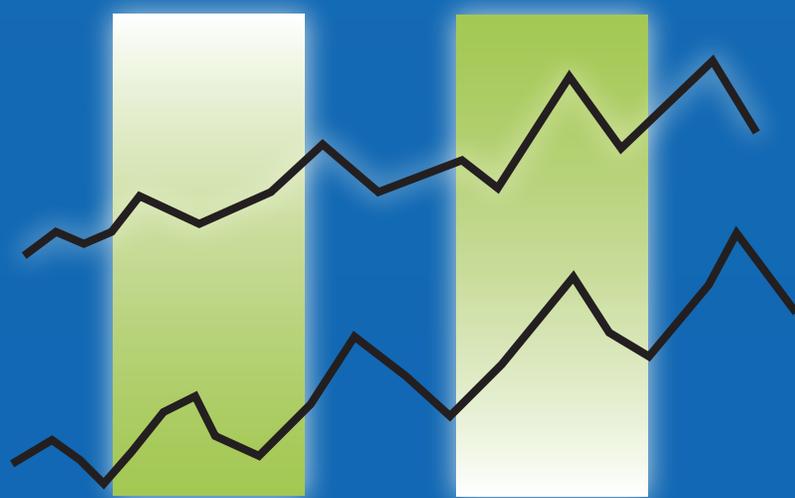


An Epidemic of

Overweight and Obesity

in Michigan's
African American Women



A Report of the

Healthy Lifestyles Initiative

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Overweight and Obesity

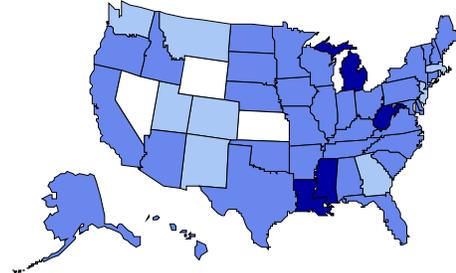
An Epidemic of Overweight and Obesity Across the United States..

An epidemic of overweight and obesity poses a formidable public health threat for all racial and ethnic groups, both sexes and all ages. More than one in two Americans is either overweight or obese (Oster et al. 1999). According to the Centers for Disease Control (CDC,) 38.8 million American adults (19.8%) were obese in 2000. This represents a dramatic increase of 61% since 1991. An additional 71.9 million American adults (36.7%) were overweight.

The epidemic nature of obesity can be seen on maps of prevalence among states over the last decade. In 1991, only 4 of 45 states participating in the Behavioral Risk Factor Surveillance Survey (BRFSS) had obesity rates of 15 to 19 percent, and none showed rates greater than 20 percent. Only nine years later, all 50 states with the exception of Colorado had rates of 15 percent or higher, with obesity rates in 22 of 50 states climbing to 20 percent or more.

Obesity Trends* Among U.S. Adults BRFSS, 1991

(*BMI \geq 30, or \sim 30 lbs overweight for 5'4" woman)

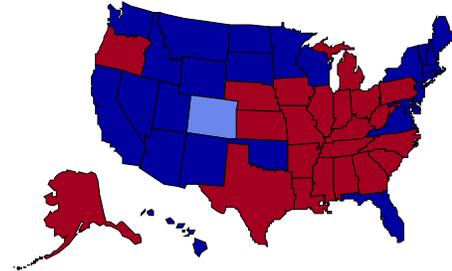


Source: Mokdad A H, et al. *J Am Med Assoc* 2001;286:10



Obesity Trends* Among U.S. Adults BRFSS, 2000

(*BMI \geq 30, or \sim 30 lbs overweight for 5'4" woman)



Source: Mokdad A H, et al. *J Am Med Assoc* 2001;286:10



Definitions:

Overweight is defined as a body mass index (BMI) of 25 to 29.9 and obesity as a BMI of 30 or greater.

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

Consequences and Costs

As overweight and obesity rates continue a shocking climb in the United States, so do related health consequences and costs. In addition to an increased risk of overall mortality—an estimated 300,000 attributable deaths per year (NIH 1998)—obesity is associated with increased risk for a host of acute and chronic conditions (Mokdad et al. 2003).

Obesity and its associated medical conditions place a serious strain on the health care system. The estimated total economic cost of obesity in 1995 was \$99.2 billion (Harnack et al. 2000). By 2000, the estimate rose to \$117 billion, \$61 billion in direct costs and \$56 billion indirect (U.S. DHHS 2001). Direct costs include preventive, diagnostic and treatment services. Indirect costs refer to wages lost through illness, disability or death.

It would be possible to reduce such costs through lifestyle improvements. Physical inactivity and unhealthy eating represent primary, and preventable, risk factors for obesity. According to the U.S. Department of Agriculture, healthier diets could prevent at least \$71 billion per year in medical costs, lost productivity, and lost lives. Likewise, CDC estimates that if all physically inactive Americans became active, annual medical cost savings would be about \$77 billion.

In our society, obesity and overweight also have social implications. In addition to the health and economic consequences, overweight individuals may suffer from social stigmatization and discrimination, experience poor body image and have low self-esteem.

Obesity is Associated with an Increased Risk of:

- ♦ premature death
- ♦ type 2 diabetes
- ♦ heart disease
- ♦ stroke
- ♦ hypertension
- ♦ gallbladder disease
- ♦ osteoarthritis (degeneration of cartilage and bone in joints)
- ♦ sleep apnea
- ♦ asthma breathing problems
- ♦ cancer (endometrial, colon, kidney, gallbladder, and postmenopausal breast cancer)
- ♦ high blood cholesterol
- ♦ complications of pregnancy
- ♦ menstrual irregularities
- ♦ hirsutism (presence of excess body and facial hair)
- ♦ stress incontinence (urine leakage caused by weak pelvic floor muscles)
- ♦ increased surgical risk
- ♦ psychological disorders such as depression
- ♦ psychological difficulties due to social stigmatization

Adapted from www.niddk.nih.gov/health/nutrit/pubs/statobes.htm

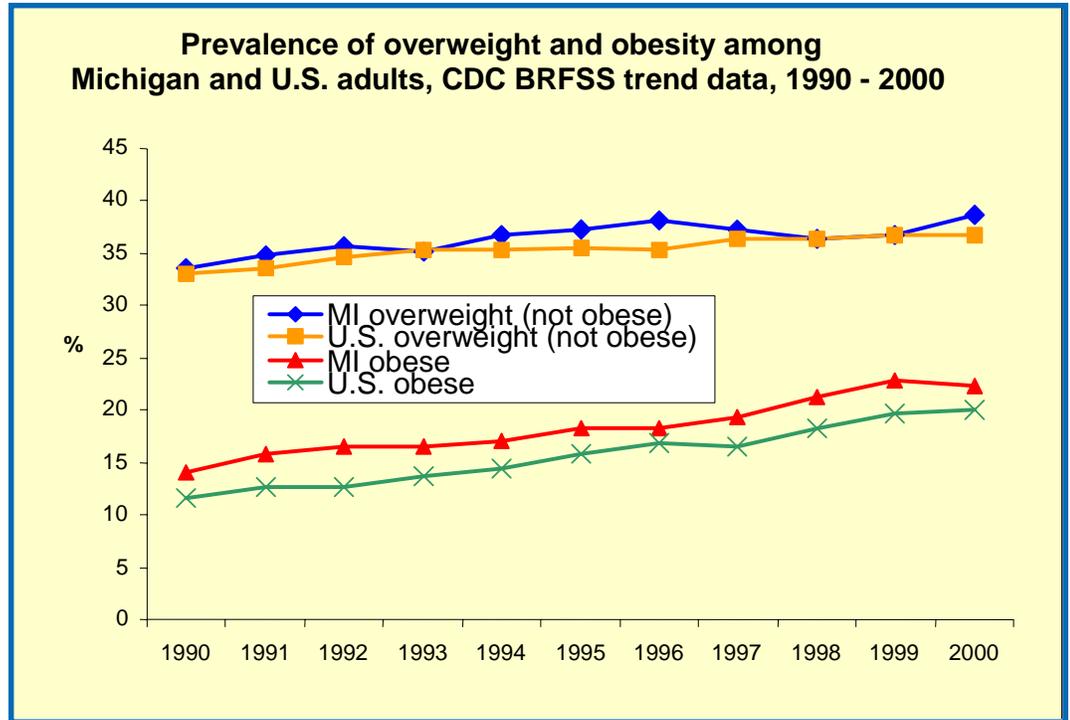
Obesity is associated with increased risk for a host of acute and chronic conditions...

In Michigan . . .

In 1991, Michigan was one of four states with obesity rates higher than the rest of the nation. This trend has persisted over time, as the rate of obesity in Michigan has remained consistently high in comparison to the rest of the U.S. Michigan BRFSS data indicate that in 2001 almost one quarter of adults (24.7%) were obese, more than double the rate in 1987

(12.2%). If rates continue to climb, almost one-third (31.5%) of Michigan adults will be obese by 2010.

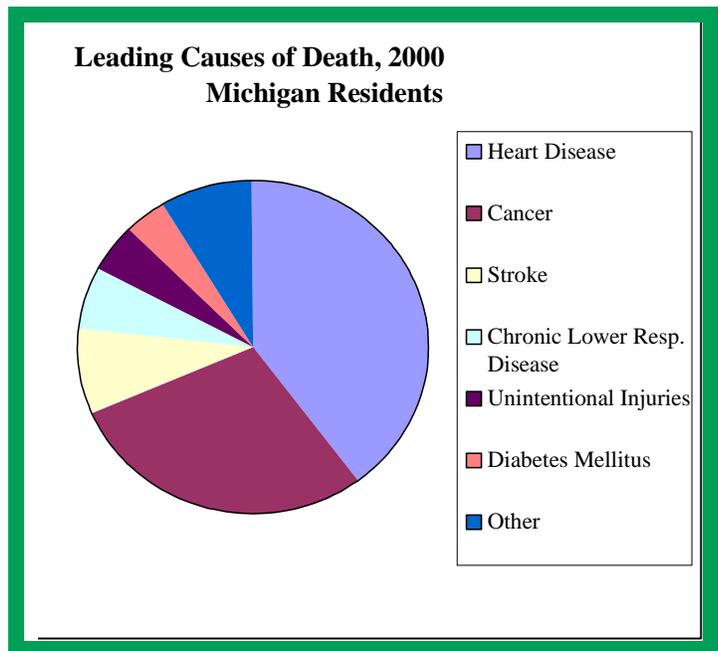
Although not as stark an increase, the prevalence of overweight among Michigan adults also continues to rise, from 32.2% in 1987 to 35.7% in 2001. Rates of overweight are more consistent with the rest of the nation.



A Heavy Burden

Chronic diseases related to obesity can be deadly. Michigan ranks among states with the highest rates of cardiovascular disease (CVD.) In 2000, heart disease and stroke—two diseases that account for the majority of CVD—claimed 33,263 Michigan lives, 38% of all deaths. CVD is Michigan’s number one killer and a significant cause of illness, hospitalization and disability.

Likewise, diabetes takes a toll on the health of Michigan’s citizens. Prevalence rates, death rates and rates of complications have been increasing steadily in Michigan over the last decade. An estimated 491,000 Michigan adults suffer from diabetes (MI BRFSS 1998). Many will experience serious complications of the disease including blindness, kidney failure, and lower-extremity amputation. In 2000, diabetes was the sixth leading cause of death, taking 2,612 lives.



Source: 2000 Michigan Resident Death File, Division for Vital Records & Health Statistics Michigan Department of Community Health

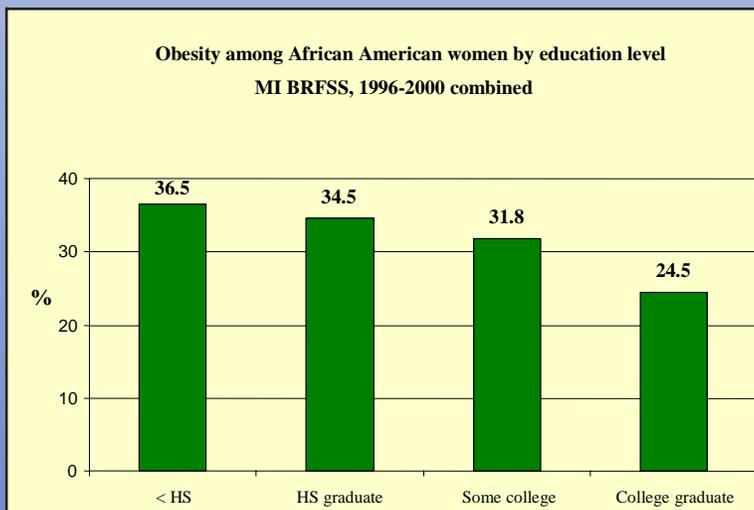
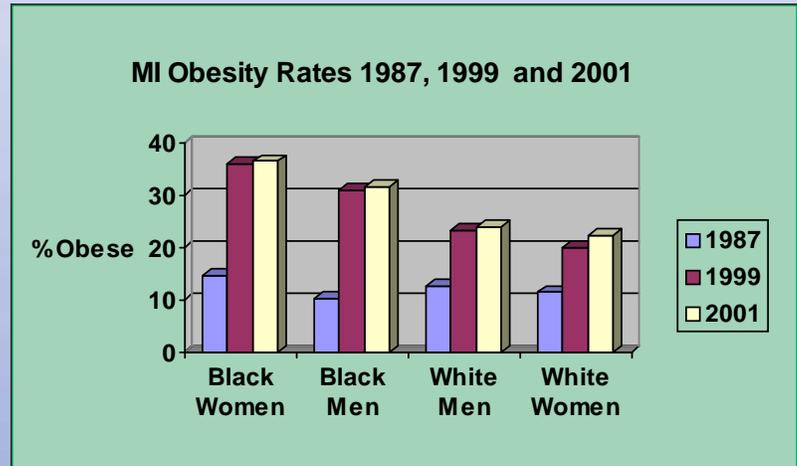
Lifestyle Factors

Despite high rates of obesity-related chronic disease, most Michigan adults have not taken steps to improve their eating or activity habits. Poor diet and physical inactivity are primary, and preventable, risk factors for overweight and obesity. If energy consumption (calories) is greater than energy expenditure (activity,) the result is weight gain.

Data from the Michigan BRFSS indicate that almost one quarter of Michigan adults are physically inactive during their leisure time and about three quarters (74.6%) do not participate in regular leisure time physical activity (at least 30 minutes of physical activity five or more times per week.) Less than one quarter (22.8%) report eating at least five fruits and vegetables per day (MI BRFSS 2000)—an important indicator of a healthy diet.

Population Segments at High Risk

Overweight and obesity affect all demographic and age groups, but segments of the Michigan population have unusually high rates. Rates of obesity among African Americans, especially women, are particularly high compared to other population groups. In 1999, 35.9% of African American were obese, an increase of 146% compared to 1987.



Within the population of African American women, there are segments at greater risk for high obesity rates.

Education

There is an inverse relationship between rates of obesity and education levels. As education levels rise, obesity rates fall.

Age

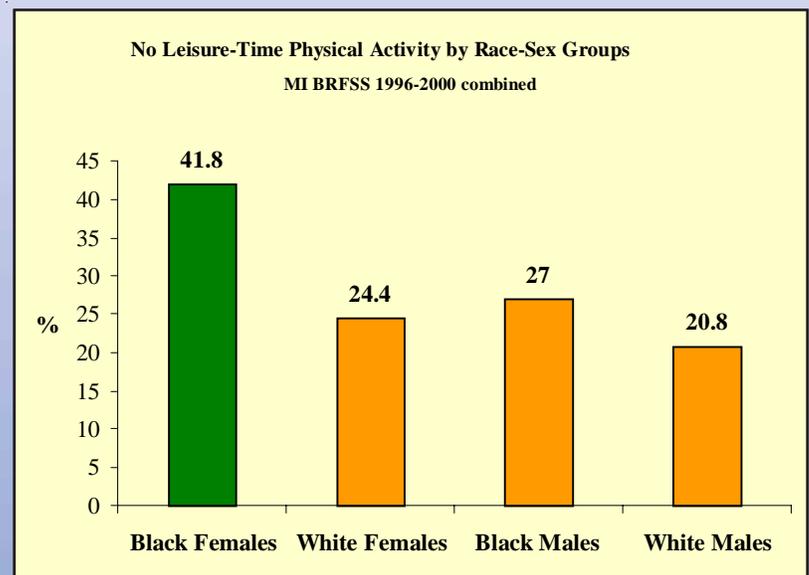
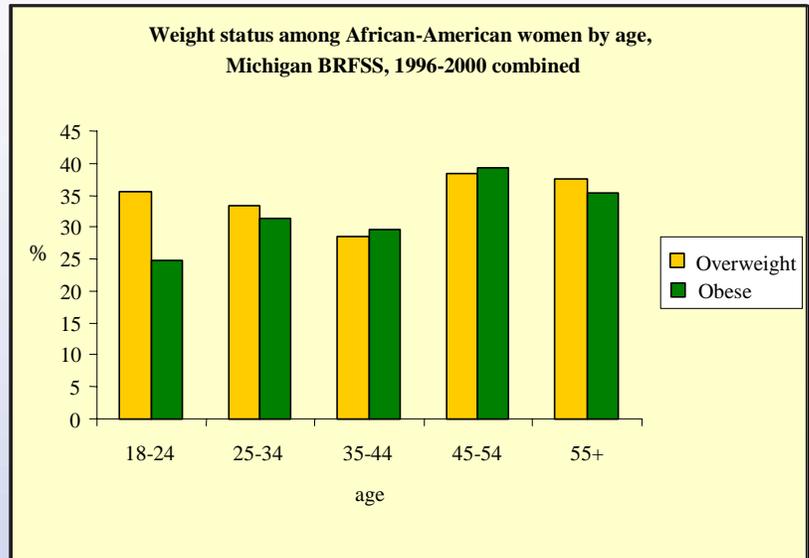
Certain age groups also experience higher rates of obesity. The prevalence of overweight does not change dramatically until after age 44, when it jumps approximately ten percentage points. Obesity rates, however, begin to climb earlier. Between the 18-24 year-old age group and the 25-34 year-old age group, the absolute increase of obesity is 6.8%. It remains roughly the same in the 35-44 year-old group, increases to its highest level in the 45-54 year-old group, and then begins to decline after age 55.

Physical Inactivity

Like the broader US and Michigan populations, African American women do not get enough exercise. However, levels of inactivity are more pronounced among African American women.

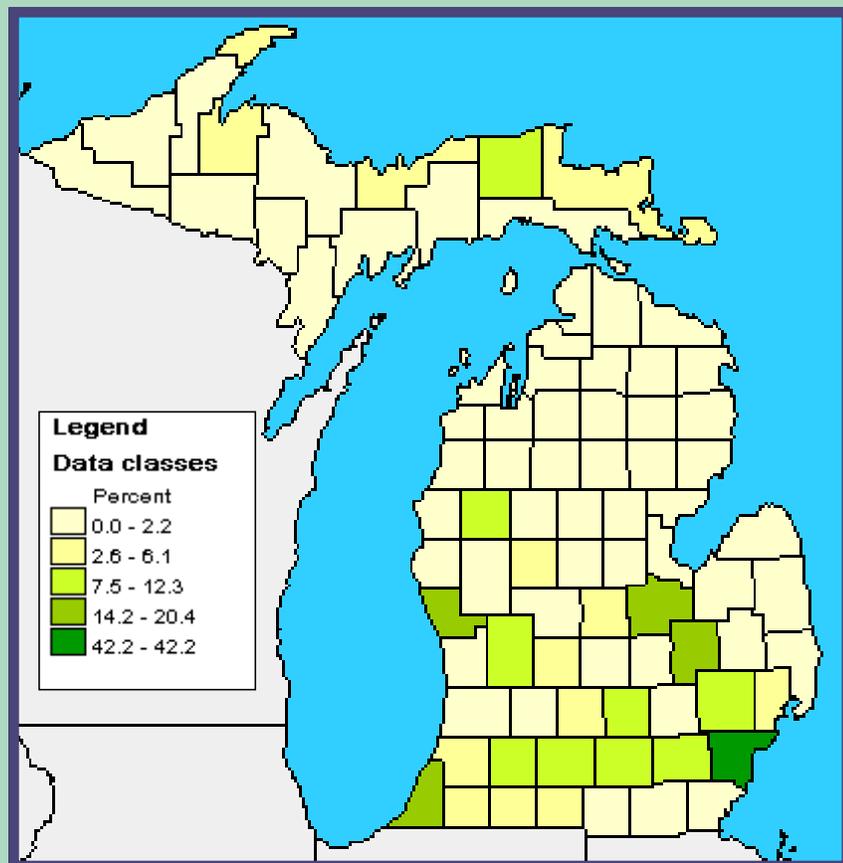
Eating Habits

About two-thirds (66.2%) of African American women who are overweight or obese indicate that they are trying to lose weight (MI BRFSS 1996-2000 Combined). Although increased consumption of fruits, vegetables and whole grain products are effective weight management techniques, only 20.7% of African American women report eating the minimum recommended 5 servings of fruits and vegetables per day. In 2000, only 5.6% of African American women reported consuming 3 or more servings of whole grain foods per day (MI BRFSS 2000).



Rates of obesity among African Americans, especially women, are particularly high compared to other population groups.

% African Americans in Michigan by County



Population Landscapes

Michigan's racial landscape is not homogenous.

- 95% of African Americans in Michigan live in 12 counties
- 55% (776,236) of African Americans in Michigan live in Detroit
- Flint has the second highest population of African Americans in Michigan (over 70,000 residents)

Living in urban areas may restrict the availability of healthy food sources and safe, convenient, affordable sites for physical activity.

Fighting the Michigan Epidemic . . .

Fighting an epidemic requires a plan and resources. In 2001, the Michigan Department of Community Health (MDCH) applied for and received a grant from the Centers for Disease Control to fund the development of a state plan to prevent and control overweight and obesity in a focused population through healthy eating and physical activity. The effort, named the Healthy Lifestyles Initiative, convened a 52-member Statewide Planning Committee to guide the production of a focused state plan to combat overweight and obesity. The committee members, listed inside the front cover of this report, represented organizations with expertise in physical activity, healthy eating, minority issues, research, communications and community development.

Fighting the Michigan Epidemic . . .

continued

The committee divided into three subcommittees to explore specific issues in detail.

- Behavior
- Policy and Environment
- Communications

Over six months, with staff help from MDCH, the committee

- 1) Determined that African American women, the highest risk segment, should be the priority population addressed in the strategic plan.
- 2) Reviewed existing data and literature and offered expert information about factors contributing to overweight and obesity in this population. (See Appendix 1)
- 3) Produced an inventory of programs and services related to physical activity, healthy eating, and/or obesity, focused on Michigan counties with the highest percentage of African American residents. (See Appendix 2)
- 4) Identified the main barriers to African American woman being active and eating well.
- 5) Developed and prioritized strategies to facilitate healthy eating and physical activity.
- 6) Provided recommendations for creation of a state plan.

The Good News—

A Little

Goes A Long Way

Goes A Long Way

Experts agree that modest weight loss, in the range of 10 % of ones' initial body weight, procures significant health benefits (Oster et al. 1999; NIH 1999). Depending on age, gender, and initial BMI, maintaining a weight loss of 10% can reduce the probable number of years one might have hypertension, high blood cholesterol and type 2 diabetes; decrease the anticipated lifetime occurrence of coronary heart disease and stroke; increase life expectancy; and diminish the expected lifetime medical care costs due to select obesity-related diseases by thousands of dollars (Oster et al. 1999).

The Plan

In developing the state plan, consideration was given to whether a strategy addressed an identified barrier and if it involved partnerships with organizations already engaged in promoting physical activity and healthy eating for the target population. Additionally, strategies were selected based on their potential to reach a large number of the population and effectively change behavior. Strategies were prioritized according to the expected immediacy of their implementation and impact as well as their importance in achieving plan objectives.

Goal

Improve the health and well being of African American women in Michigan by halting the rise in obesity rates through increased levels of physical activity and healthy eating.

Long-term Objective

By 2007, slow the rise in obesity rates among African American women.

Baseline 5-Year Trend Measures MI BRFSS

Year	Prevalence (%)
1997	29.9 (+7.3)
1998	33.5 (+8.1)
1999	35.9 (+8.0)
2000	32.3 (+7.6)
2001	36.5 (+6.4)

Intermediate Objectives

1. By 2005, decrease the percentage of African American women who are sedentary (no leisure-time physical activity) from 42% (1996-2000 BRFSS Combined) to 33% (half-way between current levels of inactivity for African American women and the rest of the Michigan population). The objective will be monitored through physical activity modules of BRFSS. Oversampling will be considered to better estimate percentages of priority population.
2. By 2005, improve by at least 10 % from baseline, the proportion of African American women engaged in healthy eating practices, as determined by a variety of healthy eating measures (fruit and vegetable intake, fiber consumption, percent of fat in diet, etc.) combined into one healthy eating indicator. Baseline to be determined from results of the 2002 Special Nutrition Survey, available in early 2003. The objective will be monitored by future administration of a similar special survey in 2005.

Recommendations

1. Communications and Education

Recommendation: Contribute to an atmosphere supportive of a healthy lifestyle by providing positive messages and information about nutrition, physical activity, and healthy weight loss strategies to African American women.

Strategies:

- A. Launch a multifaceted, culturally sensitive communication campaign addressing physical activity, healthy eating and overweight/obesity.

- B.** Partner with the National Kidney Foundation of Michigan to explore use of additional messages and information in the *Healthy Hair Starts with a Healthy Body* beauty salon program.
- C.** Partner with the MDCH Cardiovascular Health, Nutrition and Physical Activity Section to tailor 5 A Day messages for African American women and expand use through traditional and nontraditional outlets in the counties with highest target populations.
- D.** Partner with the Greater Detroit Area Health Council coalition of organizations focused on implementing a physical activity campaign entitled *Motown in Motion*.

▶ 2. Supportive Communities

Recommendation: Facilitate social, policy and environmental changes to ensure that communities improve physical activity and healthy eating environments.

Strategies:

- A.** Provide training on social, policy and environmental change to priority area communities in collaboration with the MDCH Cardiovascular Health, Nutrition and Physical Activity Program (e.g., walkable communities training, statewide policy and environmental change conference, training on Nutrition Environment Assessment Tool, etc.)
- B.** Guide communities with high populations of African Americans to implement

Michigan's Community Self-Assessment Inventory and develop plans to reduce local policy and environmental barriers to physical activity.

- C.** Guide communities with high populations of African Americans in using Michigan's Nutrition Environment Assessment Tool (NEAT) to assess and address local policy and environmental barriers to healthy eating.

▶ 3. Programs

Recommendation: Provide culturally appropriate opportunities to learn how to be active, eat healthfully, and achieve/maintain a healthy weight.

Strategies:

- A.** In collaboration with Michigan's African American faith community, implement a comprehensive faith-based initiative for improving physical activity and healthy eating.
- B.** Partner with the MDCH Cardiovascular Health, Nutrition and Physical Activity Section to expand use of their community leader guide which serves as a complement to the *Healthy Food, Healthy Soul* cookbook.

▶ 4. Health Care Providers/Systems

Recommendation: Increase the percentage of healthcare providers counseling African American female patients in a culturally sensitive manner on overweight/obesity (Baseline: 10.4% for overweight African American women and 45.7% for obese African American women.)

Strategies:

- A. Design and conduct innovative trainings for healthcare providers on issues related to cultural sensitivity in counseling on weight issues and the NHLBI guidelines.
- B. Establish, disseminate, and promote core measures for obesity to serve as a quality benchmark for healthcare providers.
- C. Empower patients to initiate conversations about weight loss with their providers.
- D. Work in partnership with managed care organizations to develop strategies that lead to a method of reimbursement for weight management counseling by a nutritionist or dietitian.

► 5. Surveillance, Epidemiology and Evaluation

Recommendation: Establish methods and systems to gather and disseminate data and monitor trends for overweight/obesity, healthy eating and physical activity, specifically for African American women.

Strategies:

- A. Implement special surveys, as needed, through the Healthy Lifestyles Initiative and through partnerships (e.g., Nutrition Program Special Survey and Prevention Research Center Flint Community Survey.)
- B. Continue to implement BRFSS with weight, physical activity and nutrition modules and consider oversampling, as necessary.
- C. Prepare burden of obesity document, update periodically and disseminate.
- D. Work with the MDCH Cardiovascular Health, Nutrition and Physical Activity

Section to develop a statewide web-based database of local policy and environmental indicators.

► 6. Resources and Infrastructure

Recommendation: Increase resources and expand infrastructure for obesity prevention and control.

Strategies:

- A. Establish a statewide steering committee composed of key stakeholders to guide implementation of obesity prevention and control strategies and determine additional methods of enhancing resources.
- B. Engage in strategic planning with other chronic disease sections in order to streamline efforts to address obesity prevention, physical activity and nutrition.
- C. Continue to devote resources to the Healthy Lifestyles Initiative positions to assure adequate state-level infrastructure.

► 7. Research

Recommendation: Using a social marketing framework, implement and evaluate pilot project(s) for the priority population that impact(s) overweight/obesity through physical activity and healthy eating.

Strategies:

- A. Implement a healthcare provider pilot project that seeks to promote culturally appropriate counseling on weight and studies the effect of support offered by a community health advocate.
- B. Enhance community supports for physical activity by addressing community walkability through a vacant land use education project.

Appendix 1:

Factors Contributing to Overweight and Obesity in African American Women

Obesity is a multifaceted problem. A variety of factors stimulates and perpetuates the obesity epidemic. These factors are explored below with an emphasis on weight management, physical inactivity and unhealthy eating as they relate to Michigan's African American women. The information is a synopsis of current literature, formative research conducted through community focus groups and the results of brainstorming with the Statewide Planning Committee during strategic planning.

1. We are not communicating effectively with African American women regarding physical activity and healthy eating.

There is a perceived lack of appropriate role models and culturally adapted information presented in a manner, style and language that is well received. Anderson (1995) discusses the fact that health messages developed for mainstream America, or for the African American community as a whole, may not resonate well with underserved African Americans who tend to view the health system with distrust and may not place emphasis on preventive practices. Data from Michigan focus groups that explored communication issues, conducted in partnership with the National Kidney Foundation of Michigan, confirm this. Almost half of the participants reacted negatively to a health-oriented message that stressed the medical consequences of being overweight. Messages that emphasized the positive personal nature of physical activity and healthy eating were better received.

Formative research also highlighted the inadequacy of message delivery, mainly in regards to the spokesperson. The African American women who participated in the communication focus groups, African American

women who took part in community focus groups in Flint, and strategic planning members, all indicated that there are not enough African American women delivering messages about healthy eating, physical activity, and weight management. In particular, focus group participants said that an African American woman who had personally struggled with her own weight and was someone like them (not a media celebrity) was best suited to provide them with information.

Finally, we make poor use of multiple channels of communication. Several methods of communication exist beyond traditional media ranging from interpersonal, such as between a hairdresser and client, to delivery through small social settings, such as churches and sororities. Both traditional and nontraditional channels should be used to reach women in places they will be most receptive to a message.

2. The living environment of many African American women in Michigan is not supportive to physical activity and healthy eating.

Our environment has undergone significant changes over the last thirty years and is a likely contributor to increasing rates of obesity. The impact of the environment in promoting or preventing physical activity is extensive. Opportunities for physical activity as an integral part of our daily lives have been impacted by television, labor saving devices, unsafe and unpleasant neighborhoods, computers at work, and increased automobile use (Schmitz and Jeffery 2000).

The problem intensifies in Michigan's urban areas, where the majority of African American residents live. Economic distress has resulted in urban blight. The Flint focus groups revealed that personal safety is a big concern. Many African American women cited groups hanging out on corners or in parks, shootings, and other crimes as reasons they feel uncomfortable being active outside. Additionally, sidewalks in disrepair, poor lighting, accumulated garbage, heavy traffic, lack of tree-lined streets and well-tended yards make the neighborhood uninviting for outdoor exercise. Limited options for indoor exercise also contribute to an environment ill suited for regular activity.

Changes in the food environment support increased consumption of high fat, high calorie foods. Portion sizes continue to grow; the current average size of a ready-to-eat chocolate chip cookie exceeds the USDA standard portion size by 700% (Young and Nestle 2002).

As a whole, people are also eating out more and cooking at home less. In the 1970s about 20%

of the food dollar was spent on food eaten away from home. In 1990, about 33% of food spending in African American households was for food eaten away from home (Harnack et al. 2000). That is compared to 35% in 1998 (Blisard and Harris 2001). This trend was confirmed in focus groups where women indicated that busy lives made the convenience and low cost of fast foods appealing. The temptation of high fat, calorie-rich foods exists around every turn and in places that would have once been odd locations for snacks: gas stations, book shops, all-purpose retail stores, etc.

Michigan's urban areas experience a more pronounced impact on the food environment. In addition to the bleak environment described above, there is a lack of inner city grocery stores with an adequate supply of fresh produce and other healthy options at affordable prices. A study done in Philadelphia suggests that limited access to supermarkets is connected to a high rate of diet-related mortality in many low-income Philadelphia neighborhoods (Food Trust 2001). In Michigan, an abundance of inner city corner markets with poor quality produce at high prices is the only option for many women who don't have transportation available to travel to better grocery stores in the suburbs.

3. It is perceived that healthcare providers are not effectively addressing the needs of African American women in regards to physical activity, healthy eating and overweight/obesity.

The literature suggests that advice from a physician may be an important factor for stimulating behavior changes that will result in weight loss among overweight and obese patients (Writing Group 2001; Simons-Morton et al. 1998; Bowerman et al. 2001; Marcus et al. 1997; Calfas et al. 1996). However, only 10% of overweight African American women and 46% of obese African American women report that their doctor has advised them to lose weight (MI BRFSS 1996, 1998, and 2000 combined). These low percentages represent missed opportunities for obesity prevention. Lack of time, training, reimbursement, and educational materials are seen as major barriers to healthcare providers in offering counseling on activity, diet and weight loss (Ammerman et al. 1993; Kushner 1995; Long et al. 1996; Pinto et al. 1998).

Results from focus groups with African American women in Flint confirmed that physician counseling would be important in motivating many Michigan women to try to lose weight. According to the BRFSS, overweight and obese individuals who receive advice from their physician are more likely to report trying to lose weight than those not being advised.

Proportion of Individuals Trying to Lose Weight by Weight Status and Physician Advice, Michigan BRFSS 2000 (± 95% confidence interval limits)		
	Overweight	Obese
Advised by doctor to lose weight	75.8 (±9.4)	83.5(±5.5)
Not advised by doctor to lose weight	47.1(±3.9)	69.5 (±5.3)

In addition to low levels of counseling, strategic planning members felt strongly that healthcare providers were not communicating with African American women in a sensitive and effective manner about their weight. This was substantiated in the communication focus groups. As stated by one woman: “The problem with seeing the doctor is they always say you have to lose weight, but they don’t know how tough that is. I just don’t hear it anymore when the doctor says that.”

4. Personal characteristics and concerns can contribute to physical inactivity and unhealthy eating.

On an individual level, self-efficacy is strongly linked with physical activity (Sherwood and Jeffrey 2000). A woman might engage in physical activity if confident in her skills and abilities to perform the activity and to overcome any initial barriers. She is more likely to persist in overcoming barriers to physical activity if convinced that physical activity offers benefits worthy of her efforts.

Contributors to physical inactivity identified through formative research and in the literature include low motivation, life stressors, self-image while being active, lack of time/competing priorities, no one to exercise with, and having children (Sherwood and Jeffrey 2000; Nies et al. 1999).

Taste preferences ranked highest among selected factors affecting eating habits for African Americans. They ranked cost second, followed by convenience, nutrition, and weight control (Glanz et al. 1998). The perception that healthier foods do not taste

good, cost more, and may be inconvenient to purchase or prepare represents a critical barrier to healthy eating. Formative research also uncovered individual factors such as using food to cope with stress and trends like increased soda consumption.

5. Cultural and social issues can impact adoption of healthy behaviors.

Overweight and obesity are not viewed negatively by all cultures. Some studies have shown that African American women are more comfortable at higher body weights than their Caucasian counterparts, and may not be subject to the same social consequences due to greater cultural acceptance of overweight and obesity (Kumanyika et al. 1993; Flynn and Fitzgibbon 1998). Although positive self-image at all weights is desirable, it may inhibit initiation and maintenance of weight loss (Kumanyika et al. 1993). However, formative research suggests that this social tolerance may be waning, as the focus group participants often cited appearance as a motivator for weight loss. Stevens, Kumanyika, and Keil state: "The challenge to the public health community is to encourage weight reduction when appropriate without forcing on Black women a negative self-image and neurotic preoccupation with weight." (Stevens et al. 1994)

African American women in Michigan live predominantly in urban areas. The stress of living, working, and raising a family in these areas can negatively impact healthy behaviors. Sherwood and Jeffery point out the possible inverse relationship between stress and physical

activity (Sherwood and Jeffrey 2000) and formative research suggests that stress can lead to improper eating for the sake of comfort.

Traditional African American cooking is popular and although often rich in taste, may also be high in fat. Psychological factors related to cultural identity and self-image may present strong motivation to keep these foods in the diet (Kumanyika et al. 1991). Although formative research shows that many younger African American women do not cook soul food very often, they still enjoy it when prepared by their mothers or grandmothers.

“The challenge to the public health community is to encourage weight reduction when appropriate without forcing on Black women a negative self-image and neurotic preoccupation with weight.” (Stevens et al. 1994)

Appendix 2:

Inventory of Programs, Services and Supports

To identify existing activities in Michigan for prevention and control of overweight and obesity through physical activity and healthy eating, the *Statewide Planning Committee* and MDCH staff completed an inventory of programs, services and community supports. The inventory—using a variety of methods including mailings, phone calls, internet exploration and informants—focused on areas of the state with the highest percentages of African American residents. Although not a comprehensive list, the inventory highlights important programs that might be enhanced or expanded and potential collaboration partners for the Healthy Lifestyles Initiative.

Inventory Highlights	
Programs, Services & Supports	Description
Faith-based Initiatives	<ul style="list-style-type: none"> ■ <i>Search Your Heart</i> is an American Heart Association kit designed for African American churches to address physical activity, nutrition, blood pressure and stroke ■ Health-related programs in church-based settings were identified in a few counties, including Wayne (Detroit) where the MI Neighborhood Partnership has established a faith-based outreach network
Parks & Recreation	<ul style="list-style-type: none"> ■ A variety of physical facilities (recreation centers) and programs (classes, open gym times, etc.) are available in many communities of interest ■ No information on utilization of facilities and programs by African American women
“Transportation Equity Act for the 21st Century” Grants	<ul style="list-style-type: none"> ■ Many areas have used enhancement funds to address environmental issues that impact physical activity through beautification, trail development, sidewalk improvement, lighting, etc.
Mall-walking Programs	<ul style="list-style-type: none"> ■ Malls in many of the priority counties have walking programs ■ The Arthritis Foundation has a comprehensive mall-walking kit and has initiated a mall-walking program in some of the priority counties



Inventory Highlights	
MDCH Cardiovascular Health Program and Governor's Council on Physical Fitness, Health & Sports	<ul style="list-style-type: none"> ■ Promoting Active Communities self-assessment developed to catalogue policies and environmental supports for physical activity ■ Mini-grants for assessment, planning, implementation ■ Walkable Communities trainings offered
Motown in Motion	<ul style="list-style-type: none"> ■ The Greater Detroit Area Health Council has created a coalition of partners in Southeastern Michigan who are working together to create a communication campaign focused on improved physical activity
Project FRESH	<ul style="list-style-type: none"> ■ Provides WIC participants/low-income seniors with coupons for farmers' markets ■ Almost all priority counties participate in the program ■ In 2002, over 33,000 WIC participants received coupons
<i>Healthy Food, Healthy Soul Cookbook</i>	<ul style="list-style-type: none"> ■ Provides ways of modifying some favorite soul food recipes to make them more healthy ■ Over 60,000 copies of editions 1-3 distributed with 4th edition recently printed ■ Leaders guide available to accompany cookbook and develop skills to use the cookbook in the community
Statewide Nutrition Programs	<ul style="list-style-type: none"> ■ WIC: Provides supplemental foods, nutrition education, social services/health care referrals to low-income, pregnant, breastfeeding, postpartum women and children to age 5 ■ EFNEP (15 counties – mostly priority counties): Helps low-income families with children improve adequacy of diets through increased knowledge and skills ■ FNP: Provides nutrition education to residents eligible or receiving food stamps
Diabetes Outreach	<ul style="list-style-type: none"> ■ Regional networks have been established and exist throughout Michigan in partnership with churches, community centers, senior centers, etc. <p>Southeastern Michigan DON activities include Healthy Soul Food Program which reached 593 African Americans (80% female) in 2001</p>



Inventory Highlights	
Healthy Hair Starts with a Healthy Body	<ul style="list-style-type: none"> ■ National Kidney Foundation of MI program in cities with a high percentage of African American women ■ Stylists are trained to conduct “health chats” with their clients in an effort to reduce rates of diabetes, kidney disease, and cardiovascular disease ■ Over 3,500 clients reached since 1999
Health Plans	<ul style="list-style-type: none"> ■ Many offer varying levels of nutrition counseling and obesity programs as part of care or disease management ■ None have obesity programs targeted to African Americans ■ Some expressed interest in partnership
Media (highlights)	<ul style="list-style-type: none"> ■ <i>Print</i>: African American Magazine reaches 15,000 predominantly AA readers per month; health is 1 of 4 main topics addressed ■ <i>Radio</i>: WFLT Flint area. Gospel programming with 3 shows per week that address health issues. Audience primarily African American women. ■ <i>TV</i>: Carol Greer New Images Cable Show frequently does health-related shows and has a particular interest in African American women’s health issues
Social Marketing Projects (originally funded by Michigan Public Health Institute)	<ul style="list-style-type: none"> ■ <i>African Americans Take Charge of Your Health</i>: Designed to influence nutrition and physical activity behaviors of African Americans 30-54 in Calhoun County ■ <i>Take the Pledge: Move More, Eat Better</i>: Oakland County program designed to increase fruit and vegetable intake and increase physical activity ■ Many worksites offer no supports for healthy eating/physical activity
Worksites (mostly Washtenaw County - Ypsilanti)	<ul style="list-style-type: none"> ■ Weight Watchers is a popular program for worksites to offer ■ A few more progressive sites include subsidized memberships to off-site exercise facilities, lowfat/healthy offerings in vending machines or cafeterias, walking clubs, flex time, etc.



Inventory Highlights	
African American Health Initiative	<ul style="list-style-type: none">■ Kalamazoo initiative composed of health-related community-based organizations, ministerial alliance, African American churches, local public health and hospitals■ Annual health fair; train lay health promoters in African American churches; sponsor education on diabetes, heart disease, cancer diet and exercise
Detroit (highlights)	<ul style="list-style-type: none">■ <i>Kettering/Butzel Health Initiative</i>: Main activities include church-based nursing programs; enhancement of primary care access; community health education; expansion of prevention programs■ <i>Health Empowerment Centers</i> (Northwest and Nolan/State Fair): Community-based health resource centers offering wide variety of physical activity and nutrition opportunities from support groups, to screenings, to aerobics■ <i>Eastside Village Health Worker Partnership</i>■ Community garden serving 20 families per year■ Produce mini-market (low/no-cost produce sold at 2 local centers) reaching about 1,000 families per year■ Walking clubs (20 women with diabetes): partnership with police dept for safety■ Heart Healthy Cooking Classes taught by SEMDON twice a year (150 individuals)
Out-of-State Program— <i>Sisters Together</i> (Boston)	<ul style="list-style-type: none">■ Encourages African American women 18-35 to maintain a healthy weight through physical activity and healthy eating■ Program includes a planning guide and kit to help organizations plan, promote, implement and evaluate community health awareness programs



REFERENCES

1. Ammerman AS et al. Physician-based diet counseling for cholesterol reduction: current practices, determinants, and strategies for improvement. *Prev Med.* 1993; 22(1):96-109.
2. Anderson NB. Appealing to Diverse Audiences: Reaching the African-American Community. *J Natl Med Assoc.* 1995; 87:647S-649S.
3. Blisard N and J. Michael Harris. *Household Food Spending by Selected Demographics in the 1990s.* Economic Research Service/USDA. August 2001. ERS Agriculture Information Bulletin No. 773.
4. Bowerman S et al. Implementation of a primary care physician network obesity management program. *Obes Res.* 2001; 9(Suppl 4):321S-325S.
5. Calfas KJ, Long BJ, Sallis JF, Wooten WJ, Pratt M, Patrick K. A controlled trial of physician counseling to promote the adoption of physical activity. *Prev Med.* 1996; 25(3):225-33.
6. Flynn JK, Fitzgibbon M. Body Images and Obesity Risk Among Black Females: A Review of the Literature. *Ann Behav Med.* 1998; 20:13-24.
7. Glanz K, Basil M, Maibach E, Goldberg J, Snyder D. Why Americans eat what they do: taste, nutrition, cost, convenience, and weight control concerns as influences on food consumption. *J Am Diet Assoc.* 1998; 98(10):1118-26.
8. Harnack LJ, Jeffery RW, Boutell KN. Temporal trends in energy intake in the United States: an ecologic perspective. *Am J Clin Nutr.* 2000; 71:1478-84.
9. Kumanyika S, Wilson JF, Guilford-Davenport M. Weight-Related Attitudes and Behaviors of Black Women. *J Am Diet Assoc.* 1993; 93:416-422.
10. Kumanyika SK, Obarzanek E, Stevens VJ, Hebert PR, Whelton PK. Weight-Loss Experience of Black and White Participants in NHLBI-Sponsored Clinical Trials. *Am J Clin Nutr.* 1991; 53:1631S-1638S.
11. Kushner RF. Barriers to providing nutrition counseling by physicians: a survey of primary care practitioners. *Prev Med.* 1995; 24(6):546-52.
12. Long BJ et al. A multisite field test of the acceptability of physical activity counseling in primary care: project PACE. *Am J Prev Med.* 1996; 12(2):73-81.
13. Marcus BH et al. Training physicians to conduct physical activity counseling. *Prev Med.* 1997; 26(3): 382-8.
14. Mokdad AH, Ford ES, Bowman BA, Dietz WH, Vinicor F, Bales VS, Marks JS. Prevalence of Obesity, Diabetes, and Obesity-Related Health Risk Factors. *JAMA.* 2003; 289(1): 76-9.
15. National Institutes of Health, National Heart, Lung, and Blood Institute. Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults. September 1998. *NIH Publication No. 98-4083.*

RERERENCES continued

16. Nies MA, Vollman M, Cook T. African American Women's Experiences with Physical Activity in their Daily Lives. *Public Health Nurs.* 1999; 16:23-31.
17. Oster G, Thompson D, Edelsberg J, Bird AP, Colditz GA. *Lifetime health and economic benefits of weight loss among obese persons.* *Am J Public Health.* 1999;89(10):1536-42.
18. Pinto BM, Goldstein MG, DePue JD, Milan FB. Acceptability and feasibility of physician-based activity counseling. The PAL project. *Am J Prev Med.* 1998; 15(2):95-102.
19. Schmitz MK, Jeffery RW. Public Health Interventions for the Prevention and Treatment of Obesity. *Med Clin North Amer.* 2000; 84:491-512.
20. Sherwood NE, Jeffery RW. The Behavioral Determinants of Exercise: Implications for Physical Activity Interventions. *Annu Rev Nutr.* 2000; 20:21-44.
21. Simons-Morton DG, Calfas KJ, Oldenburg B, Burton NW. Effects of interventions in health care setting on physical activity or cardiorespiratory fitness. *Am J Prev Med.* 1998; 15(4):413-30.
22. Stevens J, Kumanyika SK, Keil JE. Attitudes toward body size and dieting: differences between elderly black and white women. *Am J Public Health.* 1994; 84(8):1322-5.
23. The FoodTrust. Food for every child: The need for more supermarkets in Philadelphia. Philadelphia, PA.
24. The Writing Group for the Activity Counseling Trial Research Group. Effects of physical activity counseling in primary care. *JAMA.* 2001; 286(6): 677-87.
25. U.S. Department of Health and Human Services. The Surgeon General's call to action to prevent and decrease overweight and obesity. [Rockville, MD]: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; [2001]. Available from: U.S. GPO, Washington.
26. Young LR, Nestle M. The contribution of expanding portion sizes to the US obesity epidemic. *Am J Public Health.* 2002; 92(2):246-9.



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