activity, healthy eating, and breastfeeding. In the case of indicators for which there is not yet baseline data, targets will be set once the data source has been developed or enhanced and baseline data is available.

**Table 1: Tracking Progress in Achieving the Long-Term Objectives**

Component of Overall Goal, Long-term Objective, and Indicator			
Sub-Population	Data Source	Baseline	2020 Target
<b>1. Increase the proportion of Michigan's population who are at a healthy weight</b>			
<b>General Population<sup>1</sup></b>			
<b>1. By 2020, decrease the prevalence of overweight and obesity among youth and adults in Michigan.</b>			
<b>Youth: Grades 9-12</b>			
Overweight:	YRBS	14.2% YRBS-2009 preliminary	5%
Obesity:	YRBS	11.9% YRBS-2009 preliminary	7%
<b>Adults</b>			
Overweight:	BRFS	35.7% BRFS-2009 preliminary	30%
Obesity:	BRFS	30.3% CDC BRFS 2009	29%
<b>2. Reduce inequities that contribute to overweight and obesity</b>			
<b>Health Disparities<sup>2</sup></b>			
<b>2. By 2020, reduce the disparities between groups in the prevalence of overweight and obesity among adults and youth.</b>			
<b>Racial / Ethnic</b>			
<b>Overweight</b>			
Caucasian adults:	BRFS	36.7% BRFS-2009 preliminary	30%
African American adults:	BRFS	34% BRFS-2009 preliminary	30%
Native American adults:	ITCM BRFS	36.3% ITCM BRFS 2007	30%
<b>Obesity</b>			
Caucasian adults:	BRFS	28.7% BRFS-2009 preliminary	25%

<sup>1</sup>**Note:** Objectives related to goal components 1 and 2 also appear under the topic-specific goals in the categories of behavior change, environmental change, and policy change.

For each area, there is a pairing of an overall population change objective related to Goal 1 (labeled a.) and a change to reduce disparities objective related to Goal 2 (labeled b.).

<sup>2</sup>**Note:** For every objective to reduce health disparities, data can potentially be disaggregated by: Rural/Urban; SES; Sex; and Racial Ethnic (Caucasian, African American, Hispanic, Native American, etc.). Targets under the various goals have been set in the spirit of Overarching Goal 2, aiming to close the gap between groups in Michigan and end health disparities.

**Table 1: Tracking Progress in Achieving the Long-Term Objectives**

<b>Component of Overall Goal, Long-term Objective, and Indicator</b>			
<b>Sub-Population</b>	<b>Data Source</b>	<b>Baseline</b>	<b>2010 Target</b>
African American adults:	BRFS	41.6% BRFS-2009 preliminary	29%
Native American adults:	ITCM BRFS	41.0% ITCM BRFS 2007	29%
<b>Sex</b>			
<b>Overweight</b>			
Males:	BRFS	42% BRFS-2009 preliminary	30%
Females:	BRFS	29.3% BRFS-2009 preliminary	27%
<b>Obesity</b>			
Males:	BRFS	30.8% BRFS-2009 preliminary	29%
Females:	BRFS	31% BRFS-2009 preliminary	29%
<b>Topic-Specific Goal 3. Increase physical activity</b>			
<b>Behavior Change</b>			
<b>3.1 By 2020, increase the percentage of Michigan youth and adults that get the recommended amount of moderate physical activity.<sup>3</sup></b>			
<b>Youth: Grades 9-12</b>	YRBS	46.8% YRBS 2009 preliminary	65%
Caucasian	YRBS	49.7% YRBS-2009 preliminary	65%
African American	YRBS	37.6% YRBS-2009 preliminary	65%
Hispanic	YRBS	40.5% YRBS-2009 preliminary	65%
<b>Adults: 18 +</b>	BRFS	38.4% BRFS 2009 preliminary	50%
Caucasian/Non-Hispanic	BRFS	40% BRFS 2009 preliminary	50%
African American/non-Hispanic	BRFS		
Native American	REACH USRFS	Component of Overall Goal	50%

<sup>3</sup> **Note:** Healthy People 2020 includes the following proposed objective: "Reduce the proportion of adults who engage in no leisure-time physical activity". However, comments during the Strategic Planning Meeting in Michigan on April 27, 2010, indicated that there is a desire to focus on moderate physical activity as a more sensitive and practical indicator in addressing health disparities.

**Table 1: Tracking Progress in Achieving the Long-Term Objectives**

Component of Overall Goal, Long-term Objective, and Indicator			
Sub-Population	Data Source	Baseline	2010 Target
<b>3.2 By 2020, decrease screen time (television viewing, video, video games, and computer use) among children and youth.<sup>4</sup></b>			
<b>Youth: Grades 9-12</b>			
<i>Television, Video or Video Games</i>	YRBS	29.6% <sup>5</sup> 2009 YRBS	20% <sup>6</sup>
Caucasian	YRBS	25.2% <sup>7</sup> YRBS-2009 preliminary	20% <sup>8</sup>
African American	YRBS	47.7% YRBS-2009 preliminary	20%
<i>Computer or Computer Games</i>	YRBS	23.3% 2009 YRBS	15%
Caucasian	YRBS	21.9% 2009 YRBS	15%
African American	YRBS	27.8% 2009 YRBS	15%
<b>Topic-Specific Goal 4. Increase healthy eating</b>			
<b>Behavior Change</b>			
<b>4.1 By 2020, increase the percentage of Michigan youth and adults that consume the recommended amount of fruits and vegetables.</b>			
<b>Youth: Grades 9-12</b>	YRBS	19.6% YRBS 2009 preliminary	50%
Caucasian	YRBS	17.5% YRBS 2009 preliminary	50%
African American	YRBS	24.3% YRBS-2009 preliminary	50%
<b>Adults</b>	BRFS	22.2% BRFS 2009 preliminary	50%
Caucasian, Non-Hispanic	BRFS	22.5% BRFS 2009 preliminary	50%
African American, Non-Hispanic	BRFS <sup>9</sup>	19.6% BRFS 2009 preliminary	50%

<sup>4</sup> **Definition:** This relates to a Healthy People 2020 proposed objective, for which the following data sources are listed: National Health and Nutrition Examination Survey (NHANES), CDC; National Survey of Children's Health (NSCH), CDC; Youth Risk Behavior Survey (YRBS), CDC, NCCDPHP.

<sup>5</sup> **Definition:** "% of students who watched 3 hours or more of TV per day on an average school day."

<sup>6</sup> **Definition:** By 2020, decrease the percentage of youth that watch **3 + hours** of television on a **school day** to 20%.

<sup>7</sup> **Definition:** "% of students who watched 3 hours or more of TV per day on an average school day."

<sup>8</sup> **Definition:** By 2020, decrease the percentage of youth that watch **3 + hours** of television on a **school day** to 20%.

<sup>9</sup> **Definition:** The BRFS measures the proportion of adults whose total reported consumption of fruits (including juice) and vegetables was less than five times per day. The inverse has been calculated to match the objective.

**Table 1: Tracking Progress in Achieving the Long-Term Objectives**

<b>Component of Overall Goal, Long-term Objective, and Indicator</b>			
<b>Sub-Population</b>	<b>Data Source</b>	<b>Baseline</b>	<b>2020 Target</b>
Native American	REACH USRFS	22.9% REACH U.S. Risk Factor Survey	50%
<b>4.2 By 2020, decrease the amount of sugar-sweetened beverages consumed among youth and adults.<sup>10</sup></b>			
Youth: Grades 9-12	YRBS		
Caucasian	To be added to YRBS		
African American	To be added to YRBS		
<b>Topic Specific Goal 5. Increase breastfeeding</b>			
<b>Behavior Change</b>			
<b>5.1 By 2020, increase breastfeeding initiation, duration, and exclusivity.</b>			
<b>Initiation</b>			
	NIS	64.8% NIS 2008	
Caucasian	PedNSS	56.4% PedNSS 2007	75%
African American	PedNSS	37.8% PedNSS 2007	75%
<b>6-Month Duration</b>			
	NIS	31.2% NIS 2008	40% <sup>11</sup>
Caucasian	PedNSS	15.7% PedNSS 2007	50%
African American	PedNSS	11.4% PedNSS 2007	50%
<b>12-Month Duration</b>			
	NIS	14.4% NIS 2008	
Caucasian	PedNSS	12.5% PedNSS 2007	25%
African American	PedNSS	9.6% PedNSS 2007	25%
<b>3-Month Exclusivity</b>			
	NIS	23.5% NIS 2008	45% <sup>12</sup>

<sup>10</sup>**Definition:** Only regular sodas are tracked currently.

<sup>11</sup>**Target:** The Healthy People 2020 proposed target is 50%.

<sup>12</sup>**Target:** The Healthy People 2020 proposed target is 40%.

**Table 1: Tracking Progress in Achieving the Long-Term Objectives**

<b>Component of Overall Goal, Long-term Objective, and Indicator</b>			
<b>Sub-Population</b>	<b>Data Source</b>	<b>Baseline</b>	<b>2020 Target</b>
Caucasian	PRAMS	37% PRAMS 2007	45%
African American	PRAMS	15% PRAMS 2007	45%
<b>6-Month Exclusivity</b>			
	NIS	10.7% NIS 2008	17%
No data available for sub-groups.	NIS	10.7% NIS 2008	17%

In the interim, while an over-arching state-wide system is being developed to track policy and environmental change indicators, initial data available for intermediate target-setting is made available in the table below.

**Table 2: Additional Data to Inform Intermediate Objective Target-Setting**

<b>Indicator</b>	<b>Baseline</b>	<b>2020 Target</b>
<b>PHYSICAL ACTIVITY</b>		
<b>ENVIRONMENTAL CHANGE<sup>13</sup></b>		
<b>Youth:</b>		
Percentage of middle and high schools that allow community sponsored use of physical activity facilities by youth outside of normal school hours	86.4% (89.4% nationally)	92%
Percentage of youth with parks or playgrounds, community centers, and sidewalks or walking paths available in their neighborhood	52% (50% nationally)	60%
Percentage of middle and high schools in state that support or promote walking or biking to and from school	46.3% (46.1% nationally)	60%
<b>Adults:</b>		
Percentage of census blocks that have at least one park located within the block or 1/2 mile from the block boundary	21.3% (20.3% nationally)	30%
Percentage of census blocks that have at least one fitness or recreation center located within the block or 1/2 mile from the block boundary	14.7% (16.6% nationally)	20%

<sup>13</sup> Data Sources: School district administrative offices; U.S. Census; Fitness / Recreation center data; Local Jurisdiction park data and where available GIS layers; Etc.

**Table 2: Additional Data to Inform Intermediate Objective Target-Setting**

<b>Indicator</b>	<b>Baseline</b>	<b>2020 Target</b>
<b>POLICY CHANGE</b>		
<b>Local Level Policies/Ordinances</b>		
Existence of at least one enacted community- scale urban design/ land use policy in the state	Yes (27 states)	Yes
Existence of at least one enacted street scale urban design/ land use policy in the state	Yes (23 states)	Yes
Existence of at least one enacted transportation and travel policy in the state	Yes (36 states)	Yes
<b>State Level</b>		
State requires or recommends regular elementary school recess	Yes (20states)	Yes
State requires elementary, middle and high schools to teach physical education (PE)	No (37 states)	Yes
State requires moderate or vigorous intensity physical activity in licensed, regulated childcare centers	No (8 states)	Yes
<b>HEALTHY EATING</b>		
<b>ENVIRONMENTAL CHANGE</b>		
<b>Adults:</b>		
Percentage of census tracts that have healthier food retailers located within the tract or within 1/2 mile of tract boundaries	66.5% (72% nationally)	75%
Farmers markets per 100,000 state residents	1.6/100,00 (1.7 nationally)	2.4/100,000
Percentage of cropland acreage harvested for fruits and vegetables	4.5% (2.5% nationally)	5%
<b>Youth:</b>		
Percentage of middle and high schools that offer fruits (not juice) and non-fried vegetables as competitive foods	39% (20.9% nationally)	50%
<b>State Level</b>		
Percentage of farmers markets that accept electronic benefits transfer (EBT)	3.1% (7.6% nationally)	6%
Percentage of farmers markets that accept WIC Farmers Market Nutrition Program coupons	22.8% (28.2% nationally)	35%
<b>POLICY CHANGE<sup>14</sup></b>		

<sup>14</sup> Data Source: Respond to need as identified by Michigan nutritional and related coalitions, by health sector personnel, and disparity reduction advocates

**Table 2: Additional Data to Inform Intermediate Objective Target-Setting**

Indicator	Baseline	2020 Target
<b>Policy Changes</b>		
Local level: Local Food Policy Councils	1 (59 across states)	10
State-level policy for healthier food retail	Yes (8 states nationwide)	Yes
State-level food policy councils	Yes (20 states nationwide)	Yes
State-level policy for Farm-to-School programs	Yes (21 states nationwide)	Yes
<b>BREASTFEEDING</b>		
<b>ENVIRONMENTAL CHANGE</b>		
State Level		
State mPINC score ( <i>Maternity Practices in Infant Nutrition and Care</i> )	64/100	70
Percent of live births occurring at facilities identified as part of the Baby-Friendly Hospital Initiative (BFHI)	0 (1.93 national avg.)	2
Number of International Board Certified Lactation Consultants (IBCLCs) per 1,000 live births	1.06 (2.2 national avg.)	2
Number of La Leche League Groups per 1,000 live births	0.4 (0.34 national avg.)	0.5
<b>POLICY CHANGE</b>		
<b>State-Level Legislative Acts</b>		
Laws protecting breastfeeding in public	Yes	Yes
Laws supporting breastfeeding mothers who return to work	No	Yes

## 4B: SURVEILLANCE PLAN

There is an ongoing need for data (Table 1) to support the Strategic Plan to identify population targets, inform program evaluation, and determine the distribution and determinants of obesity in Michigan, as well as nutrition and physical activity in general. Additionally, health disparities among various ethnic/racial, socioeconomic, rural/urban and other demographic subgroups need to be measured and addressed. The target areas that the CDC has identified which the Program needs to measure include:

- Increase physical activity (including enhanced access to places for physical activity combined with outreach and education, transportation policy, and infrastructure enhancement for non-motorized transportation to support physical activity).
- Increase fruit and vegetable consumption.
- Decrease the consumption of sugar-sweetened beverages, including, but not limited to, soda pop.
- Decrease the consumption of high energy density foods.
- Decrease television viewing.
- Increase breastfeeding — initiation, duration and exclusivity.

State programs, local health departments, and state-wide partners can benefit from current data reports provided by ongoing surveillance systems, often available before standard surveillance documents are published. In February 2008, Michigan based data holders updated its information about the various state level data systems. This was the first major update since an “Ad Hoc Meeting of Statewide Data Set Managers” on “Obesity Surveillance for Michigan” in March 2006, although contact has been maintained and new information sought during the ensuing two year period (BE Anderson et al 2009). A Data Advisory Group has been formed which comprises epidemiologists and data owners of Michigan data. This group will provide valuable input and information on data sources that they are familiar with, guidance in the process of developing the surveillance update, objectives and implementation of strategies. Several new surveys and surveillance systems have been added during this year, as well as information on traditional surveys that have been changed.

Surveillance systems have adequately provided information on the prevalence of overweight and obesity among adults, along with other indicators on healthy eating, and physical activity leading to obesity. However, persistent gaps have been noted in certain areas and efforts are being made to address them.

In order to monitor the progress of the strategic plan over time, surveillance remains a crucial factor. Establishing a surveillance goal can aid us in the development of strategies that can serve as building steps for better program evaluation. The goal of surveillance in relation to the Strategic Plan is to assess Michigan’s obesity burden and identify disparities, high-risk populations, and trends. The four surveillance objectives are listed below with their respective strategies:

**Goal:** Assess Michigan’s obesity burden to identify disparities, high risk populations, and trends.

**Objective 1:** Assess the prevalence of overweight, obesity, and related risk factors in the state of Michigan.

### Implementation Actions:

- Conduct surveillance of the prevalence of overweight and obesity for all persons in Michigan.
- Conduct surveillance of the prevalence of risk factors related to overweight and obesity, including sedentary behavioral characteristics and nutritional consumption.

**Objective 2:** Assess the disparities of overweight, obesity, and related risk factors in the state of Michigan.

**Implementation Actions:**

- Conduct surveillance of overweight and obesity differences by age group, sex, race or ethnicity, income, education, insurance status, geographic residence, and occupation.

**Objective 3:** Assess the health impact of obesity in Michigan.

**Implementation Actions:**

- Conduct surveillance of the prevalence of co-morbidities with overweight and obesity, including hypertension, diabetes mellitus, and high cholesterol.
- Conduct surveillance of the prevalence of perceived health status, academic performance, health care access, and disability among overweight and obese individuals.

**Objective 4:** Evaluate the surveillance system for overweight, obesity, and related risk factors to identify opportunities to improve quality, efficiency, and use.

**Implementation Actions:**

- Create surveillance model for overweight, obesity, and related risk factors.
- Identify data gaps and potential ways to overcome such gaps in future.
- Evaluate the distribution and use of surveillance data for public health program planning and interventions.

By tracking and analyzing trends in the prevalence of overweight, obesity, and associated risk factors, such as a lack of physical activity and healthy eating, information will be gained to inform the planning and implementation of strategic actions to contribute to a healthier population. Surveillance of differences by age group, sex, race and ethnicity, income, education, insurance status, geographic residence, occupation, primary language, and literacy level will be conducted throughout the ten-year period in order to assess the health impact of various disparities and to guide interventions to eliminate those disparities. All surveillance of overweight, obesity, and related risk factors will be conducted for the purpose of identifying opportunities to improve quality, efficiency, and use of interventions to improve the health of Michigan's population.<sup>21</sup>

#### 4C: DATA SOURCES

Behavior change data sources are listed in the table below, with their designated frequency and the type of data provided. A state-level data collection system will be developed to capture policy and environmental changes.

**Table 3: Data Sources**

Data Source	Methods	Population	Data Collection	Data Ownership	Indicators for State Plan	Strengths
Behavioral Risk Factor Surveillance System (BRFSS)	Random sample, telephone survey	Adults 18 and over	Core questions asked annually or every other year, state developed questions vary	Michigan Department of Community Health (MDCH)	Adult overweight and obesity, physical activity, fruits and vegetables consumption	State-wide representative sample, continuous reliable data, easy accessibility
Inter-Tribal Council of Michigan - Behavioral Risk Factor Survey (ITCM-BRFS)	Telephone survey	Native Americans 18 years and over who were enrolled in one of the eight tribes participating in the Steps to a Healthier Anishinaabe program	Conducted in 2006 and 2007; Similar questions as on BRFS with few added questions	ITCM and the participating tribes in Michigan.	Adult overweight and obesity	Provides adequate data on Native Americans in Michigan; discussions underway to repeat periodically
Racial and Ethnic Approaches to Community Health across the U.S. (REACH U.S. Risk Factor Survey)	Telephone survey	Adults (Age 18+) who are African American, American Indian/Alaska natives, Hispanics/Latino, Asian Americans, and Native Hawaiian/Pacific Islander	Annual (2008 to 2012)	CDC	Overweight, Obesity, Physical Activity, and Nutrition	Data on all racial and ethnic groups; available annually

**Table 3: Data Sources**

<b>Data Source</b>	<b>Methods</b>	<b>Population</b>	<b>Data Collection</b>	<b>Data Ownership</b>	<b>Indicators for State Plan</b>	<b>Strengths</b>
Youth Risk Behavior Survey (YRBS)	Random selection selection of schools and classes within Michigan; self-report written survey	Youth (Grades 9-12)	Alternative (odd) years	CDC, Michigan Department of Education (MDE)	Overweight, Obesity Physical Activity, and Nutrition	State-wide representative sample, continuous reliable data
Pregnancy Risk Assessment Monitoring System (PRAMS)	Self-written survey, if not telephone interview	Michigan women having live births aged 18 and over	Annual	CDC-MDCH	Breastfeeding initiation and 3-month exclusivity	Nationwide survey representative, reliable data including race/ethnic stratified data
National Immunization Survey (NIS)	Random digit dialing telephone survey	Mothers of children between 19 and 25 months	Annual	National Immunization Program (NIP)	Breastfeeding initiation, duration, and 3, 6 months exclusivity	Nationwide survey, representative. ongoing annually
Pediatric Nutrition Surveillance System (PedNSS)	Data is collected at time of enrollment and at recertification visits	Children ages 0-5 years enrolled in Michigan WIC program	Continuous PedNSS is released annually; program has data to present	CDC	Breastfeeding initiation and duration to 12 months; BMI, TV/Video viewing for children 2 to 5 years;	Nationwide, state and local agency level data available. Also county level available from the WIC program; Source of data on children under 5
School Health Profiles	Random selection of schools and classes	Youth (Grades 9-12)	Alternative (even) years; opposite the YRBS	CDC, Michigan Department of Education (MDE)	Physical activity, fruits and non-fried vegetables offered as competitive	State-wide representative sample, continuous reliable data

**Table 3: Data Sources**

Data Source	Methods	Population	Data Collection	Data Ownership	Indicators for State Plan	Strengths
School Principal Survey (as a part of Profiles)	Random selection of schools and classes within Michigan; Self-report written survey				Physical activity, fruits and non-fried vegetables offered as competitive foods at middle and high schools (environmental and policy)	
School Health Policies and Programs Study, (SHPPS) 2006	Conducted at state, district, school, and classroom levels	Elementary, middle and high schools	Conducted in years 1994,2000, and 2006	CDC	Physical education, policy and environment in schools	Comprehensive national assessment
Retail Data	Retail stores are accounted for based on 2007 North American Industry Classification Codes; the information is derived from Dun and Bradstreet commercial data	Retail food establishments	Ongoing update	US Department of Homeland Security Database	Number of food retailers	Environmental measure of availability of food
Census Tract Information	Census tract, self report	Entire population	Every ten years	United States Census Bureau	Used as a denominator to determine number of food retailers	Source of denominator for population count

**Table 3: Data Sources**

<b>Data Source</b>	<b>Methods</b>	<b>Population</b>	<b>Data Collection</b>	<b>Data Ownership</b>	<b>Indicators for State Plan</b>	<b>Strengths</b>
Legislation Database	Staff at CDC summarize the bill and enter the information into the database whenever a change to bill status occurs.	Bills in every state in US	Bill information is gathered from several sources, including state legislative web pages, National Council of State Legislatures, and Health Policy Tracking Service, Council of State Governments and reviews of media coverage	CDC; Nutrition, Physical Activity and Obesity Legislative Database	Policy for healthier food retail, farm to school, healthy eating and drinking, physical activity	Up to date source on state-level bills related to nutrition and physical activity topics
National Conference of State Legislatures (NCSL)	Collects, tracks, and summarizes state legislation	All states	Healthy Community Design and Access to Healthy Food Legislation Database, Breastfeeding Laws	CDC	Policy for healthier food retail, farm to school, physical activity, breastfeeding, lactation and employment	Resource for states on policies
Agricultural Marketing Services (AMS)	Sources of information: state market representatives, market managers, and consumers	Farmers markets	Ongoing updates regularly	United States Department of Agriculture (USDA)	Farmers Market list	Complete listing of farmers markets in United States stratified by those that accept EBT, WIC FMNP coupons
Census of Agriculture	Mailout and mailback method, Electronic data reporting, non-response follow-ups by telephone	US farms and ranches in every state and county or county equivalent in the US	Every five years; comprehensive agricultural data	USDA, National Agricultural Statistics Service (NASS)	Cropland acreage harvested for fruits and vegetables	Source of uniform, comprehensive agricultural data

**Table 3: Data Sources**

<b>Data Source</b>	<b>Methods</b>	<b>Population</b>	<b>Data Collection</b>	<b>Data Ownership</b>	<b>Indicators for State Plan</b>	<b>Strengths</b>
Food Policy Council Program (FPC)	Maintains a record of state, regional, county and local level food councils	All state and local food councils	Periodically	Community Food Security Coalition (CFSC)	State and Local level food policy councils	Michigan Food Policy Council (MFPC) is developed with funding from W.K. Kellogg Foundation
National Survey of Maternity Practices in Infant Nutrition and Care (National Survey of mPINC)	Survey completed by the person at the birth facility who has the most knowledge regarding the facility's maternity and infant feeding practices	All US hospitals and birth centers with registered maternity beds	In 2007 for the first time summary scores based on 34 questions related to maternity and infant feeding practices were derived; plans to repeat are underway	CDC	mPINC score for breast feeding	Indicator for breast feeding environment
Baby-Friendly Hospitals and Birth Centers	On-site assessment by Baby Friendly USA to designate a centre as a part of Baby-Friendly Hospital Initiative	All hospitals and birthing-centers that practice "10 Steps To Successful Breastfeeding" for healthy newborns	Ongoing	Baby Friendly USA	Breast feeding	Indicator for breast feeding environment
International Board of Lactation Consultant Examiners (IBLCE)	Registered lactation consultants need to obtain license through IBLCE	All the licensed lactation consultants in 50 states in US	International Board Certified Lactation Consultants (IBCLCs) per 1,000 live births updated regularly	International Board of Lactation Consultant Examiners	Breast feeding	Indicator for breast feeding environment
La Leche League of Michigan	La Leche League Groups formed by leaders within each state	La Leche League Groups	La Leche League Groups per 1,000 live births	La Leche League in the USA		Indicator for breast feeding support within state

Two additional data sources are included in the table below. These data sources provide national-level data which is not disaggregated to the state level.

<b>Table 4: Additional National-Level Data Sources</b>						
<b>Data Source</b>	<b>Methods</b>	<b>Population</b>	<b>Data Collection</b>	<b>Data Ownership</b>	<b>Indicators for State Plan</b>	<b>Strengths</b>
National Health and Nutrition Exam Survey (NHANES)	Household interview (clinical visits in mobile trailers) and clinical exam	Annual	Annual	CDC	TV viewing and Computer use	Nation wide survey, annually available
National Survey of Children's Health (NSCH)	Parent report via phone survey	2003 - 2004, 2007-2008	2003 - 2004, 2007-2008	DHSS (Department of Health and Human Services)	TV viewing and computer use; physical activity environmental and policy	Conducted twice thus far

## Data Gaps

While Michigan has a number of robust data sources, there are some data gaps at present. These unmet needs for data include information on consumption of energy dense foods, sugar sweetened beverages, and health disparities between groups among all age groups are noticed as a gap. Even though racial/ethnic groups are accounted for in most of the surveys, some of the groups are comprised of sample sizes too small to report the estimates. Among children aged 2 to 12, overweight, obesity, nutrition, physical activity and television viewing information is not yet available at the state level.

Most significantly, there is a need for more detailed data to assist in tailoring programs to effectively eliminate health disparities and a need for a state-level data collection system to track policy and environmental changes that support physical activity, healthy eating, and breastfeeding.

## Plans to Address Data Gaps

In order to address the existing data gaps, a Data Consultation Group has been formed consisting of representatives of the existing data sources, staff from the Michigan Department of Community Health, and other interested partners within Michigan. A diverse spectrum of partners throughout Michigan have become involved in the leadership of the Healthy Weight Partnership through their participation on the Healthy Weight Partnership Executive Leadership Team, and will also help to inform initiatives to collect and use data to effectively tailor programs aimed at reducing and eliminating health disparities. Recognizing the need to track policy and environmental changes in a systematic and comprehensive manner, a state-level data collection system will be developed to capture policy and environmental changes to support physical activity, healthy eating, and breastfeeding over the next 10 years.

## 4D: EVALUATION PLAN

### Introduction

The 10-year Strategic Plan focuses on achieving targets for all Long-Term Objectives by the end of 2020. Progress toward achieving the 2020 targets will be evaluated at the end of each Implementation Plan period. The targets for the Long-Term Objectives can be found in Section 4A.

### Facilitation of the Evaluation Process

Evaluation of the Strategic Plan will be conducted by the Michigan Nutrition, Physical Activity and Obesity (NPAO) Program staff with guidance from the Evaluation Advisory Group, which is a sub-group of the Michigan Healthy Weight Partnership. The Evaluation Advisory Group will engage stakeholders in analyzing and using the data resulting from the evaluation of progress on implementing the Strategic Plan Objectives. CDC guidance documents and workgroup materials will be referenced to ensure that state evaluation processes meet national standards. Evaluation Advisory Group members represent a variety of different backgrounds and areas of expertise.

### Evaluation Advisory Group

Until recently, many public health strategic plans did not have an Evaluation Advisory Group. They would typically be evaluated independently of the stakeholders, although key findings could be reported to them. As part of the drive to improve evaluation and accountability, the use of an Evaluation Advisory Group is required for CDC grant funded "nutrition, physical activity and obesity"

state programs. In turn states have representatives working on the related CDC's "Consultation Group" developing standards, practices and suggestions for creating and utilizing these Evaluation Advisory Group. (The Michigan NPAO Program currently has its evaluator on the CDC evaluation consultation group.) The Evaluation Advisory Group's "primary purposes are to provide input to the State Health Department Evaluation Facilitator on both the best scientific and most practical evaluation activities of the Partnership, the State Plan and State Policies." Members should reflect the diversity of the state population: gender, ethnicity, race, rural, urban, etc; should be active in different settings: school, faith, work, healthcare, worksite, and daycare; and bring different skills and expertise. An Evaluation Advisory Group might be merely advisory or could participate directly in evaluation work. Different states with different needs will have a variety of Evaluation Advisory Group forms. But in all, the Evaluation Advisory Group will advise the programs.<sup>22</sup>

### **Data for the Evaluation**

The Michigan Department of Community Health (MDCH) will start by tracking process measures, as detailed in the Plan, such as marketing and disseminating the Plan, expanding the Healthy Weight Partnership, infrastructure and the capacity to implement the Plan. Michigan's long-term progress in improving healthy eating, increasing physical activity and reducing obesity will be measured over time. Some of this measurement will focus on individual behaviors and health status (such as how many high school students are overweight); while other portions will focus on policies and environments that make people healthier (such as how supportive of breastfeeding are state laws).

The evaluation will be data based. For example, the Michigan Behavioral Risk Factor Surveillance Survey (BRFSS), conducted annually and focusing on individual behavior, demographics and health status, will be used to follow annual adult obesity prevalence, etc. Some data sets exist; some will have to be constructed or improvised, especially with regard to policy and environmental changes.

In July 2009, the CDC published "Recommended Community Strategies and Measurements to Prevent Obesity in the United States: Implementation and Measuring Guide." This compiles a summary of 24 measurable strategies, each with one or more detailed data sets with which to measure. For example, school districts, on food policies; and city planning offices, on local government policies that facilitate physically activity friendly environments. The Michigan program will make extensive use of this guide.

The CDC has also been publishing various 'report card' and 'state indicator' documents, often specifically ranking states and comparing them to national averages. For example, the "Breastfeeding Report Card" contained 14 separate process and outcome indicators, with state rankings, ranging from "Percent Ever Breastfed" to "Average mPINC Score".

While nationally compiled reports will be very helpful, much of the needed evaluation information will be collected and analyzed by MDCH from many organizational, project, local and state sources. And some data will simply not be available, requiring the use of proxy data and non-traditional sources or approaches.

### **Frequency and Scope of Evaluation**

Evaluation efforts will be ongoing, with three timelines incorporated:

1. Every 18 months there will be a new Implementation Plan. Each plan will contain detailed short-term objectives that will be evaluated separately, during the 18 months, and at the end.

2. At the five year midcourse point, there will be an evaluation of the intermediate-term objective outcomes.
3. At the finish of the ten year plan, there will be an evaluation of the long-term objectives.

### Systematic Approach to Evaluation

1. **Evaluation of the Short-Term Objectives:** This will include collecting process — and, if feasible, outcome — data to document the progress of each of the objectives. Examples of process indicators for the short-term objectives include:
  - a. Documentation of meetings with new partners to discuss their involvement in the Plan.
  - b. List of partners involved in implementing an intervention related to the Plan and the partners' role in the intervention.
  - c. Written reports of intervention strategies implemented. The process data will be collected each year from organizations and partners who implemented strategies/interventions. Outcome data will be collected each year, if available, but it is understood that outcome data may take time to achieve, and may not be seen in the first 1-2 years.
2. **Evaluation of the Intermediate Objectives and Five-Year progress:** By the end of the fifth year, progress towards achieving the Plan's long-term goals will be measured by examining the indicators of the intermediate objectives; intermediate objectives will be measured as resources and data systems are available.
3. **Evaluation of the Long-Term Objectives:** The data systems are in place to measure the progress of the long-term individual behavior and health status objectives, and in place or under development regarding the policy and environment objectives.

### Evaluation Reports

Evaluation results will be reported to stakeholders. Ad hoc reports will be sent out from time to time when a one time survey or event is reported on. Oral reports will be made at each stakeholder meeting; varying in length depending on what there is to report. Independent of stakeholder reports, the NPAO program anticipates that it will also be making related annual reports directly to the CDC in response to detailed federal grant reporting requirements, and, as needed, to state government, when required.

### Evaluation Model

The overall evaluation model used will be "Utilization-Focused Evaluation" as recommended by the CDC and covered in Patton, M.Q. (2008) *Utilization-Focused Evaluation*, 4th ed. Thousand Oaks, CA: Sage, "Evaluations should be judged by their utility and actual use" from beginning to end. The concern about use directs us immediately to the users. "How real people in the real world apply evaluation findings and experience the evaluation process." Users should feel *ownership* of the evaluation. It should help with "concrete, specific uses."

Research shows that "Nothing makes a larger difference in evaluation than *the personal factor* — the interest of officials in learning from the evaluation and the desire of the evaluator to get attention for what he knows." (Cronbach et al., 1980: 6: emphasis added).

## SECTION 5: SUSTAINING THE EFFORT

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To dramatically improve the health of people living in Michigan and to decrease the currently alarming levels of chronic diseases and other health problems such as coronary heart disease, stroke and diabetes, a state-wide coordinated, strategic approach is needed. This 10-year Strategic Plan has been developed by partners across Michigan who have committed to working together to reach the 2020 targets in the areas of physical activity, healthy eating, and breastfeeding in order to reduce overweight and obesity and alleviate the burden of chronic disease on Michigan families.

As the implementation of the Strategic Plan progresses, the Michigan Healthy Weight Partnership Advisory Group will convene to create a sustainability plan that will identify Strategic Plan components which can be sustained over the long-term and resources to continue these efforts. The Evaluation Advisory Committee of the Healthy Weight Partnership will track progress in achieving the objectives in the plans and identify components with potential for further expansion. Sustaining the efforts begun on the platform of this Strategic Plan will be essential to ensuring a coordinated approach that maximizes the benefits of all partners' efforts in achieving a healthier Michigan.

**Appendix:**

**1. Related Plans in Michigan**

**2. National Planning, Implementation, and Evaluation Resources**

**3. Definitions**

**4. References**

**5. Acknowledgements**

## APPENDIX 1: Related Plans in Michigan

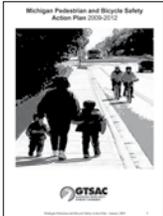
### Working Collaboratively Toward a Shared Vision

In developing the Michigan Healthy Eating and Physical Activity Strategic Plan: 2010-2020, we are building from a number of vital plans that exist in Michigan. In this way, we can unite our efforts toward our common goal of a healthier Michigan.



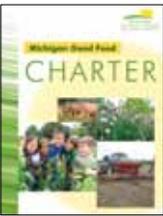
## Helpful Resources: Related Plans in Michigan

The following examples of existing plans are helpful resources and form some of the building blocks for a shared effort toward nutrition, physical activity, and obesity prevention:



### Michigan Pedestrian and Bicycle Safety Action Plan: 2009-2012

- Enhance, clarify and develop state and local laws and policies to improve pedestrian and bicycle safety.



### Michigan Good Food Charter: 2010-2020

- All people in Michigan have access to Good Food and Michigan-grown food.



### Michigan Food Policy Council Plan

- Cultivate a safe, healthy and readily available food supply for all of Michigan's residents by increasing accessibility to fresh and healthy Michigan grown foods, coupled with physical activity and nutrition education.



### Michigan Breastfeeding Network Logic Model

- Increase breastfeeding initiation, duration and exclusivity rates.



### Tribal Proposed Practices to Combat Obesity (REACH Grant)

- Reduce health disparities (A Tribal Obesity Plan has been proposed to address health disparities in Michigan Native American communities for all 12 Tribes).



### Michigan Strategic Opportunities for Rural Health Improvement: 2008-2012

- Reduce the rate of obese and overweight adults and children in rural Michigan by encouraging physical activity and healthy eating.



### Healthy Kids, Healthy Michigan 5-Year Strategic Plan: 2008-2013

- Reduce overweight and obesity in children through policy and legislative changes targeting schools, childcare, communities, and health care services.

## APPENDIX 2: National Planning, Implementation, and Evaluation Resources

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### Healthy People

#### 1. Healthy People 2010

For three decades, Healthy People has provided a comprehensive set of national 10-year health promotion and disease prevention objectives aimed at improving the health of all Americans. It is grounded in the notion that establishing objectives and providing benchmarks to track and monitor progress over time can motivate, guide, and focus action. Healthy People 2020 will continue in the tradition of its predecessors to define the vision and strategy for building a healthier Nation.

#### 2. Healthy People 2020

Healthy People 2020 will continue in the tradition of its predecessors to define the vision and strategy for building a healthier Nation.

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### Guidance from the CDC

#### 1. Guidance Documents per Target Area (March 2010)

- **Guidance Document 1. Physical Activity**

The CDC Guide to Strategies for Increasing Physical Activity in the Community describes strategies and interventions recommended by the CDC for states to implement.

- **Guidance Document 2. Fruits and Vegetables**

The CDC Guide to Fruit & Vegetable Strategies to Increase Access, Availability and Consumption describes strategies and interventions recommended by the CDC for states to implement.

- **Guidance Document 3. Sugar-Sweetened Beverages**

The CDC Guide to Strategies for Reducing the Consumption of Sugar-Sweetened Beverages describes strategies and interventions recommended by the CDC for states to implement.

- **Guidance Document 4. Energy Dense Foods**

The CDC Guide to Strategies for Reducing the Consumption of Energy Dense Foods describes strategies and interventions recommended by the CDC for states to implement.

- **Guidance Document 5. Breastfeeding**

The CDC Guide to Breastfeeding Interventions describes strategies and interventions recommended by the CDC for states to implement.

## 2. Community Strategies and Measures Guide (July 2009)

- **Community Strategies and Measures Guide**

The Recommended Community Strategies and Measurements to Prevent Obesity in the United States: implementation and Measurement Guide offers guidance on what communities can do to promote and support nutrition and physical activity. For each recommended strategy, it provides a measure, several data collection questions, and recommended data sources.

## 3. NPAO Technical Assistance Manual (January 2008)

- **NPAO Technical Assistance Manual**

The State Nutrition, Physical Activity and Obesity (NPAO) Program Technical Assistance Manual describes the target areas, strategies, and interventions recommended by the CDC for states to implement.



## The eShare Forum: Evaluating Nutrition, Physical Activity, and Obesity Prevention

~ Your Link to Evaluation Resources ~

[www.npaoeval.org](http://www.npaoeval.org)

(National Release: April 2010)

This resource is a national collaborative endeavor led by Michigan and the CDC to organize and coordinate evaluation efforts across the United States. The eShare Forum provides you with a place to exchange information for more effective evaluation of community, state, and national efforts to promote nutrition and physical activity and prevent obesity.

### How The eShare Forum Can Make My Life Easier

Whether you eat, sleep and breath evaluation, or whether evaluation puts you to sleep, this is a home for you!



- This site will make your life easier, save you time, and make evaluation more relevant to improving your program.
- It gives you an easy place to store and access all evaluation-related materials and provides a platform for collaboration with other partners in your state and around the country.

## APPENDIX 3: Definitions

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**Behavioral Risk Factor Surveillance System (BRFSS)** - Ongoing data collections program to monitor the prevalence of major behavioral risks among adults associated with premature morbidity and mortality.

**Best Practices** - Programs, initiatives or activities that are considered leading edge, or exceptional models for others to follow.

**Body Mass Index (BMI)** - An index of body weight for height used to classify overweight or obesity in adults and, in conjunction with age and gender, for children and adolescents. To calculate Body Mass Index:  $BMI = [\text{weight (kg)}] / \{[\text{height (m)}]^2\} \times 703$ .

**Community Scale Urban Design and Land Use Policies and Practices** - Zoning and land use requirements to promote "mixed-use" land development.

**Complete Streets** - Streets that are designed and operated to enable safe access along and across the street for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities.

**Energy Density** - The number of calories per gram in weight.

**Environmental Change** - Describes changes to physical and social environments that provide new or enhanced supports for healthy behavior.

**Evidence-Based** - Development, implementation and evaluation of effective programs and policies through application of principles of scientific reasoning, including systematic uses of data and information systems, and appropriate use of behavioral science theory and program planning models. From such an approach, activities are explicitly linked with the underlying scientific evidence that demonstrates effectiveness. An evidence-based approach involves the development and implementation of effective programs and policies.

**Goals** - Goals link specific information on disease burden and the current activities to the actions that will expand and improve the effectiveness of intervention efforts and, ultimately, reduce the disease burden.

**Health Disparities** - Differences in the rates of disease and health status among groups of people. Most health disparities are the result of poor living and work conditions or discrimination which may be due to socioeconomic status, age, race or ethnicity, sexual orientation, gender, gender identify, disability status, geographic location or a combination of these factors.

**Health Equity** - Achieved when all people have the opportunity to be as healthy as possible and no one is limited in achieving good health because of their social position or any other social determinate of health.

**Health Inequities** - Result when the disparities or differences are combined with conditions that are unfair, unjust and avoidable.

**Health Promotion** - Moving beyond the traditional treatment of illness and injury, health promotion efforts are centered primarily on the social, physical, economical and political factors that affect health, and include such activities as the promotion of healthy eating and increased physical activity.

**Healthier Foods and Beverages** - As defined by the Institute of Medicine (2005), foods and beverages with low energy density and low content of calories, sugar, fat and sodium.

**Healthy Weight** - A body weight which is neither under- or overweight for ones height.

**Implementation Actions** - Presents a short list of activities that might be undertaken to begin implementing a particular strategy. This list can serve as a springboard for locally tailored approaches and help jump-start local thinking on how to proceed with implementation.

**Intermediate Objectives** - Steps to take after the short-term objectives are achieved, such as changes in behavior, environment, or policy. They provide an opportunity for fine-tuning before tackling the long-term objectives and ultimately, the goals. They may be broader in nature than the short-term objectives, with somewhat less precise outcomes, but they flow logically from the changes brought about by the short-term objectives.

**Intervention** - An organized or planned activity that interrupts a normal course of action within a selected group of individuals or the community at large in order to diminish an undesirable behavior or to enhance or maintain a desirable one. In health promotion, interventions are linked to improving the health of the population or to diminishing the risks of illness, injury, disability or death.

**Long-term Objectives** - Are more ambitious and broader than intermediate objectives, usually focusing on changing health status indicators. Built on the achievement of earlier short-term and intermediate objectives, they should lead to the realization of the goals. They reflect the ideals and vision of the future.

**Low Energy Dense Foods and Beverages** - Foods and beverages with a low calorie-per-gram ratio. Foods with high water and fiber content are low in energy density, such as fruits, vegetables and broth-based soups and stews.

**Obesity** - Excess amount of subcutaneous body fat in proportion to lean body mass. For adults, a BMI of 30 or greater indicates obesity. For children ages 2-20, an age- and gender-specific BMI percentile equal to or greater than 95 indicates obesity.

**Objectives** - These are the roadmap of landmarks that need to be attained to reach the goals. They should be consistent with the overall public health priorities and tied directly to the goals. Objectives should be SMART (Specific, Measurable, Attainable, Results-oriented, and Time-phased).

**Overweight** - Excess amount of body weight for height. For adults, a BMI of equal to or greater than 25 but less than 30 indicates overweight. For children ages 2-20, an age- and gender-specific BMI percentile equal to or greater than 85 but less than 95 indicates obesity  
(Reference: <http://www.cdc.gov/healthyweight/index.html>).

**Pediatric Nutrition Surveillance System (PedNSS)** - Sponsored by the Centers for Disease Control and Prevention (CDC), program-based surveillance system that monitors the nutritional status of low-income infants, children and women in federally-funded maternal and child health programs. PedNSS data represent more than 7 million children from birth to age 5. This surveillance system provides data that describe prevalence and trends of nutrition, health and behavioral indicators for mothers and children.

**Physical Activity** - Any bodily movement that is produced by the contraction of skeletal muscle and that results in energy expenditure.

**Policy Change** - Modifications to laws, regulations, formal and informal rules, as well as standards of practice. It includes fostering both written and unwritten policies, practices and incentives that provide new or enhanced supports for healthy behaviors and lead to changes in community and societal norms. Policy changes can occur at different levels, such as the organizational level (a single worksite), the community level (an entire school system) or at the society level (state legislation).

**Short-term Objectives** - Often reflect process change, things that need to change to eliminate obstacles and pave the way for the more direct implementation steps to follow. Because the desired outcomes are usually clear, short-term objectives provide opportunities to test the assumptions on which the plan is based and to identify potential problems that might not have been apparent during plan development.

**Social Determinants of Health** - Defined as : income; employment and working conditions; education; neighborhoods and housing; environment; transportation; food; security; access to social support networks and health care services; and racism as well as other forms of discrimination.

**Social Ecological Model (SEM)** - A model for health promotion interventions that focus on individual, social and environmental factors.

**Strategy** - An activity intended to prevent disease or promote health in a group of people, also referred to in the literature by the term "approach".

**Street Scale Urban Design and Land Use** - Policies/mandate of funds/ or zoning ordinances requiring or supporting sidewalks and bike lanes.

**Sugar Sweetened Beverages** - Beverages that contain added caloric sweeteners, primarily sucrose derived from cane, beets and corn (high-fructose corn syrup), including non-diet carbonated soft drinks, flavored milks, fruit drinks, teas and sports drinks.

**Transportation and Travel Policies and Practices** - Encourage the use of transportation funds for mass transit and highway alternatives.

**Youth Risk Behavior Surveillance System (YRBSS)** - Data collection Sponsored by the Centers for Disease Control and Prevention (CDC), this is a program developed to monitor priority health-risk behaviors that contribute to the leading causes of mortality, morbidity and social problems among youth in the U.S.<sup>23</sup>

## APPENDIX 4: References

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- <sup>23</sup> Adapted from the National Association of Chronic Disease Directors, *Promoting Health. Preventing Disease.*

## APPENDIX 5: Acknowledgements

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### Co-Chairs of the Healthy Weight Partnership

Kevin Hughes, Healthy Weight Partnership Co-Chair  
Stephanie Leibfritz, Healthy Weight Partnership Co-Chair

### Members of the Healthy Weight Partnership

American Cancer Society  
American Heart Association  
Black Mother's Breastfeeding Association  
C.S. Mott Group for Sustainable Food Systems  
Detroit Wayne County Health Authority  
District Health Department #10  
Ingham County Health Department  
Inter-Tribal Council of Michigan, Inc.  
Land Policy Institute  
Lambert Health Center  
Memorial Healthcare, Memorial FIT Kids  
Michigan After School Partnership  
Michigan Breastfeeding Network  
Michigan Center for Rural Health  
Michigan Department of Community Health  
Michigan Department of Education  
Michigan Fitness Foundation  
Michigan Public Health Institute  
Michigan State University,  
Mid Michigan Medical Center-Midland  
National Kidney Foundation of Michigan  
Organization Healthy Kent 2010  
Pediatric Comprehensive Weight Management Center  
Saginaw Chippewa Indian Tribe  
Strategic Health Alliance  
University of Michigan  
Washtenaw County Public Health Department  
YMCA

### Strategic Planning Process Facilitators

Monique Boivin, Monitoring & Evaluation Specialist,  
International Public Health Consultant  
and  
Denise Cyzman, Cyzman Consulting

## Partner Statements

Decreasing the breastfeeding disparity rate is the responsibility of the community at all levels. We must provide our village with the nurturing and nourishing that is needed through breastfeeding by going beyond conventional limitations to do so. Let us blaze the trail by making a collaborative effort to form a community-based breastfeeding supportive environments.

- Kiddada Green, Michigan Black Mothers Breastfeeding Network

Achieving and maintaining a healthy weight, eating healthy foods and engaging in regular physical activity are essential to enjoying the benefits of good health and are ongoing priorities in the lives of Native Americans. Despite this priority there remains a need for access to safe and appealing opportunities for exercise and recreation through policy and environmental changes. In addition, there is a need for improved access to local traditional food in order to increase consumption of healthier and affordable food choices. This collaborative effort among state-wide partners and tribal communities will most effectively enhance healthier lifestyles for all Michigan communities.

- Cathy Edgerly, Inter-Tribal Council of Michigan

The Michigan Good Food Charter advocates good food — food that is healthy, green, fair and affordable. Just like the 2010-2020 Obesity Prevention State Plan, it envisions consistent access to affordable, healthy, nutrient-rich, fresh foods for all Michigan's people. The Michigan Good Food Charter recognizes that not everyone in Michigan has access to the healthy foods they need to thrive, which contributes to diet-related health problems. The charter seeks to change this through specific agenda priorities with the goal of reaching at least 80 percent of Michigan residents (twice the current level) who have easy access to affordable, fresh, healthy food, 20 percent of which is from Michigan sources, by 2020. The charter can complement the recommendations in the State Plan by also addressing other dimensions of the food system — farm viability, youth engagement, institutional purchasing and food system infrastructure — in a way that will enable the whole food system to support access to good food for everyone in the state. For more information, see [www.michiganfood.org](http://www.michiganfood.org)

- Kathryn J. A. Colasanti, C.S. Mott Group for Sustainable Food Systems

Michigan's State Rural Health Plan addresses Healthy Lifestyles. Goal one of the State Rural Health Plan is to improve the health of rural residents. More than 50 communities are currently involved healthy lifestyles activities. Partnerships include hospitals, local public health, schools, businesses, United Way agencies, etc. The Michigan Center for Rural Health looks forward to utilizing The Michigan Obesity Prevention State Plan in addressing the State Rural Health Plan goals and to help the rural residents of Michigan reach their healthy lifestyle goals.

- Angela Emge, Hospital Programs Manager, Michigan Center for Rural Health

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