



Iowa's Comprehensive Nutrition and Physical Activity Plan

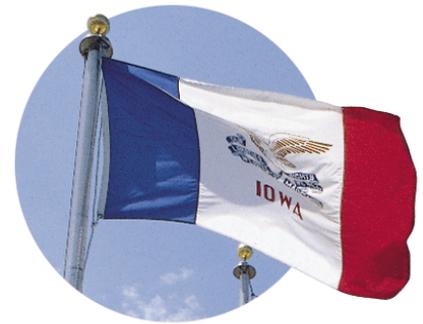
Table of Contents

Introduction	2
The Burden of Obesity in Iowa	4
Nutrition in Iowa	10
Physical Activity in Iowa	12
Iowa Focus Groups	15
Community Health Needs Assessment	15
Healthy Iowans: Charting the Course for Healthier Iowans	16
Community Forums	17
Survey of WIC Agencies	19
Key Informant Interviews	19
Barriers to nutrition and physical activity	21
Collaboration, Stakeholders, and Partnerships	21
Iowans Fit for Life Symposium	22
Iowans Fit for Life Work Groups	22
Interagency Task Force	23
Epidemiology/Program Evaluation Committee	23
High Priority: Target Populations	24
Goals, Objectives, and Strategies	26
Nutrition Focus	29
Physical Activity Focus	34
Breastfeeding Focus	40
Screen Time Focus	43
Implementation of the Plan	44
Iowans Fit for Life Intervention	46
Evaluation Plan: Our Road Map	48
Appendix	53



Iowa's Comprehensive Nutrition and Physical Activity Plan

The topic of the 2005 World Food Prize International Symposium was “The Dual Global Challenges of Malnutrition and Obesity.” In the opening address of the conference, Iowa Governor Tom Vilsack spoke about the moral need to share resources such as healthy food with the less fortunate. Today, paradoxically, obesity coexists with malnutrition even in developing countries. Like much of the world, Iowa is struggling with the obesity pandemic. Children and Iowans with lower socio-economic resources, as in much of the rest of the world, particularly struggle with this issue.



Organized public health has been enabling Iowans to lead healthier lives, primarily through the prevention of infectious disease, for 125 years. Today, Iowans' health is now impaired due to an epidemic of physical inactivity and poor nutrition. Obesity and related diseases are the consequences.

“Today's children will be the first generation in memory to have a shorter life span than their parents”

(Sir John Krebs, chairman of United Kingdom's Food Standards Agency).

As the Iowa Department of Public Health moves into the next 125 years, it is time to focus on **health promotion and disease prevention.**

The long-standing belief that overweight people lack willpower is slowly giving way to the realization about society's role in this complex phenomenon. Modern conveniences, the availability and promotion of low nutrient foods, and a lack of physical activity have combined to create an “obesigenic environment.”¹ It is thought to be one of the root causes for the unprecedented increase in overweight and obesity affecting Iowa, our nation, and many parts of the world.

Obesity and overweight, which are risk factors for a host of chronic diseases, affect 60.9 percent of Iowa adults.² A condition that impacts over half of Iowans needs immediate action - action so great it will take efforts beyond those of the Iowa Department of Public Health. The department will strengthen current partnerships and form new ones for these essential efforts.

Overweight and obesity contribute to the burden of cardiovascular disease, the number-one killer of Americans. See the appendix for Iowa maps of cardiovascular disease rates, stroke disease rates, and diabetes prevalence. According to the Nutrition and Physical Activity Division at the Centers for Disease Control and Prevention (CDC),³ obesity and overweight are associated with an increased risk for hypertension, diabetes, hypertriglyceridemia, low levels of high density lipoprotein-cholesterol (HDL, or “good cholesterol”), and high levels of total and low density lipoprotein-cholesterol (LDL, or “bad cholesterol”). Other diseases associated with overweight and obesity include:

- Type 2 Diabetes
- Certain types of cancer
- Arthritis and orthopedic problems
- Sleep apnea
- Depression
- Asthma
- Gall Bladder Disease

The psychosocial ramifications can also be severe. Youth say that being teased and left out are the worst aspects of being overweight. People who are obese face social marginalization, job discrimination, and poor self esteem.⁴

As a result, **obesity and physical inactivity are among the top ten leading *Healthy People 2010* priorities (indicators) in the United States.** *Healthy People 2010* is a national master health plan for health promotion and disease prevention. Its goals are to increase the quality and years of healthy life and eliminate health disparities. The Leading Health Indicators show individual behaviors, physical and social environmental factors, and important health system issues that greatly affect the health of individuals and communities.⁵ *Healthy People 2010* includes the following healthy weight objectives:

Objective # *Healthy People 2010 Objectives*

19-1	Increase the proportion of adults who are at a healthy weight.
19-2	Reduce the proportion of adults who are obese. (Baseline: 24 % Target: 15%)
19-3	Reduce the proportion of children and adolescents who are overweight or obese.* (Baseline: 12.5 percent; Target: 5%)

**See the appendix for definitions of overweight and obesity*

In July 2004 the Iowa Department of Public Health was awarded CDC funding to address nutrition and physical activity to prevent obesity and other chronic diseases, specifically through the increased consumption of fruits and vegetables, increased physical activity, increased breastfeeding and the reduction of screen

time. Iowa's project, Iowans Fit for Life, has two major components, the Iowans Fit for Life Partnership and the Iowans Fit for Life Intervention.

The Iowans Fit for Life Partnership was created in the spring of 2005 and includes a network of statewide partners with a vested interest in nutrition and physical activity. The partnership's first responsibility was to write a comprehensive state plan to address nutrition and physical activity for Iowans of all ages.

Iowa currently has a health priority map, *Healthy Iowans 2010*, which includes Nutrition and Overweight chapter and a Physical Activity and Fitness chapter. *Healthy Iowans 2010* has been used as a building block for the Iowans Fit for Life Partnership in developing Iowa's Comprehensive Nutrition and Physical Activity Plan, and is designed to help meet *Healthy Iowans 2010* and *Healthy People 2010* objectives.

The purpose and long-range goal of Iowans Fit for Life is to improve quality of life and reduce obesity-related diseases and medical expenditures. While the rates of obesity and overweight are steadily increasing in Iowa, Iowans can immediately benefit from improved nutrition and increased physical activity.

The Burden of Obesity in Iowa

Obesity and overweight has been on the rise in Iowa over the last several years. Not only is the number of overweight adult Iowans increasing, but the number of overweight youth is escalating at an even higher rate. In Iowa, the Behavioral Risk Factor Surveillance System (BRFSS), the National Children's Health Survey, and the Pediatric Nutrition Surveillance System (PedNSS) provide information about nutrition, physical activity, obesity, and related diseases. See the appendix for a more detailed description about these surveys.

Early Childhood

In 2004, nearly half of all Iowa babies born were eligible for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and according to census data, about 188,000 Iowans were under five years of age. PedNSS provides data on the prevalence of underweight, overweight, anemia, low birth weight and breastfeeding initiation and duration for children ages 0-4 years who participate in the WIC program.

During the period of 1984 to 2004 there was steady rise in the prevalence of overweight in Iowa WIC infants and children from 8 percent in 1984 to 13.6 percent in 2003 (compared to 14.7 percent nationally). **In 2003, 31 percent of**

low income Iowa children aged 2 to 5 years were overweight or at risk of becoming overweight. Minority populations in Iowa are small, but trends are similar to those reported in other states. Of children over two years of age, 12.8 percent of white, 11.1 percent of black, and 19.4 percent of Hispanic children were overweight in the 2003 report. Iowa's ten counties with the highest prevalence (2003 data) of overweight in children two – four years of age are shown below.

Overweight Children 2 - 4 Years of Age

County	Percent of children >95 th percentile for weight	Percent of Hispanic children that are >95% for weight
Mills	16.8%	1.6%
Fremont	17.0%	5.8%
Keokuk	17.5%	0%
Louisa	17.7%	53.3%
Buena Vista	18.9%	59.3%
Marshall	19.4%	47%
Monroe	19.7%	1.6%
Wright	21.6%	37.1%
Butler	22.4%	Not provided
Franklin	22.6%	34.4%

The data on the percent of overweight Hispanic children are shown in this table because it provides guidance on possible interventions customized to specific populations. With Iowa's growing Hispanic population and data supporting the fact that Hispanic children are at higher risk of overweight, many communities will want to ensure that Hispanics are included when designing interventions. However, other communities have very few Hispanic children and yet have a high prevalence of overweight. These communities may customize their intervention strategies after studying their particular population more thoroughly.

Youth

The prevalence of overweight for U.S. children 6-11 years old has climbed to 16 percent, while the prevalence of overweight adolescents 12-19 years has nearly tripled in the past two decades to 16 percent.⁶ The American Heart Association, American Stroke Association and the Robert Wood Johnson Foundation declared in 2005 that childhood obesity is “the most pressing health concern in the country.” This concern stems from obesity in children and adolescents being associated with significant health problems, such as high blood cholesterol, high blood pressure, hypertension, diabetes, and depression.⁷ It is estimated that over one-third of children born in 2000 will develop diabetes if current trends continue.⁸ While children's health diminishes, the children say the most immediate consequence of overweight is social discrimination.⁹

Here are some sobering data:

- **Today's children are less physically active than any other generation¹⁰**
- **Overweight children report lower quality of life than children with cancer¹¹**

The National Survey of Children's Health tracks health behaviors of children, their families, and communities through randomized telephone surveys. In Iowa, parents reported their child's height and weight to interviewers, and it appears Iowa children have a lower incidence of "at risk for overweight" and "overweight" than the national average. Iowa children with special health care needs have a lower prevalence of those in the normal weight range (63.4 percent compared to 71.1 percent).

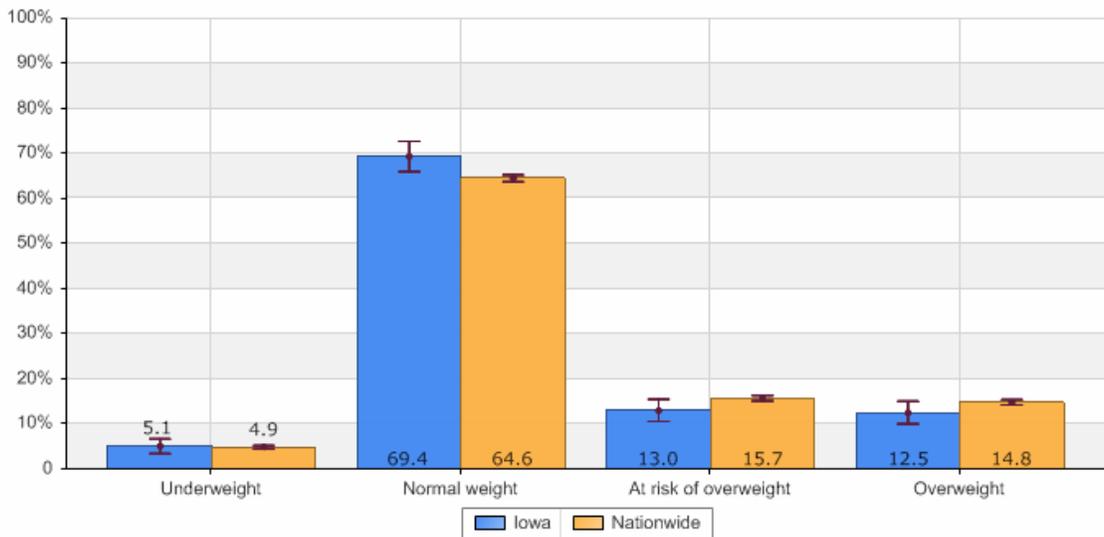


Figure 1. Comparison of Iowa youth to U.S. youth in underweight, normal weight, at risk weight, and overweight categories. Child and Adolescent Health Measurement Initiative (2005). National Survey of Children's Health, Data Resource Center on Child and Adolescent Health website. Retrieved 03/20/2006 from <http://www.nschdata.org/>

The surveys described thus far are based on self-report (or parent report) rather than actual measurements which are more accurate. A potential statewide health surveillance system with standardized anthropometric measurements of school-age youth is expanding. United States Senator Charles Grassley of Iowa secured earmarked funds for the surveillance project, "Physical Activity and Nutrition Among Rural Youth" (PANARY) through the University of Northern Iowa (Principal Investigator: Larry Hensley). In this project, physical education teachers measure the height, weight, and physical fitness of school-aged children from schools across Iowa. From data collected in 2003, the prevalence of

overweight among 3,416 Iowa fourth, fifth, and sixth grade children was found to be higher than the national average for this age group.¹² The results showed:

- 60 percent were in the normal weight zone (as compared to 70 percent of U.S. children)
- 20 percent were in the “at risk for overweight” zone (as compared to 16 percent of U.S. children)
- 20 percent were in the “overweight” zone (as compared to 15 percent of U.S. children)

The national data is self-report rather than actual measurements, which may explain the higher prevalence of overweight found in the PANARY sample. Iowa children from rural areas had a higher prevalence of overweight and more were at-risk for overweight than children from urban areas and small cities.

Children from Urban Areas
Distribution of Overweight

Children from Rural Areas
Distribution of Overweight



Figure 2. Differences in prevalence of normal weight, at-risk for overweight, and overweight among upper elementary Iowa children in the PANARY study.

Overweight has been increasing in all groups, but seems to be increasing at a greater rate among minority/ethnic groups. In this sample of Iowa children (92.7 percent white, non-Hispanic), overweight did not vary by ethnicity, but such differences have been reported nationally including:

- Non-Hispanic black (21 percent) and Mexican-American adolescents (23 percent), ages 12-19, were more likely to be overweight than non-Hispanic white adolescents (14 percent)
- Mexican-American children, ages 6-11, were more likely to be overweight (22 percent) than non-Hispanic black children (20 percent) and non-Hispanic white children (14 percent)

Youth obesity also has financial costs in addition to physical and emotional costs. Disease trends and the economic burden of youth obesity were examined from

1979 to 1999.¹³ During this time, the percentage of:

- obesity-related hospital discharges for diabetes nearly doubled,
- obesity and gallbladder diseases tripled, and
- sleep apnea increased fivefold.

After adjusting for inflation, annual hospital costs associated with these diseases were about \$35 million during 1979-81 and increased more than threefold, to about \$127 million, during 1997-1999.¹³

Adults

The rate of overweight is also increasing among Iowa adults. Obesity among Iowa adults increased 84 percent from 1991 to 2004. The 2004 BRFSS data show:

- 37.4 percent of adult Iowans are overweight (having a body mass index (BMI) greater than or equal to 25 kg/m²) and
- 23.5 percent are obese (BMI greater than or equal to 30 kg/m²). See the appendix for more information about BMI

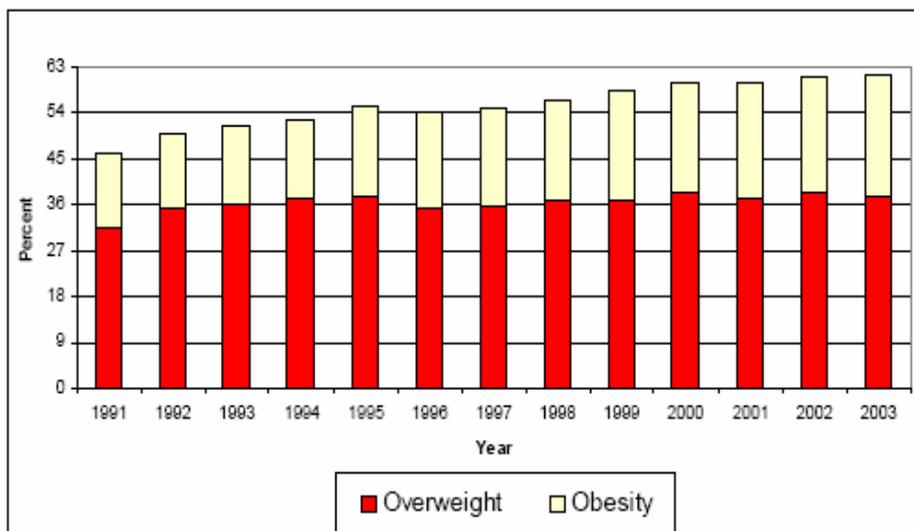


Figure 3. Overweight/Obese Iowans by Year Based on Body Mass Index (BMI), 1991-2003.

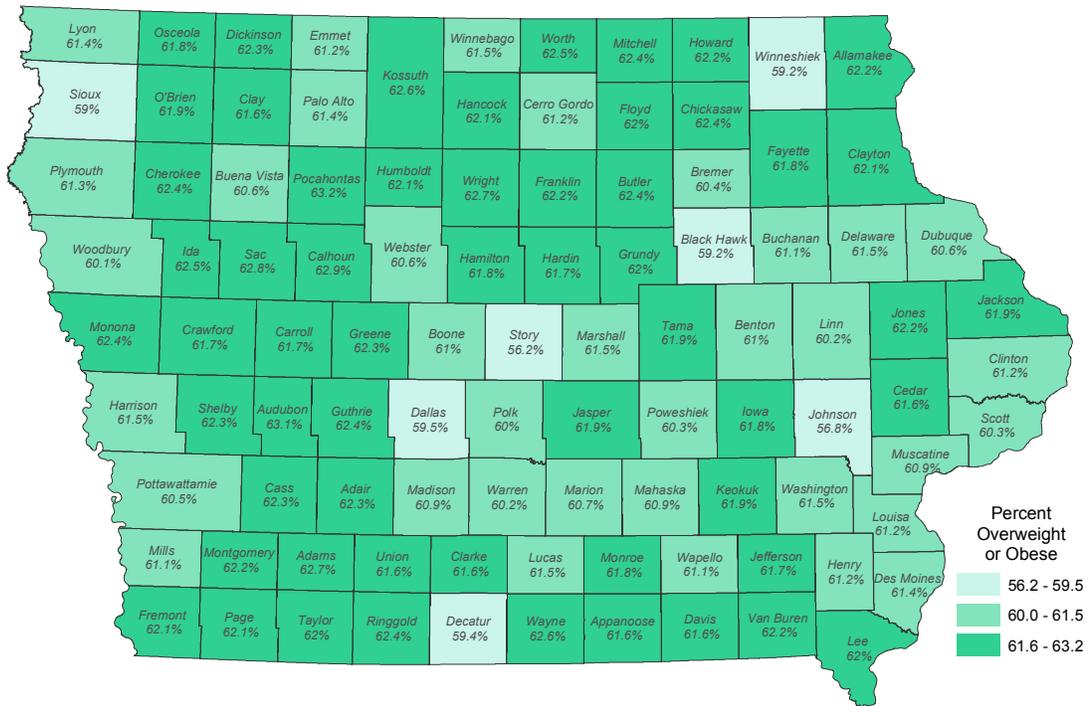
The majority of Iowans, 93 percent, are white, non-Hispanic. In the 2003 BRFSS the number of Iowans of other races/ethnicities sampled was not high enough to

identify Iowa-specific race/ethnicity trends in obesity. Nationally, African-American and Mexican-American women have the highest prevalence of overweight and obesity according to the National Health and Nutrition Examination Survey (NHANES). Beyond race and ethnicity, other groups of Iowans are also vulnerable:

- **Women have a higher prevalence of overweight and obesity than men.**
- **Adults from rural areas have a higher incidence of overweight than those from urban areas, and the population of Iowa is 50 percent rural. (See Figure 4 for synthetic estimates of adult overweight and obesity in Iowa counties by level of urbanization.)**
- **Obesity prevalence is highest, 28.2 percent, among Iowans with incomes under \$15,000**
- **Less education is associated with higher obesity**
- **The prevalence of overweight and obesity rises with increasing age to 64 years**

The burden of obesity stretches into Iowa financially. Iowans pay \$783 million in health care costs annually for problems associated with obesity. Of that, about half is covered by Medicaid & Medicare. National medical spending among obese adults averaged about 56 percent more than medical spending by normal-weight adults.¹⁴ The same study also reported that from the late 1970s until 2004, total diabetes prevalence, which is clinically linked to obesity, increased 53 percent, and diagnosed diabetes prevalence increased 43 percent. Meanwhile, medical spending for diabetes has increased 79 percent due to increased prevalence of obesity.¹⁵

Percentage of Overweight/Obese Adult Iowans



Source: IDPH 2004 BRFSS Synthetic Estimates

Prepared 09/22/2005

Figure 4. Percent of overweight and obese adults by county

Nutrition in Iowa

Obesity is primarily caused by poor nutrition and inadequate physical activity. The lack of balance between calories consumed with calories expended is causing Iowans' weight to increase. Iowa's Comprehensive Nutrition and Physical Activity Plan targets 1) improving nutrition, particularly through increased consumption of fruits and vegetables, 2) increasing physical activity, 3) increasing breastfeeding, and 4) reducing screen time.

Iowa's nutrition goals for this plan include increasing fruit and vegetable consumption and incidence and duration of breastfeeding. The 2005 Dietary Guidelines recommends the consumption of a sufficient amount of fruits and vegetables while staying within energy needs. Two cups of fruit and 2½ cups of vegetables per day are recommended for a reference 2,000-calorie intake, with higher or lower amounts depending on the calorie level.

The 1997 Iowa Youth Risk Behavioral Survey (YRBSS) showed that 29 percent of Iowa youth in grades 9-12 consumed fruits and vegetables five or more times per day in the week preceding the survey. This consumption dropped to 19.7 percent in 2003 (non-representative sample). The 2003 Behavioral Risk Factor Surveillance System (BRFSS) showed that 17 percent of Iowa adults overall consumed five or more servings of fruits and vegetables per day. This compares with:

- **22 percent of U.S. adults**
- **24 percent of older Iowans**
- **19 percent of Iowans with an income of less than \$15,000 annually**
- **11 percent of Iowans with less than a high school education or General Equivalency Diploma (GED)**

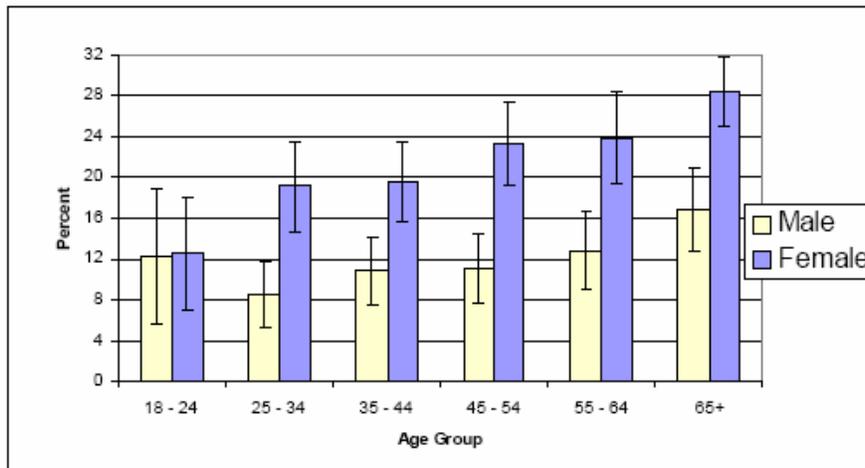


Figure 5. Percent of Iowans Who Report Eating 5 or more Portions a Day of Fruits and Vegetables by Age and Gender, 2003

Iowa's breastfeeding goals in *Healthy Iowans 2010* are for 75 percent of babies to be breastfed at birth and 50 percent of babies continuing to be breastfed at six months. These goals are modeled from the *Healthy People 2010* goals.

Breastfeeding rates in Iowa were up in 2004, with 67 percent of babies breastfed at birth, according to the Iowa Newborn Metabolic Screening Profile. Iowa has had a steady increase in breastfeeding since 1991. The following table shows rates for the past 10 years:

1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
56.4%	57.7%	59.9%	61.6%	62.7%	63.1%	64.6%	64.9%	65.8%	67%

Physical Activity in Iowa

Physical activity goals include 60 minutes of daily physical activity for youth and 30 minutes of daily physical activity for adults. Results from the 1997 YRBSS indicated that 67 percent of Iowa youth participated in at least 20 minutes of vigorous activity on three or more days in a week. That compares to 60.8 percent in 2003 (non-representative sample). Data from the 2003 National Survey of Child Health showed that Iowa boys are more active than girls, and fewer Iowa youth than U.S. youth are active every day.

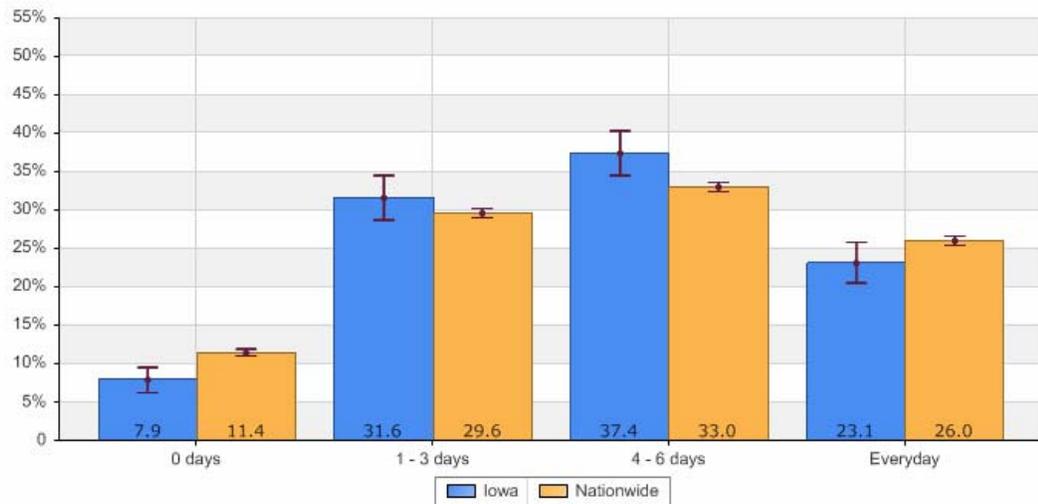


Figure 6. Comparison of Iowa youth and U.S. youth in frequency of physical activity Child and Adolescent Health Measurement Initiative (2005). National Survey of Children's Health, Data Resource Center on Child and Adolescent Health website. Retrieved 03/20/2006 from <http://www.nschdata.org/>

The 2003 BRFSS showed that 43 percent of Iowa adults (men- 45 percent; women- 42 percent) met the recommended guidelines of moderate activity for 30 or more minutes per day for five or more days per week or vigorous activity for 20 or more minutes per day, three or more times per week. This compares to:

- **47 percent of U.S. adults**
- **32 percent of older adults**
- **38 percent of adults with incomes of less than \$15,000 annually**
- **36 percent of adults with less than a high school education or GED.**

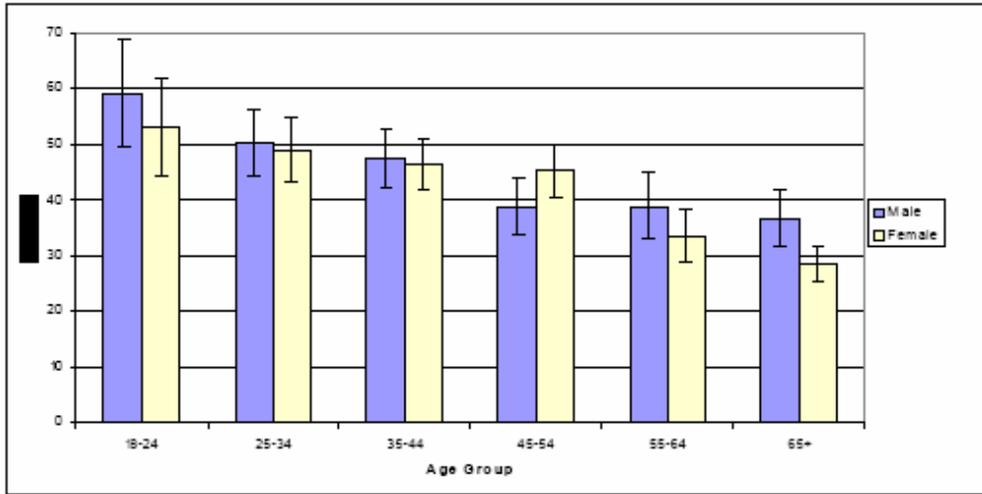


Figure 7. Comparison of Iowa youth and U.S. youth in frequency of physical activity

Too much *inactivity* may be harmful to health. In a study of U.S. youth ages 14-18, those that watched more than four hours of television per day had a higher BMI.¹⁷ On the other hand, television and video games that include physical activity participation may be part of the solution of increasing access to physical activity for all Iowans. Compared to U.S. youth (ages 6-17), Iowa youth fare better at meeting the recommended guidelines of less than two hours a day.

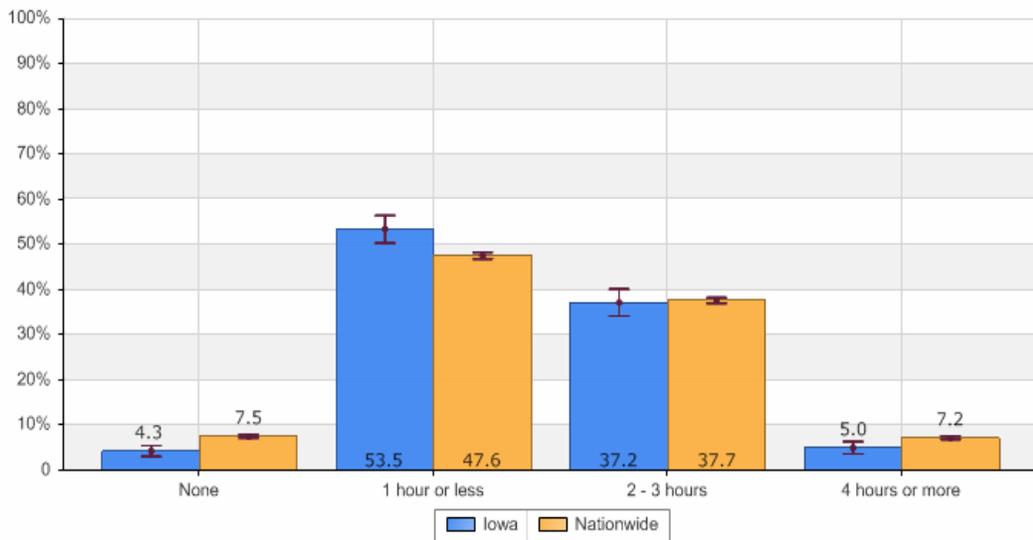


Figure 8. Comparison of Iowa youth and U.S. youth in duration of screen time
 Child and Adolescent Health Measurement Initiative (2005). National Survey of Children's Health, Data Resource Center on Child and Adolescent Health website. 03/20/2006 from <http://www.nschdata.org/>

References

1. Hill, J. O. & Melanson F. L. (1999). Overview of the Determinants of Overweight and Obesity: Current Evidence and Research Issues. *Med Sci Sports Exerc. Nov; 31(11 Suppl):S515--21.*
2. Iowa Department of Public Health Center for Health Statistics. (2004). Iowa Health Risk Behaviors: Final Report from the Behavioral Risk Factor Surveillance System, 2004 or www.idph.state.ia.us
3. "Overweight and Obesity: Health Consequences." <http://www.cdc.gov/nccdphp/dnpa/obesity/consequences.htm>
4. Puhl, R, Brownell, KD. (2001) Bias, discrimination and obesity *Obes Res* 9,788-805.
5. "Leading Health Indicators". Retrieved from www.healthypeople.gov/Document/HTML/uih/uih_4.htm
6. Hedley, A. A., Ogden, C. L., Johnson, C. L., Carroll, M. D., Curtin, L.R., and Flegal, K. M. (2004). Prevalence of overweight and obesity among US children, adolescents, and adults 1999-2002. *JAMA*, 291, 2846-50.
7. American Academy of Pediatrics, 2003 American Academy of Pediatrics (2003). Prevention of Pediatric Overweight and Obesity, *Pediatrics*, 112, 424-430.
8. Narayan, K.M.V., Boyle, J.P., Thompson, T.J., Sorensen, S.W., Williamson, D.F. (2003). Lifetime Risk for Diabetes Mellitus in the United States. *JAMA*; 290:1884-90.
9. Schwartz, M.B. & Puhl. R.M. (2003). Childhood obesity: A societal problem to solve. *Obesity Reviews*, 4, 57-71.
10. Koplan, Liverman, & Kraak, Eds. (2005). Preventing Childhood Obesity: Health in the Balance. Committee on Prevention of Obesity in Children and Youth. National Academy of Sciences. [Http://books.nap.edu/catalog/11015.html](http://books.nap.edu/catalog/11015.html)
11. "Physical Activity Levels Among Children Aged 9-13 Years--United States." (2003). *Morbidity and Mortality Weekly Report, August 22, 2003/ 52(330; 785-788).*
12. 2003 Pediatric Nutrition Surveillance – Iowa Data. Contact: Spohl@idph.state.ia.us
National: http://www.cdc.gov/pednss/pednss_tables/pdf/national_table20.pdf
State: http://www.cdc.gov/pednss/pednss_tables/pdf/national_table6.pdf
Trend: http://www.cdc.gov/pednss/pednss_tables/pdf/national_table18.pdf
13. Joens-Matre, R.R., Welk, G.J., Calabros, M.A., Russell, D.W., Nicklay, E., & Hensley, L. (2005). Differences in Physical Activity and Physical Fitness in Children by Level of Urbanization. *Med Sci Sports Exerc.* 37(5) Supplement:S62.
14. Wang & Dietz. Economic burden of obesity in youths aged 6 to 17 years: 1979-1999. (2002). *Pediatrics* 109(5).
15. Finkelstein, Fiebelkorn, & Wang. (2004). State-level estimates of annual medical expenditures attributable to obesity. *Obesity Research. January, 2004* 12(1):1-7.
16. Thorpe, K.E., Florence, C.S., Howard, D.H., and Joski, P. (2004). The Impact of Obesity on Rising Medical Spending. *Health Aff(Millwood). Jul-Dec; Web Exclusives:W480-6.*
17. Eisenmann, J.C., Barteo, T., & Wang, M.Q. (2002). Physical Activity, TV Viewing, and Weight in U.S. Youth: 1999 Youth Risk Behavior Survey. *Obesity Research* 10:379-385.

Iowa Focus Groups

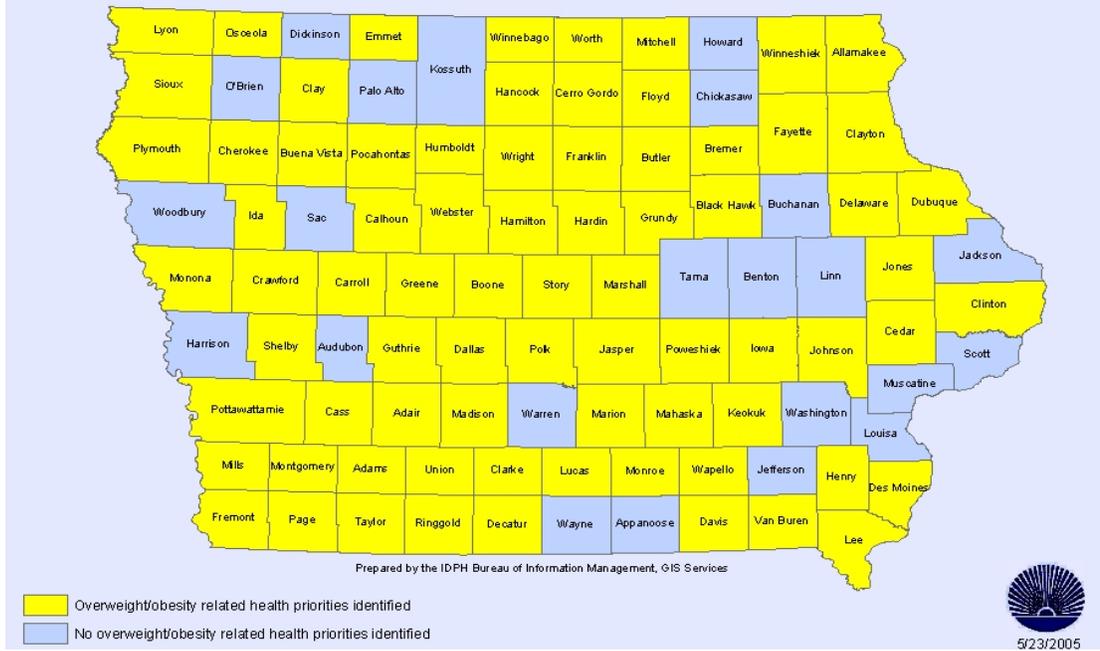
While obesity and overweight has been on the rise, Iowans have already begun to address this alarming trend. However, if changing nutrition and physical activity patterns were easy, Iowa, the nation, and many parts of the world would not be experiencing obesity epidemic.

A Community Health Needs Assessment and Health Improvement Plan (CHNA&HIP) was completed in every Iowa county in 2005 and a mid-course revision of *Healthy Iowans 2010* was also completed in 2005. These two documents were used to begin establishing Iowa's needs to address nutrition and physical activity to prevent obesity and other chronic diseases. After the Iowa Department of Public Health gained Centers for Disease Control and Prevention (CDC) funding, several more assessments occurred including community forums, key informant interviews and a survey of WIC agencies.

Community Health Needs Assessment

Each Iowa county (99) completed a Community Health Needs Assessment & Health Improvement Plan (CHNA & HIP) in the spring of 2005. Each county created a local needs-assessment process and prioritized its health-care needs with local boards of health, community residents, and health providers. Many of the counties determined that overweight is a health concern. Out of 99 counties, 75 percent (74 counties) placed overweight/obesity, nutrition, physical activity or other closely related factors among their top priorities. The map below highlights those counties in yellow.

2005 CHNA & HIP Reports Counties With Overweight/Obesity Related Health Priorities



Healthy Iowans: Charting the Course for Healthier Iowans



Healthy Iowans 2010 is an Iowa version of the national *Healthy People 2010* plan to improve health and well-being. It is the master health plan for Iowa. “Collaboration,” it says, “is the bedrock of public health and *Healthy Iowans 2010* Planning. At the core of ... *Healthy Iowans 2010* is the idea that all Iowans benefit when stakeholders decide on disease prevention and health promotion strategies and agree to work together on them.” Both *Healthy People 2010* and *Healthy Iowans 2010* are used to guide federal resource allocations for disease prevention and health promotion. Iowa’s Comprehensive Nutrition and Physical Activity Plan is closely aligned and complementary to the *Healthy Iowans 2010* objectives and strategies.

The Governor ties the *Healthy Iowans* planning into his overall plan; *Iowa 2010: the state of our future*. State Legislators receive copies of the *Healthy Iowans*

plan and a number of them serve on chapter teams. Citizens are involved in every stage of the plan and team meetings are often held over ICN –Iowa Communication Network – a fiber optic network allowing video meetings. Additionally over 550 team members are linked through listserves established at Hardin Library for the Health Sciences at the University of Iowa.

The 25 chapters of *Healthy Iowans 2010* are guides for stakeholders in public health and other health fields. The Nutrition and Overweight, and Physical Activity and Fitness chapters are the foundation for Iowa's Comprehensive Nutrition and Physical Activity Plan.



Dr. Louise Lex opens the public health Barn Raising Conference with *Healthy Iowans 2010*.

Community Forums

To begin writing the plan, the Iowa Department of Public Health began three separate assessments to gain an Iowa focus. Several approaches were used to obtain broad statewide representation. Early on, Community Health Needs Assessments and Health Improvement Plans (CHNA & HIP) were completed, and community forums were held over the winter months, followed by a series of Supplemental Nutrition Program for Women, Infants and Children (WIC) surveys in WIC agencies. Key informant interviews were held in the summer with the Office of Multicultural Health to identify barriers for minority populations.

Nine community forums were held during 2004-2005 in Bedford, Jefferson, Ames, Donnellson, Ottumwa, Estherville, Spencer, and West Union, finishing with an April forum in Cedar Rapids. Diverse community groups provided information on the signs of obesity in their communities, measures currently being used to address the problem, and ideas to create lifestyles that address overweight and related health issues. The groups discussed steps they could take in their communities and areas in which they could use help from the state. The groups also prioritized their strategies.

Responses were remarkably similar across all regions, and no appreciable differences were noted between urban and rural communities.

Ninety-six percent of forum attendees “strongly agreed” that overweight and obesity was a major threat in Iowa, and 88 percent agreed that a community approach was the best way to address the problem. Attendees were equally divided between whether or not there were sufficient opportunities for physical activity in their communities. They ranked parents as having the greatest influence on children’s lifestyles.

Community forum participants made the following suggestions/comments on Iowa's nutrition and physical activity initiative:

- More school time should be allotted for physical education.
- Schools should devote more time to promoting healthy lifestyles.
- Exercise is important to lose weight.
- Fitness is more important than fatness.
- Weight-loss diets do not work long-term without physical activity.
- Banning/restricting access to vending machines during school hours would help curb obesity.
- Schools should promote one major event every six months. Examples are a "Kids Walk-to-School" event in October and a "No T.V. Week" in April. Public promotions would make each county's public health organizations more recognizable.
- Each Iowa school needs a committee to develop a school wellness policy by the 2006-2007 school year.
- Public awareness should be made of all the resources available in each city/county.
- Each county should expand the developing health coalitions.
- The coalitions could establish a relationship with schools, where it could disseminate information about upcoming events or tips for healthier living.

Participants at three of the forums were surveyed on attitudes, beliefs, and barriers. Participants who completed the survey included local health stakeholders, many of whom were volunteers on health committees or school wellness committees.

Respondents believe obesity is a societal threat and that community-based approaches are necessary to combat it. They identified challenges about the level of opportunity for access to physical activity and proper nutrition. Another challenge, they believe, is the negative influence on children's food choices.

Finally, participants were asked to rank children's role models, from most important to least important. A majority believe the ranking is as follows:

- 1. Parents**
- 2. Media**
- 3. Classmates**
- 4. Teachers**
- 5. Doctors**

Survey of WIC Agencies

Following the community forums in March and April of 2005 the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) agencies were used to solicit more input from across Iowa to gain their perceptions on overweight and childhood obesity specifically.

Children coming to their clinics provided WIC personnel with the greatest indication that there was an obesity problem in their communities. More children are overweight, have increased and rapid weight gain, and have increased blood pressure, and some of their parents are concerned about diabetes. Schools and families contribute to promotion of this health problem. Families on the go are major contributors due to their rushed schedules. This results in consumption of more high-calorie foods and less time for physical activity.

Several factors are promoting a healthy lifestyle. Media attention, and activity opportunities provided by trails, ballparks, water parks and recreation centers, are increasing. Pennsylvania WIC Nutrition and Physical Activity modules are being implemented in Iowa WIC clinics. Also, coalitions to combat the problem are forming statewide. Increased activity opportunities, increased community support and partnerships, and limited sales or change in products sold (i.e., dairy products instead of soda) in vending machines appear to work.

State funding is the greatest need. Clinic personnel also noted they need technical assistance and information about best practices. To help implement the state plan, communities can provide more programming, education of parents and communication with them, school personnel and other community members.

Key Informant Interviews

The final assessment conducted was a joint venture by Iowans Fit for Life and the Iowa Department of Public Health (IDPH) Office of Multicultural Health. Over 50 key informant interviews were conducted during the summer of 2005 on nutrition, physical activity, and obesity among African-American and Hispanic Iowans. They included individual interviews and a group session over the Iowa Communications Network.

Participants acknowledged obvious overweight problems in their communities through observation and personal experience. Community members were divided on whether there is a relationship between weight and illness, and they agreed that too much television, not enough physical activity, and consumption of less-nutritious foods contribute to an increase in overweight. Several participants

believed that television is a major problem since it not only contributes to inactivity but to consumption of less nutritious foods. This occurs because people eat while watching television or are influenced by food advertising.

Participants discussed popular activities in their communities. Children's favorites are playing, swimming, and running while adolescents favor more sports, particularly basketball. Young adults favor walking and biking as well as sports such as basketball, and older adults mostly preferred walking. Interviews also identified barriers. The barriers most frequently mentioned were safety and access, but participants also listed cost, lack of interest, and lack of knowledge about physical activity.

As for eating, fried foods, including chicken, pork, and fish, and a great deal of soul food, are among the most popular. Beef, chitterlings, macaroni and cheese, greens, breads, and anything cooked with grease and butter were also popular, along with food from fast food restaurants. Participants were also asked if they ate fruits and vegetables regularly. Most said that they did, and thoroughly enjoyed them (particularly vegetables). But they said they probably did not eat five servings a day.

Barriers to consuming five servings of fruits and vegetables daily are similar to barriers to being physically active. The cost of fruits and vegetables is a barrier, as well as the lack of their consistent availability for home and work. Several participants noted that they lack nutrition knowledge.

Participants also discussed their access to regular health care, and whether or not that affects their weight. The group was split on the extent of their access. Participants who had limited access said it is because of a lack of knowledge on where to go or because their employers did not provide it. The group was split on its impact on weight. Some believed that if they went to their health-care provider, they would know their weight and blood lipid levels, as well as the health-awareness benefits of having a regular check up.

Finally, participants told where they could go for information and how they would approach losing weight. The local health department, a library, their church, their health-care provider's office, or the local community center were among the sources. Most said they would take a positive approach to losing weight through exercise and eating more nutritiously, although some said they would be reluctant to lose weight unless it was medically necessary.

Summary of Barriers

From all of the assessments, a list of barriers was created and used in establishing the objectives and strategies of Iowa's Comprehensive Nutrition and Physical Activity Plan. Barriers include:

- **Time:** Most adults say this is the number-one barrier to being physically active along with cooking meals with fresh fruit and vegetables.
- **Money:** "Extra value meals" are often a better bargain than regularly sized portions.
- An **environment** built to serve automobiles rather than people.
- Easy access to "**junk food.**"
- **Lack of fresh fruits and vegetables** available in rural communities.
- **Safety** of children playing outside.
- Reduction of **physical education class** time and recess time in schools.
- Belief that school pop and candy **vending machine** money revenue is necessary.
- Popularity of **video games, television, and computers**, leading to excessive "non-purposeful" time.
- **Inclement weather.**

Collaboration, Stakeholders, and Partnerships

After completing the community forums, key informant interviews, and WIC surveys, the Iowa Department of Public Health began gathering members to form the Iowans Fit for Life Partnership. The partnership formally began in May 2005 at the Iowans Fit for Life Symposium, and was followed by work groups meeting for several months.

The partnership is made up of many partners and stakeholders across Iowa that have joined to fight this epidemic. Leaders from state and community organizations, public health, academia, government, non-profit, business, and advocacy organizations representing people affected by obesity have helped with planning and will be involved in the implementation of the Iowa's Comprehensive Nutrition and Physical Activity Plan. Traditional public health partners and new ones have joined to help Iowans overcome poor nutrition and inactivity.

The Iowans Fit for Life Partnership was formed in May 2005 and is broad. The partnership was formed to begin writing Iowa's Comprehensive Nutrition and Physical Activity Plan and in the future will implement the plan. It brings together

people who help older Iowans, younger Iowans, and Iowans of diverse races/ethnicities. It includes health-care providers, educators, and nutrition and physical activity experts. It also includes partners who work primarily in Iowa agriculture, business and industry, government, and Iowa communities.

Iowans Fit for Life at the Iowa Department of Public Health also work to bring together other existing efforts. Key members of the partnership that have valuable stakes in this fight against obesity programs include the Diabetes Prevention Program, Iowa Arthritis Program, Comprehensive Cancer Control, Harkin Wellness Grants, WISEWOMAN, Five-a-Day, Iowa Nutrition Network, BASICS, Cardiovascular Risk Reduction, Women's Health, Fit Kids Coalition, Maternal and Child Health, WIC, Healthy Child Care Iowa and Lighten Up Iowa. See the appendix for descriptions of these programs.

Finally the Iowa Department of Public Health will serve as the conduit for communication among local boards of health, national public health entities, and federal programs. Iowa's local public health infrastructure, which exists in various forms in all the state's counties, will be essential in working directly with communities.

Iowans Fit for Life Symposium

The Iowa Department of Public Health in May 2005 invited partners and stakeholders of Iowans Fit for Life to a symposium to discuss nutrition and physical activity. Over 300 participants attended to begin working on goals, objectives, and strategies to improve Iowans nutrition and physical activity to prevent obesity and other chronic diseases.

Participants were asked to visualize what Iowa would be like in 20 years if appropriate nutrition and physical activity changes occurred. They then discussed what it would take to get there, what barriers exist and what partnerships could overcome those barriers. They were then asked to commit to the Iowans Fit for Life Partnership.

Iowans Fit for Life Work Groups

In the summer months following the symposium, the partnership met once a month for four months to identify goals, objectives and strategies to include in Iowa's comprehensive plan for nutrition and activity. It met in six groups: older Iowans, health care, educational settings, early childhood, community, and

business and agriculture. A list of partnership members is included in the appendix.

The Iowans Fit for Life Steering Committee also met to determine how the six work groups' goals, objectives and strategies would come together, to identify target populations, to ensure that the strategies were meeting all levels of the socio-ecological model (policy, community, organizational, interpersonal, individual), and to identify partners to carry out the goals, objectives, and strategies. The committee comprised two to three members from each of the six work groups. A list of committee members is in the appendix.

In the future, the Iowans Fit for Life Partnership will continue to help guide Iowa's comprehensive plan for nutrition and physical activity.

Interagency Task Force

Besides the work groups, an Interagency Task Force is responsible for providing input, guidance, and advice on grants of the CDC Nutrition and Physical Activity to Prevent Obesity and Other Chronic Diseases program, which in Iowa is Iowans Fit for Life. Participation is open to state agencies interested in helping develop and support Iowans Fit for Life objectives. Members include physical activity and nutrition experts, as well as other interested stakeholders from the Iowa Department of Public Health and other state agencies.

The task force reviews, approves, and gives input on draft plans of the Iowans Fit for Life Partnership. It also monitors and evaluates progress in development of the state plan and other grant activities to ensure they are implemented as intended, and provides feedback, coordination and guidance for the comprehensive state plan. A list of members is in the appendix.

Epidemiology/Program Evaluation Committee

One final group that is essential to Iowans Fit for Life is the Epidemiology/Program Evaluation Committee. This committee was formed at the beginning of program development for Iowans Fit for Life. The purpose of the committee is to provide recommendations in regards to the strength of the proposed interventions, program evaluation design, and statistical methodology. The committee works with the Iowans Fit for Life Epidemiologist/Program Evaluator and consists of faculty from the three state universities. The committee also facilitates access to Iowa databases that may expand the description of the problem and track changes in physical activity and nutrition. A list of the members is in the appendix.

High Priority: Target Populations

Based on disease burden prevalence and the responses from county health needs assessment, community forums, WIC agency surveys, key informant interviews and work groups, the following populations were determined to be high priority targets for steps to improve nutrition and increase physical activity:

Iowa children, especially those from rural areas, have the highest risk of disease and economic burden from obesity. They also have the potential risk of reduced quality of life. If improved nutrition and increased opportunities for activity are offered soon, Iowans have a chance of preventing the fulfillment of dire predictions, such as that 1 of 3 children today will develop diabetes in his or her lifetime. Children who live in poverty are at higher risk for overweight. Of all children born in Iowa last year, 44 percent were eligible (based on family income) for the Special Supplemental Nutrition for Women Infant and Children (WIC) program.

Older adults, particularly those with disease and disability, are at risk because they lack access to fresh produce and physical activity opportunities. Adults ages 55 to 65 have the highest prevalence of overweight and obesity of any age group, so targeted remedies are essential for this group as well. Because half of Iowa's population is projected to be older than 50 by 2010, the health and financial condition of the entire state must increase accessible, appropriate, and low-cost nutrition and physical activity programming for older citizens. Iowa is third in the nation in percentage of people over 75 and fifth in percentage over 65. Iowa is unique in that its older population is "aging in place" with a concurrent out-migration of young people. Most other "old" states get that way from influx of retirement-age seniors. As Iowa ages ahead of the rest of the nation, Iowans Fit for Life can become a model for the rest of the country. As a rural state with strong communities, it can implement an inclusive plan to help communities build and sustain healthier lifestyles.

Iowans of lower socio-economic resources and/or minority/ethnic groups have the highest prevalence of obesity. They also have the lowest levels of physical activity. While those with incomes less than \$15,000 have rates of fruit and vegetable consumption comparable to those of higher incomes, Iowans with incomes of \$25,000-\$49,999 have the lowest rates of fruit and vegetable consumption (BRFSS 2003). The state's minority population, while small, has increased. People from other cultures often quickly develop problems with overweight and obesity when immersed in the U.S. environment. Since language and economics can be barriers for new Iowans, it is essential that public health offer resources in other languages as well as solutions well-matched to different cultures. The components of Iowa's plan must be affordable to all and their educational messages easily understood.

Goals, Objectives, and Strategies

Goals, objectives, and strategies are the road map that guides us in reducing the incidence and burden of obesity in Iowa. In May of 2005, a symposium organized by the Iowa Department of Public Health was offered to individuals and organizations to discuss nutrition and physical activity. Over 300 participants attended to begin working on goals, objectives and strategies for a comprehensive state plan to address nutrition and physical activity to prevent obesity and other chronic diseases. The program was named “Iowans Fit for Life.” “Active and Eating Smart” was selected as the motto. The vision, mission, and goals of Iowans Fit for Life are:



Vision

- **Iowans will enjoy balanced nutrition, lead physically active lives and live in healthy communities**

Mission

- **Develop and strengthen partnerships that prevent and reduce obesity**

Goals/Outcomes

- **Prevent and reduce the level of obesity in Iowans through improved nutrition, physical activity and supportive environments**
- **Reduce obesity through integration, coordination, and collaboration among organizations and entities that share expertise and maximize resources of existing programs and partnerships**

The purpose of Iowans Fit for Life is to improve quality of life and reduce obesity-related diseases and medical expenditures. The intermediate objectives (as listed in *Healthy People 2010*) are to improve health behaviors and the environment. The short-term or process objectives are listed under “Infrastructure Objectives” in the Implementation section. The strategies to meet these objectives were developed by the Iowans Fit for Life Partnership through a series of work group meetings. The strategies address current efforts, the environment, barriers, and resources. This process laid the groundwork for implementing community-based approaches that will ultimately improve the health of all Iowans. The work groups included representatives of

- **Older Iowans**
- **Health care**
- **Educational settings**
- **Early childhood**
- **Community**
- **Business and agriculture**

Iowa’s work groups and partners spent many hours together to develop objectives that are **SMART**: Specific, Measurable, Achievable, Realistic, and Time-phased. Also, careful attention was paid to: 1) the number of people that would be reached, 2) the intervention’s efficiency, 3) the scientific evidence supporting high impact, and 4) the likelihood that the program and the results will continue after outside funding ceases.

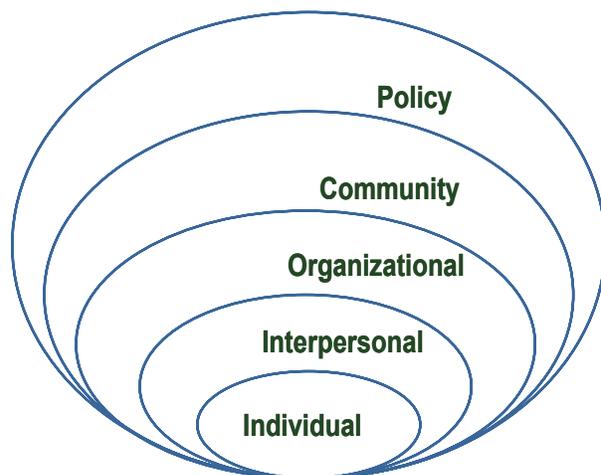
These factors are part of a logic framework called **RE-AIM** (Reach, Efficacy, Attainability, Implementation, and Maintenance (Klesges, Estabrooks, Dziewaltowski, Bull, & Glasgow, 2005). Their purpose is to find and maximize the best ways to improve health. The methods used in the state plan also needed to be *new*, not just a continuance of existing programs.

Health interventions need to be based on scientific theory, which is a well-thought out and tested explanation for events. One of the better theories on how to improve health behavior is the Socio-ecological Model of Health Promotion.

Socio-ecological Model of Health Promotion

Over half of Iowa deaths result from behaviors such as smoking, poor nutrition, or sedentary lifestyle. While individual choices are important, the reality is that factors such as family and environment impact our health as well. While individuals act or fail to act in a way that puts them at risk, the social environment is also a risk. The schematic here depicts the relationship among individuals, their social sphere, their social organizations, communities, and society as a whole – all of which impact health and the ability to live healthier. It recognizes the

interwoven relationship between individuals and their environment. Individual behavior is determined to a large extent by social environment – community values and norms and laws and regulations. As community barriers to healthy behavior are removed, sustained change becomes more achievable. The most effective approach to change is a comprehensive initiative for each level of the model: individual, interpersonal, organizational, community, and policy. The model level(s) is identified for each of the following work group strategies.



Focus Areas

The work group objectives were organized into four focus areas recommended by the Centers for Disease Control and Prevention to improve the energy (calorie) intake/energy expenditure balance:

Increased Physical Activity

Reduced Screen Time



Improved Nutrition

Increased Breastfeeding

There is no magic pill, miraculous surgery, or other easy short cut to balance energy intake with energy output.

These focus areas are aligned with the *Healthy People 2010* objectives that will be used to evaluate the program. Short-term, intermediate, and long-term strategies are planned over ten years. The objectives and strategies reflect a statewide effort to impact Iowans across their lifespan. Working together, partners across the state can use Iowa-specific strategies and data to maximize public and private resources. All of Iowa's Comprehensive Nutrition and

Physical Activity Plan objectives and strategies fully support the *Healthy Iowans 2010* goals. The related *Healthy Iowans 2010* goals are listed with each objective along with the level(s) of the socio-ecological model the objective will reach. The strategies primarily of the individual/interpersonal level of the socio-ecological model will be listed first followed by strategies aimed at the organizational, community, and policy levels.

Nutrition Focus

Food is the input side of the energy balance equation. How much we eat (calories) and what we eat (nutrients) are both important in weight control.

Recommendations contained within the Dietary Guidelines¹ and MyPyramid² will aid the general public over two years of age in reducing the risk for obesity and chronic disease.

The Dietary Guidelines describe a healthy diet as one that

- Emphasizes fruits, vegetables, whole grains, and fat-free or low-fat milk and milk products;
- Includes lean meats, poultry, fish, beans, eggs, and nuts; and
- Is low in saturated fats, trans fats, cholesterol, salt (sodium), and added sugars.

Healthy People 2010 Nutrition Objectives

The work group strategies are designed to help Iowans achieve these *Healthy People 2010* nutrition objectives:

Objective *Healthy People 2010* Objectives

#

19-5	Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit. (<i>Baseline: 28% Target: 75%</i>)
19-6	Increase the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables. (<i>Baseline: 3% Target: 50%</i>)
19-8	Increase the proportion of persons aged 2 years and older who consume less than 10 percent of calories from saturated fat. (<i>Baseline: 36%</i>)

	<i>Target: 75%</i>
19-9	Increase the proportion of persons aged 2 years and older who consume no more than 30 percent of calories from total fat. (<i>Baseline: 33% Target: 75%</i>)
19-15	(Developmental) Increase the proportion of children and adolescents aged 6 to 19 years whose intake of meals and snacks at schools contributes to good overall dietary quality.
19-16	Increase the proportion of worksites that offer nutrition or weight management classes or counseling. (<i>Baseline: 55% Target: 85%</i>)
19-17	Increase the proportion of physician office visits made by patients with a diagnosis of cardiovascular disease, diabetes, or hyperlipidemia that include counseling or education related to diet and nutrition. (<i>Baseline: 42% Target: 75%</i>)

Nutrition Strategies

Together, the Iowans Fit for Life work groups developed the following strategies. The associated *Healthy Iowans 2010* goals are noted when applicable.

1. Provide educational opportunities on healthy eating and healthy weight to targeted groups.

Healthy Iowans 2010 goals: 13-3, 13-4, 13-9

Socio-ecological model: community, organizational, interpersonal, individual

PARTNERS:

Des Moines Area Community College

Lee County Health Department

Iowa Partners: Action for Healthy Kids

Iowa Medicaid

Tobacco Use Prevention & Control Division

Hawkeye Valley Area Agency on Aging

Diabetes Prevention and Control Program

Heritage Area Agency on Aging

Lee County Health Department

Target Population: Parents of preschool children

1.1 Implement programs for parents on healthy food, eating behaviors, and weight for preschool children.

Target Population: Child care providers

1.2 Implement programs for child-care providers on healthy food, eating behaviors, and weight that target food service and curricula.

Target Population: Students (pre-school through college) and school personnel

1.3 Assist the Iowans Fit for Life Intervention schools with the implementation of Pick a **better snack**[™] & ACT initiatives, newsletters, and media information.

1.4 Offer mini-grants to increase the number of schools offering healthy eating and improve the nutrition environment.

1.5 Identify, compile, and publicize healthy eating best practices from Iowans Fit for Life Interventions, Fresh Fruit and Vegetable Program schools, Team Nutrition/Iowa Partners: Action for Healthy Kids interventions, Farm Bureau/Wellmark Pilot Intervention Schools, and Harkin Wellness communities.

Target Population: Parents of school age children

1.6 Explore and/or expand partnerships with Parent Teacher Associations and Parent Teacher Organizations to encourage parents to be involved in developing and monitoring school food policies and education to promote healthy eating behaviors.

Target Populations: Iowans by income and education level, age, gender, race/ethnicity, disability-specific, rurality

1.7 Provide monthly education with a clear and consistent message on healthy food, eating behaviors, and weight through various media.

2. Provide technical assistance to health care providers, hospitals and managed-care organizations that address healthy weight and healthy eating

Healthy Iowans 2010 goals: 13-1, 13-7

Socio-ecological model: individual, organizational, policy

PARTNERS:

Iowa Medicaid

Tobacco Use Prevention and Control Division

Iowa Association of Nurse Practitioners

Iowa Dietetics Association

State Nutrition Action Plan (SNAP) Coalition

University of Iowa College of Medicine

Target Population: Health Professionals, parents/family members, and individuals with obesity and related diseases

2.1 Provide education to health care providers on nutrition, healthy weight and the providers' role in counseling patients with obesity and related diseases by developing accessible continuing education.

2.2 Publicize resources from which medical offices can order patient information on obesity, and related diseases.

2.3 Create and distribute "prescription pads" on wellness behaviors to be signed by physicians and distributed to patients and health care providers.

3. Support work sites offering employer-sponsored nutrition education and healthy eating policies.

Healthy Iowans 2010 goal: 13-3

Socio-ecological model: organizational

PARTNERS:

Tobacco Use Prevention and Control Division

Iowa Dietetics Association

Lee County Health Department

Partners of Lighten Up Iowa

Target Population: Business owners, employees

3.1 Enhance Lighten Up Iowa by supporting scholarships for work site teams of low wage earners.

3.2 Provide education on work site wellness components and options such as nutrition, physical activity, and connected health behaviors.

3.3 Promote development of work site programs that address nutrition opportunities.

4. Increase availability of fresh produce at schools and in communities.

Healthy Iowans 2010 goal: 13-5

Socio-ecological model: policy, community, organizational, individual

PARTNERS:

United States Department of Agriculture

Iowa Department of Education

Hawkeye Valley Area Agency on Aging

Heritage Area Agency on Aging

Page County Public Health

Target Population: Students and community members in Iowans Fit for Life Intervention Communities

4.1 Partner with the Iowa Department of Education and U. S. Department of Agriculture to subsidize fruits and vegetables served at schools through the Fresh Fruit and Vegetable Program and the Iowans Fit for Life school/community intervention.

4.2 Provide resources and technical assistance to intervention community and coalitions to develop community gardens.

Target Population: All Iowans

4.3 Through marketing and partnerships such as “Buy Fresh, Buy Local”, promote fruits and vegetables as an affordable, healthy option to high fat/low nutrient dense foods.

4.4 Develop partnerships with parish nurses, clergy organizations, and wellness coalitions to develop an initiative with faith-based communities and social/service organizations to offer fruits and vegetables at church events.

4.5 Develop a template for communities to list resources that support healthy eating.

Target Population: Iowans in Intervention Communities

4.6 Develop, implement, and evaluate a plan for a community initiative that increases access to fruits and vegetables outside of the school day in Iowans Fit for Life intervention communities.

Target Population: Convenience store operators in rural areas

4.7 Develop partnerships with convenience stores to increase the availability of fruits and vegetables in rural communities without grocery stores.

5. Pursue the development of healthy local food systems in at least three intervention communities that 1) produce healthy foods, meeting the USDA dietary guidelines, 2) support agricultural practices producing a healthy environment for Iowans to live, and 3) support Iowa farmers.

Healthy Iowans 2010 goal: 3-5

Socio-ecological model: policy, community

PARTNERS:

Governor's Food Policy Council

Target population: Targeted communities

5.1 Form a task force with a mission of instituting public policy to improve health through healthy food systems.

5.2 Assist the task force in performing an assessment to determine regional food system changes needed that expand the local resources.

5.3 Assist the task force and communities to develop and implement a plan based on the food system assessment that institutes healthy food policies.

6. Support the development of statewide policies that improve nutrition education and healthy eating environments.

Healthy Iowans 2010 goal: 13-3; 13-4

Socio-ecological model: organizational, policy

PARTNERS:

Iowa Dietetics Association

Des Moines Area Community College

Iowa Partners: Action for Healthy Kids

State Nutrition Action Plan (SNAP) Coalition

Target Population: Policy makers

6.1 Provide resources to identify potential healthy eating environment policies.

6.2 Educate legislators, and targeted school administrators, parents, and community leaders on guidelines and rationale for policy initiatives.

6.3 Introduce and support legislation to approve third-party payer coverage of nutrition counseling for obesity, partnering with legislators at the state and federal levels to educate about covered benefits.

Physical Activity Focus

Physical activity is the calorie output side of the energy balance equation, along with Resting Metabolic Rate, which is the amount of energy a body requires to function. How many calories we expend is an important aspect of weight control, and more importantly, health. Increasing physical activity is one of the top ten leading health indicators or goals for the United States.

The Centers for Disease Control and Prevention³ and the American College of Sports⁴ Medicine recommend that adults should engage in moderate-intensity physical activity for at least 30 minutes on five or more days of the week. The 30 minutes of activity can be accumulated in short bouts of activity throughout the day.

The National Association for Sport and Physical Education⁵ states that children should accumulate at least 60 minutes, and up to several hours of age-appropriate

physical activity on all, or most days of the week. This daily accumulation should include moderate and vigorous physical activity and should be accumulated in short bouts of activity throughout the day. Extended periods (two hours or more) of inactivity are discouraged for children, especially during daytime hours.

Healthy People 2010 Physical Activity Objectives

The work group strategies are designed to help Iowans achieve these *Healthy People 2010* objectives:

Objective # *Healthy People 2010* Objectives

6-12	(Developmental) Reduce the proportion of people with disabilities reporting environmental barriers to participation in home, school, work, or community activities.
22-2	Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day. <i>(Baseline: 15% Target: 30%)</i>
22-6	Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days. <i>(Group Baseline: 27%; Female Baseline: 24%; Male Baseline: 29%; Target: 35%)</i>
22-7	Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardio-respiratory fitness 3 or more days per week for 20 or more minutes per occasion.* <i>(Group Baseline: 65%; Female Baseline: 57%; Male Baseline: 72%; Target: 85%)</i>
22-8	Increase the proportion of Iowa's public and private schools that require daily physical education for all students. <i>(Middle/Junior High School Baseline: 17%; Target: 25%; Senior High School Baseline: 2%; Target: 5%)</i>
22-10	Increase the proportion of adolescents who spend at least 50 percent of school physical education class time being physically active. <i>(Group Baseline: 38%; Female Baseline: 32%; Male Baseline: 45%; Target: 50%)</i>
22-13	Increase the proportion of work sites offering employer-sponsored physical activity and fitness programs. <i>(Baseline: 46% Target: 75%)</i>
22-14	Increase the proportion of trips made by walking. <i>(Adults 18 and older Baseline: 17% Target: 25%; Children & Adolescents 5 to 15 Years Baseline: 31% Target: 50%)</i>
22-15	Increase the proportion of trips made by bicycling. <i>(Adults 18 and older Baseline: 0.6% Target: 2.0%; Children & Adolescents 5 to 15 Years Baseline: 2.4% Target: 5.0%)</i>

Physical Activity Strategies

Together, the Iowans Fit for Life work groups developed the following strategies for various levels of the socio-ecological model and target populations to achieve *Healthy People 2010* objectives. The associated *Healthy Iowans 2010* goals are identified when applicable.

7. Provide educational opportunities on physical activity and healthy weight to targeted groups.

Healthy Iowans 2010 goals: 13-3, 13-4, 13-9, 16-3, 16-4

Socio-ecological model: individual, interpersonal, organizational, community

PARTNERS:

Iowa Senior Olympics

Tobacco Use Prevention and Control Division

Hawkeye Valley Area Agency on Aging (AAA)

Heritage AAA

Target Population: Parents of pre-school children

7.1 Provide programs for parents on appropriate physical activity for pre-school children.

Target Populations: Iowans by income and education level, age, gender, race/ethnicity, disability-specific, degree of urbanization

7.2 Provide monthly education with a clear and consistent message for sub-populations through a variety of media.

8. Provide technical assistance to health care providers, hospitals and managed care organizations that address healthy weight and healthy eating.

Healthy Iowans 2010 goal: 16-2

Socio-ecological model: individual, organizational, policy

PARTNERS:

Iowa Association of Nurse Practitioners

Iowa Medicaid

Tobacco Use Prevention and Control Division

Target Population: Health professionals, parents/family members, and individuals with obesity and related diseases

8.1 Educate health care providers on physical activity, healthy weight and providers' roles in counseling patients with obesity and other related chronic diseases by development of accessible continuing education.

8.2 Publicize resources from which medical offices can order patient information on obesity and related diseases.

8.3 Create and distribute prescription pads on wellness behaviors to be signed by physicians and distributed to patients and health care providers.

9. Provide technical assistance to schools whose facilities are used as multi-generational hubs for physical activity outside of normal school hours.

Healthy Iowans 2010 goals: 16-6, 16-10

Socio-ecological model: organizational, policy

Target Population: School boards and school administrators

9.1 Assist schools to include access to their facilities outside normal school hours as a component of their wellness policy.

9.2 Locate model schools that allow people to use their facilities for physical activity.

10. Identify, support, promote, and encourage safe routes to school.

Healthy Iowans 2010 goal: 16-8

Socio-ecological model: organizational, community, policy

PARTNERS:

Iowa Department of Transportation

Iowa State University: Landscape Architecture Extension

Bike to Work Week

10.1. Partner with the Governor's Traffic Safety Bureau and Safe Kids Coalition to enforce traffic safety and ensure safe travel to and from school.

10.2 Identify community resources, including neighborhood safety assessments, planning and implementation guides.

10.3 Promote walking and bicycling to school statewide and help communities promote them.

11. Provide technical assistance to work sites offering employer-sponsored physical activity and policies.

Healthy Iowans 2010 goal: 16-5

Socio-ecological model: organizational, community, policy

PARTNERS:

**Iowa Arthritis Program
Bike to Work Week
Tri-State Medical Group**

Target Population: Employers

11.1 Promote development of work site programs that address physical activity opportunities.

11.2 Increase employer knowledge of physical activity benefits and options.

11.3 Develop partnerships with third party payers so more of them provide incentives (financial or otherwise), and/or lower premiums, to employers with physical activity programming for their work forces.

12. Create more opportunities for physical activity in communities.

Healthy Iowans 2010 goals: 16-3, 16-8, 16-10

Socio-ecological model: community, policy

PARTNERS:

**Bike to Work Week
Hawkeye Valley Area Agency on Aging
Heritage AAA
Hoerner YMCA
Iowa Arthritis Program
Iowa Department of Public Health
Iowa State University: Landscape Architecture Extension
Page County Public Health
University of Iowa Prevention Research Center**

Target Population: policy makers

12.1 Partner with the American Society of Landscape Architects, American Planning Association, Department of Economic Development, Department of Transportation, Department of Natural Resources and other interested land-use partners to increase the number of physical activity friendly environments.

12.2 Increase the use of Iowa trails.

12.3 Increase the number of physical activity opportunities through parks and recreation services, particularly in small towns.

12.4 Develop media partnerships to establish a system to provide messages for targeted audiences.

12.5 Enhance and expand Lighten Up Iowa by increasing promotion through Iowans Fit for Life and providing mini-grants for whole communities to be involved.

12.6 Increase the number of physical activity opportunities in faith-based and other organizations.

Target Population: Faith-based and other organizations

12.7 Partner with parish programs, Parish Nurses Association, clergy associations, and church wellness committees to increase the number of low-cost exercise classes for adults and seniors and play and/or game opportunities for toddlers and youth.

Target Population: Older adults

12.8 Increase the number of wellness programs for older Iowans.

13. Improve the walkability* of Iowa communities.

Healthy Iowans 2010 goal: 16-8

Socio-ecological model: policy, community

PARTNERS:

Bike to Work Week

Tri-State Medical Group

Floyd Co. PH/HHC

Target Population: Policy makers

13.1 Implement policies that encourage the connectivity of walkways to aid Iowans in making physical activity the easy choice.

13.2 Develop mandates for walkable communities, including requiring sidewalks in new developments, adequate sidewalks leading to parks, and sidewalks in new zoning or rezoning.

13.3 Identify partners to advocate for more walkable communities.

* or “maneuver-ability,” such as bicycling, tricycling, roller skating, skateboards, etc.

14. Support the development and dissemination of guidelines for minimum physical activity per day for students (including recess, physical education, and alternative methods to incorporate physical activity into the class day).

Healthy Iowans 2010 goals: 16-6, 16-10

Socio-ecological model: policy, organizational

PARTNERS:

Iowa Association of Health, Physical Education, Recreation and Dance (IAHPERD)

University of Northern Iowa

Target Population: Policy makers

14.1 Provide policy makers, school administrators, parents, staff and students with evidence for the necessity of increased physical activity for children.

14.2 Recommend that schools include increased physical activity during the school day as a component of their wellness policies.

14.3 Provide mini-grants to targeted schools performing physical activity and body mass index (BMI) assessments similar to those in the Iowans Fit for Life school and community intervention and Physical Activity and Nutrition Among Rural Youth (PANARY) projects for schools.

Breastfeeding Focus

Breastfeeding is important in preventing childhood obesity and helping new mothers return to pre-pregnancy weight. Increasing evidence suggests that breastfeeding reduces overweight in children and nursing mothers. Increased social support for breastfeeding is important because women who have support are more likely to breastfeed than those who do not.⁶

Increased breastfeeding is also a major program area of the CDC State-Based Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases.

Healthy People 2010 Breastfeeding Objective

Breastfeeding objectives and strategies were developed by the Iowans Fit for Life Partnership through work group meetings. They are designed to help Iowans achieve the following *Healthy People 2010* objectives:

Goal- *Healthy People 2010* Objective
Objective #

16-19 Increase the proportion of mothers who breastfeed their babies.

Breastfeeding Strategies

Together, the Iowans Fit for Life work groups developed these objectives and strategies for various levels of the socio-ecological model and various populations to achieve the *Healthy People 2010* goals. The associated *Healthy Iowans 2010* goal is identified when applicable.

15. Increase educational opportunities for families on breastfeeding and nutrition.

Healthy Iowans 2010 goal: 16-2

Socio-ecological model: interpersonal

PARTNERS:

Iowa Medicaid

Iowa Association of Nurse Practitioners

Floyd County Public Health and Home Health Care

Iowa Lactation Task Force

WIC

Lactation Consultants – Iowa Health Systems

Target Population: Parents of infants

15.1 Develop partnerships to assess education programs for new parents.

15.2 Use home visiting programs, such as Empowerment, Healthy Smiles, parents as teachers, and expanded food and nutrition programs, for dissemination.

15.3 Develop a public education campaign on breastfeeding and nutrition with a clear, consistent message for expectant mothers and families with children under two years old.

15.3.1 Provide culturally-sensitive, age-appropriate information.

15.3.2 *Provide messages specific to identified populations.*

16. Provide technical assistance to help work sites implement policies that allow breastfeeding.

Healthy Iowans 2010 goal: 16-2

Socio-ecological model: policy, organizational

PARTNERS:

Floyd County Public Health/Home Health Care

Target Population: employers

16.1 Develop partnerships to develop and promote a model family-friendly work site policy

16.1.1 Develop a family-friendly business checklist, using other national models for ideas

16.2 Disseminate a breastfeeding work site support kit.

16.2.1 Contact corporate wellness councils in the state to notify them of the availability of the work site kit.

16.2.2 Identify an organization or group that will keep the work site support kit current and available.

16.2.3 Educate child care providers on policies and structure to support breastfeeding

16.3 Expand with mini-grants, a work site recognition program for family-friendly work places.

16.3.1 Provide incentives to employers to provide flexible work schedules.

16.4 Educate employers about breastfeeding.

16.4.1. Provide lactation kits, including information about financial savings, to employers.

16.4.2 Provide educational materials to employers on the benefits to employees of breastfeeding.

17. Partner with Iowa Lactation Task Force to provide technical assistance to help health providers address breastfeeding with expectant parents.

Healthy Iowans 2010 goal: 16-2

Socio-ecological model: individual

Target Population: Health care providers

17.1 Partner with pediatricians, physician assistants, nurse practitioners, and nurse organizations to develop a white paper on breastfeeding.

17.2 Educate health care providers on the benefits of breastfeeding and their role in counseling patients.

17.2.1 Develop accessible continuing education for health professionals on breastfeeding.

17.2.2 Incorporate breastfeeding into the curriculum of health professionals at two universities or colleges.

17.2.3 Increase the number of healthcare providers who provide community education and awareness on breastfeeding.

Screen Time Focus

Reducing screen time is an important component to increasing physical activity. More time in front of a screen (television, video games, computer) is less time being active. The Iowans Fit for Life intervention will include surveillance of this habit.

Healthy People 2010 Screen Time Objective

The objectives and strategies are designed to help Iowans achieve the following *Healthy People 2010* objectives:

Goal- *Healthy People 2010* Objective
Objective #

22-11	Increase the proportion of adolescents who view television 2 or fewer hours on a school day.
-------	--

Screen Time Strategies

Together, the Iowans Fit for Life Work Groups developed these strategies for various levels of the socio-ecological model and target populations to achieve the *Healthy People 2010* goals. The associated *Healthy Iowans 2010* goal is identified when applicable.

18. Develop an awareness campaign to educate parents/caretakers about the hazards of inactivity of children due to screen time.

Healthy Iowans 2010 goal: 16-10

Socio-ecological model: interpersonal, individual

PARTNER:

Iowa Association of Nurse Practitioners

Target Population: Parents/caregivers

18.1 Investigate an established and recommended set of guidelines.

18.2 Disseminate guidelines to caretakers, such as child care providers, schools, parents.

18.3 Provide training to child care providers on alternatives to screen time.

18.4 Provide educational materials on reduction of screen time to parents/caregivers of students in the Iowans Fit for Life Intervention Communities.

19. Provide technical assistance to health care providers, hospitals and managed care organizations that provide health promotion that addresses reducing screen time.

Healthy Iowans 2010 goal: 16-2

Socio-ecological model: individual, interpersonal, organizational, community

PARTNER:

Iowa Association of Nurse Practitioners

Iowa Child Care Resource and Referral Consultants

Target Population: Health professionals; parents/family members, and individuals with obesity and related diseases.

19.1 Develop and distribute community-resource guides in health care provider offices containing referral resources for reduced screen time.

Implementation of the Plan

The Iowans Fit for Life plan exemplifies the “new” public health which focuses on health promotion and wellness. Strategies include:

“... community mobilization, coalition building, and community-based interventions; integration of policy advocacy and media advocacy into comprehensive interventions; collaborations with academic institutions and other partners to advance the translation of research into practice; and the adoption of the socio–ecological approach to public health interventions.” (Schwartz, p.2, 2005).

This new public health is also synergized by the re-design of the Iowa Department of Public Health. This re-designing public health initiative builds the capacities for local public health to be a health resource for citizens and businesses and assures consistent standards of services throughout the state. It serves the state as well as the community health infrastructure. The resultant coordination of these two initiatives will be a catalyst and enhancement for both.

The role of the Iowans Fit for Life program is to build capacity and strengthen the infrastructure to facilitate the work of communities, the work groups and task forces necessary to implement Iowa’s Comprehensive Nutrition and Physical Activity Plan. Implementation of some strategies is statewide and comprehensive. For other strategies, the purpose is to strengthen the system to accomplish the task and build sustainability. In order to move forward with Plan implementation, Iowans Fit for Life needs to:

- **Develop and support partnerships that implement obesity prevention programs;**
- **Create and sustain model healthy communities around nutrition and physical activity;**
- **Collect and analyze data that drives decisions on program needs and effectiveness.**

Considering needs, capacities and potential, Iowans Fit for Life program staff and the work groups have determined the following strategies as essential for building a program that expands and builds on the first year of plan development. See the appendix for a complete list of short-term process objectives and the respective strategies.

- Build on the current partnership network, identifying gaps and key organizations necessary to implement both specific strategies and the overall statewide initiative.
- Create an inventory of city, county, and statewide physical activity and nutrition opportunities to post on the Iowans Fit for Life website

partnership with Iowa State University Health Promotion class.
(www.iowa.gov/iowansfitforlife)

- Establish the task forces and advisory committees necessary to implement strategies identified in the Plan.
- Work with the governor's office to develop/support statewide initiatives to increase healthy eating and physical activity opportunities.
- Develop a social marketing and communication plan for the nutrition and physical activity initiative.
- Provide nutrition and physical activity documents, tool kits, workbooks and resources on the Iowans Fit for Life Web site.
- Establish six new regional Community Health Consultant positions as health-promotion specialists with emphasis on physical activity and nutrition to prevent obesity and other chronic conditions.
- Identify model programs that exemplify healthy physical activity and eating environments.
- Expand and implement an Iowans Fit for Life surveillance and evaluation system to facilitate data-driven decisions.

Iowans Fit for Life Intervention

As work groups and partners developed Iowa's Comprehensive Nutrition and Physical Activity Plan, an intervention based on scientific evidence and theory was developed for select Iowa communities. Its purpose within the context of the Nutrition and Physical Activity to Prevent Obesity and Other Chronic Diseases grant is to investigate a nutrition and physical activity intervention using all levels of the socio-ecological model. The long-range goal is to develop a model program that will support and sustain the consumption of more fruits and vegetables daily and being physically active 60 minutes per day that can be replicated in other communities. The program evaluation will include consistent measures and track outcomes over five years.

Intervention Goal 1: Move children towards eating more fruits and vegetables daily to meet the recommendations from the 2005 Dietary Guidelines for Americans.

Intervention Goal 2: Move children towards being physically active 60 minutes per day.

Schools and communities were selected to participate based on the following criteria:

- Previous applicant for the Fruit and Vegetable (Pilot) Program in either 2002 or 2004
- Population range of 2,000 to 12,000 (categorized by Beale Codes as non-metropolitan)
- 3rd, 4th and 5th grade students in the same building with a minimum of 23 students in each grade.
- School is in a small town that has a newspaper and a grocery store with fresh produce
- Located in a county that identified overweight, obesity, nutrition, physical activity and/or other healthy lifestyle as a priority in the Community Health Needs Assessment and Health Improvement Plan completed in the spring of 2005

Community coalitions receive mini-grants to help create or expand physical activity and fruit and vegetable opportunities outside the school day. Schools participating in the public health school and community pilot interventions are part of the USDA funded Iowa Department of Education Free Fruit and Vegetable Program for two of the four years, subject to availability of funds.

Twelve schools and their communities were randomly assigned (stratified by geographical area) to intervention groups for the 2005-06 and 2006-07 school years.

- Three schools participate in the Free Fresh Fruit and Vegetable Program funded through USDA in cooperation with Iowa Department of Education.
- Three schools participate in the Free Fresh Fruit and Vegetable Program plus an IDPH school and community program.
- Three schools participate in an IDPH school and community program.
- Three additional schools will start the full program after two years so that comparisons may be made.

Schools and communities will be offered the program components that they did not receive during the first two intervention years in the 2007-2008 and 2008-2009 school years.



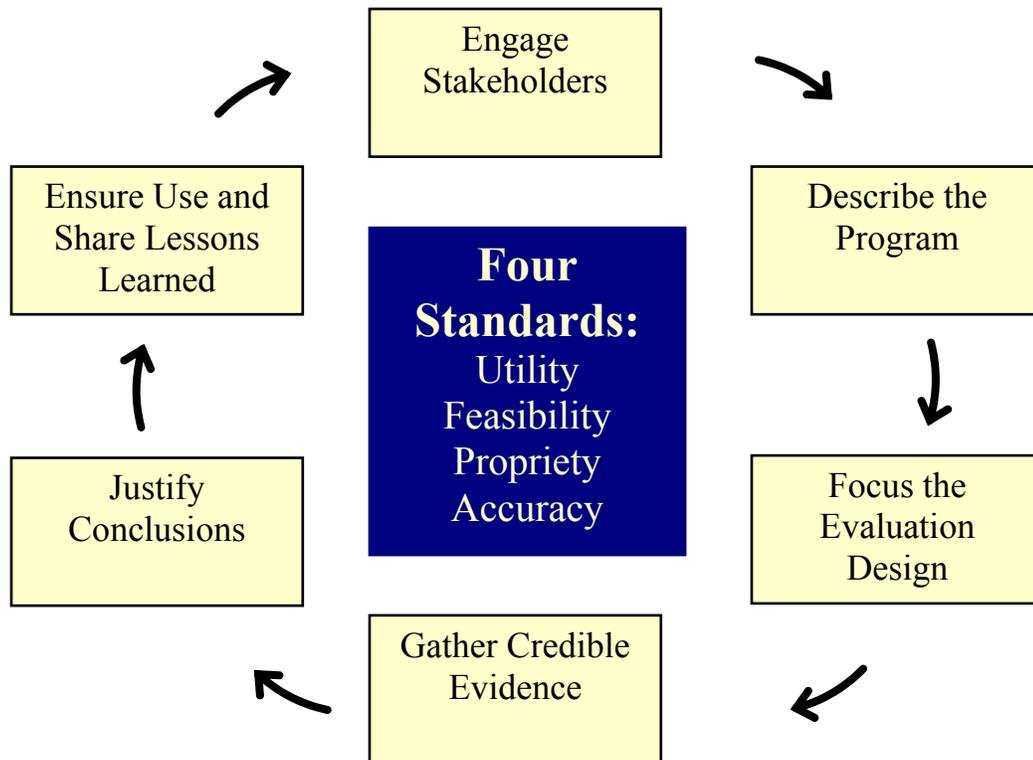
The intervention will be reinforced at the community level through community or county health coalitions, after-school physical activity and nutrition programs, billboards, newspaper articles, radio public service announcements and retail points of purchase; at the institutional/organizational level through school procedures and environment; at the interpersonal level through parental involvement with initiatives, and school-to-home initiatives; and at the individual level through Pick a better snack™ & ACT curriculum and bingo cards, tasting opportunities, physical activity opportunities, incentives, and social support.

Schools alone cannot solve the pending health crisis of youth obesity. It will take the combined efforts of families, schools, communities, government agencies, health providers, the food industry, and the media. The project is designed to strengthen an alliance of parents, teachers, child nutrition personnel, school staff, and community partners to teach children and their families how to be healthy for a lifetime. A successful intervention will lead to model schools and communities so people will have balanced nutrition, lead physically active lives, and sustain healthy weights.

Evaluation Plan: Our Road Map

If we are following a road map, how will we know when we arrive?

Evaluation will give us guidance as to whether we are going in the right direction and when we have arrived at our goals. The Centers for Disease Control and Prevention recommends a six-step process for evaluation, which includes steps in the following evaluation framework diagram:



Source: Baker, et al., 2000. *An evaluation framework for community health programs.*

Stakeholders have been engaged to jointly describe the program. Its evaluation design focuses on the *Healthy People 2010* Nutrition, Physical Activity, Breastfeeding, and Screen Time objectives. Short-term, intermediate, and long-term strategies are also included. Iowa's Nutrition and Physical Activity Logic Model, representing this process, can be found in the appendix. The model illustrates the flow from inputs to activities, which will produce the outputs, to outcome objectives, which lead to the achievement of our goals. The outcome columns are divided into short, intermediate and long term objectives.

Short-term indicators are identified in the Goals, Objectives, and Strategies and Implementation sections. These objectives will serve as a checklist of tasks to be completed as we work towards achieving our goals. Short-term objectives span one to three years for completion.

Intermediate-term objectives and strategies (behavior, environment, or policy changes) are included with each of the four main focus areas to balance calorie intake with calorie expenditure. If these objectives are *not* impacted (taking into account demographics of the state), partners will need to consider the reasons and modify the Iowans Fit for Life Program to achieve these outcomes. Intermediate goals and objectives typically span four to seven years.

The objectives for adults will be measured by new “over-sampling” BRFSS questions in the intervention communities. Those will then be compared to the baseline BRFSS data collected in Iowa over the past 12 years. Expanding middle and high school participation in the Youth Risk Behavioral Surveillance System survey will improve the validity of health information in that age cohort.

Iowans Fit for Life Intervention

The Iowans Fit for Life Intervention will include more intensive data collection and analysis. The evaluation design will include a 4 (conditions) x 4 (times) design that assesses the program together with the USDA Fresh Fruit and Vegetable Program. The schools were selected based on data suggesting rural children are at higher risk for overweight and also to minimize variability (due to community size and socio-economic status) among communities for more accurate statistical analysis.

The evaluation will include a mix of quantitative and qualitative data. Quantitative data will include students' BMI, physical activity (by survey and pedometer), fruit and vegetable consumption and attitudes about physical activity and fruits and vegetables (by survey with parental assistance). Qualitative data will be collected at the pilot intervention community forums, which will include youth, parents, and community members, besides a school and community assessment survey. The increased opportunities for access to physical activity and fruits and vegetables that are created by each community coalition will be documented and reported. Baseline data will be collected in the fall each year of the study and data again collected each May to determine change in attitudes and behavior. Data collection will be done in conjunction with Iowa State University. The third year will be used to provide the same opportunities to schools that were not originally included in the program. In addition, the original treatment groups will be monitored for program sustainability.

Ensure Use and Share Lessons Learned

The Iowans Fit for Life staff includes an epidemiologist/program evaluator whose responsibilities include analyzing the data. The epidemiologist will work with an epidemiology committee, including faculty from Iowa State University, University of Iowa, and University of Northern Iowa. Please see the appendix for more information about the people who have donated their time and energy to this project. The outcomes and evaluation will be regularly updated on the Iowans Fit for Life website site www.iowa.gov/iowansfitforlife for review and input from stakeholders. Also, feedback from key stakeholders for special projects will be solicited. Specifically, Drake Agriculture Center of Law will be a partner for a Food Systems Intervention in three pilot communities. Refer to the appendix for a more complete list of partners and projects.

Measurement and Evaluation – Long Term Objectives

Measurement and evaluation are essential to ensure the plan is working. Like following a road map, if we find we are off course (e.g., fruit and vegetable consumption is not increasing), we will need to modify the plan so we can arrive at our destination: better health. We know our starting point from responses to the Behavioral Risk Factor Surveillance System. Questions on the health of individual Iowans have been tracked for over 10 years, thus a baseline is established. By continuing this survey project, we can monitor our progress. Long term objectives typically span 10 years and more. Based on research, we expect that when fruit and vegetable consumption, physical activity, and breastfeeding increases, the screen time decreases. Our expectations are summarized:

- **Childhood overweight will stabilize, thus preventing potentially unprecedented diabetes incidence and other obesity-related diseases. And, active, healthy children will have enhanced mood, self-esteem, and academic success.**
- **Senior Iowans will have functional independence for a greater proportion of their lives, which will result in reduced costs for long term medical and assistive care.**
- **Iowans of lower socio-economic status and/or of minority/ethnic groups will show less health disparities in nutrition, physical activity, breastfeeding, and screen time.**
- **Intervention communities will show reduced diabetes, cardiovascular disease, and other obesity-related diseases compared to a predicted trajectory of these diseases based on current demographics.**

Limitations of Measurement and Evaluation

These long term objectives may be influenced by many events out of our control, but the effort to improve nutrition and physical activity must not cease. Accordingly, healthy lifestyles are affected by complex interactions which may or may not result from the project. The BRFSS is based on self-report and may be biased (Do people have their true height and weight listed on their driver's licenses?). More accurate measures will be taken and more sophisticated analysis performed in the pilot-intervention schools, but cause and effect relationships must be considered critically in a complex world. Despite these limitations, **we must strive to reduce the negative impact of obesity on quality of life, medical expenditures, and disease.** The goal to stop the increase in childhood overweight is particularly ambitious, but the potential threat to our children's lives demands our best efforts. This is the vision for Iowans' health.

References

1. Dietary Guidelines for Americans 2005.
www.healthierus.gov/dietaryguidelines
2. United States Department of Agriculture, My Pyramid.
www.mypyramid.gov
3. Centers for Disease Control and Prevention. www.cdc.gov
4. American College of Sports Medicine. www.acsm.org
5. National Association of Sport and Physical Education.
www.aahperd.org/naspe
6. Mc Lorg, PA and Bryant CA. Influence of social network members and health care professionals on infant feeding practices of economically disadvantaged mothers. *Medical Anthropology*; 1989 Apr;10(4):265-78.
7. Schwartz, R. At the cutting edge or the center of the storm? Innovation in public health through health promotion and education in state health departments. *Preventing Chronic Disease*; 2005 Nov;2 Spec no:A05. Epub 2005 Nov 1.

Appendix



Definitions of Overweight, Obesity and Body Mass Index

In those aged 6 to 19 years, overweight or obesity is defined as at or above the sex- and age-specific 95th percentile of Body Mass Index (BMI) based on CDC Growth Charts: United States.

In adults, obesity is defined as a BMI of 30 kg/m² or more; overweight is a BMI of 25 kg/m² or more.

Body mass index (BMI) is calculated as weight in kilograms (kg) divided by the square of height in meters (m²) (BMI = weight[kg]/height[m²]). To estimate BMI using pounds (lbs) and inches (in), divide weight in pounds by the square of height in inches. Then multiply the resulting number by 704.5 (BMI = weight[lbs]/height [in²] X 704.5).

Source: Centers for Disease Control and Prevention, National Center for Health Statistics. National Health and Nutrition Examination Survey. 1988–94.

Data Sources

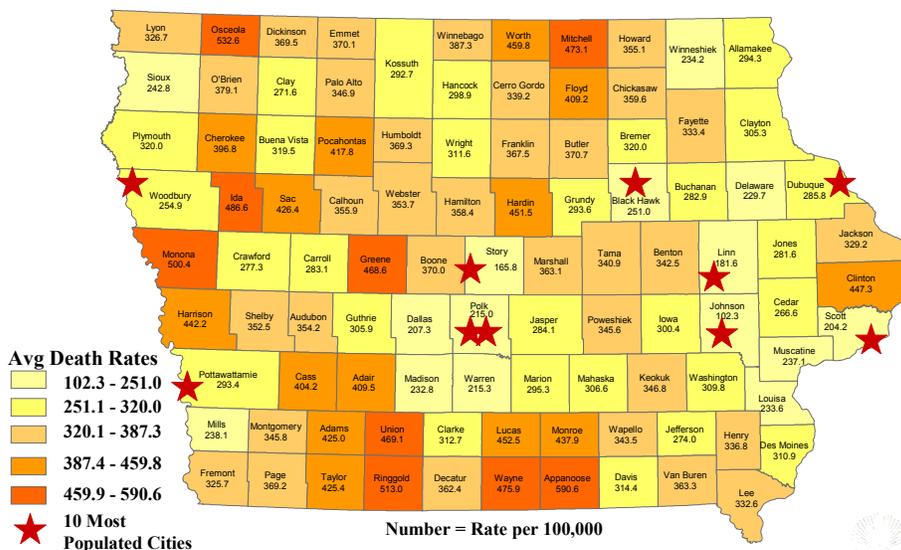
The Behavioral Risk Factors Surveillance System (BRFSS) is a yearly telephone survey that is designed to identify and monitor risk factors for chronic diseases and other leading causes of death. Obesity and overweight are assessed yearly in the BRFSS, while nutrition and physical activity are assessed every odd year (e.g., 2001, 2003). The Youth Risk Behavior Surveillance System (YRBSS) was developed by the CDC to monitor six categories of priority health-risk behaviors among youth. It includes a national school-based survey administered to students in grades 9-12 every odd year. An inadequate number of schools have elected to distribute the survey, so there have not been reliable data available since 1997. The Child and Adolescent Health Measurement Initiative administered a national telephone survey named the National Survey of Children's Health that includes accurate and reliable statistics of Iowa children. There are few accurate data sources for early childhood overweight. The Centers for Disease Control and Prevention supports a database (the Pediatric Nutrition Surveillance System) that collects state-data on early childhood nutrition-risk indicators. The Pediatric Nutrition Surveillance System (PedNSS) may be Iowa's only source of reliable data on the prevalence of overweight among our youngest children. Iowa's Special Supplemental Nutrition Program for Women, Infants, and Children (the

WIC Program) has participated in the PedNSS since 1984. PedNSS provides data on the prevalence of underweight, overweight, anemia, low birth weight and breastfeeding initiation and duration for children ages 0-4 years who participate in the WIC program. PedNSS data are collected, using specific techniques and equipment. The data are limited in that it describes only the population of children whose families meet the income guidelines for WIC (185% of the Federal Poverty Guideline) and choose to participate. Approximately forty three percent of all children born in Iowa participate in the WIC program during their first year of life. PedNSS data on overweight does provide insight into the growing prevalence of overweight among young children living in Iowa.

Obesity-related Disease Burden in Iowa

A complete review of Iowa Chronic Disease “Chronic Diseases: A Critical Issue for Iowa” can be accessed at:
www.idph.state.ia.us/common/pdf/publications/chronic_diseases.pdf.

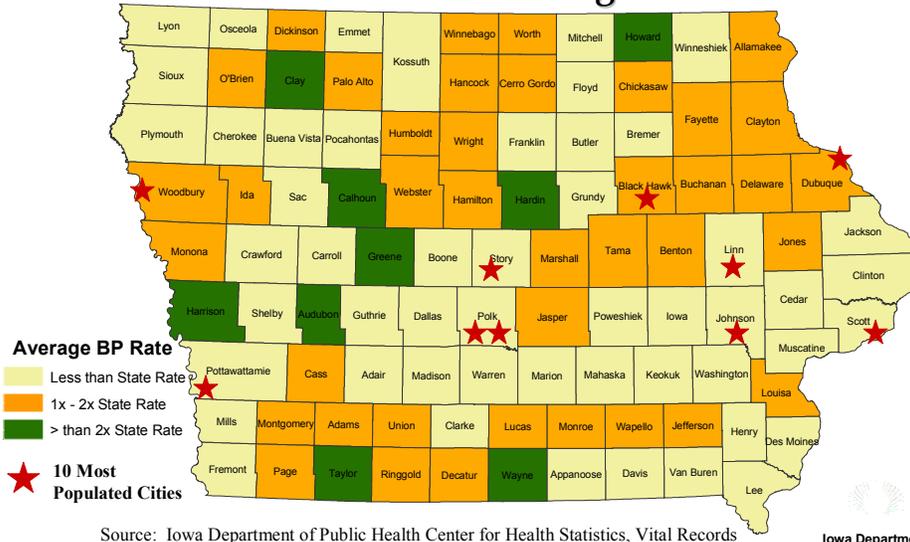
Average Heart Disease Death Rates 2000-2003



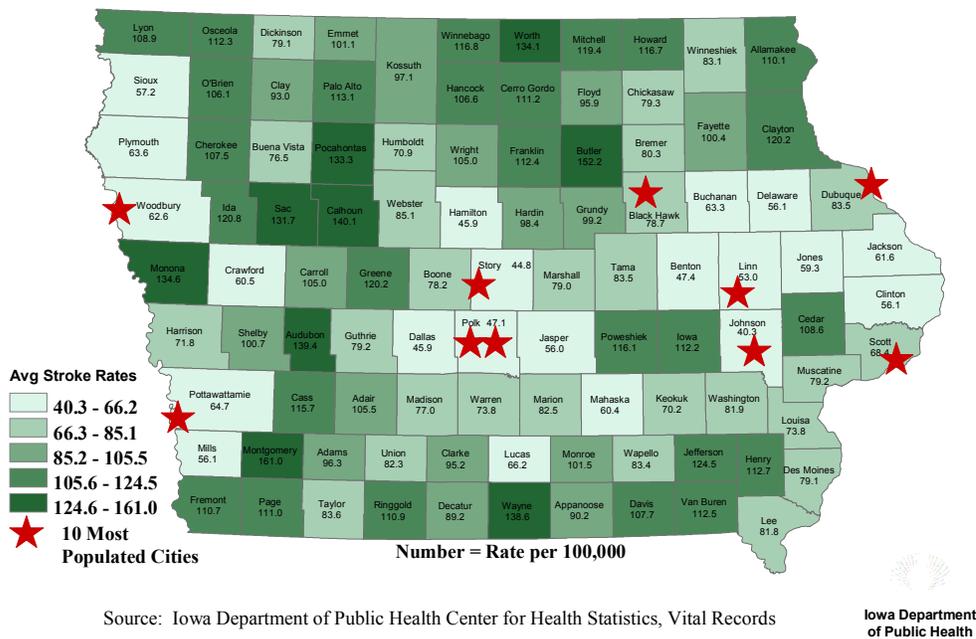
Source: Iowa Department of Public Health Center for Health Statistics, Vital Records



Essential Hypertension and Hypertensive Renal Disease Deaths Comparison to State Rate 2000-2003 Average



Average Stroke Death Rates 2000-2003



Process Objectives

Considering needs, capacities and potential, Iowans Fit for Life program staff and the work groups developed the following short-term objectives for building a program that expands and builds on the first year of plan development. Strategy implementation will be subject to availability of funds.

1. By 2007, expand relationships with partners.

- 1.1 Meet with each partner to further delineate roles and opportunities.
- 1.2 Bring partners on specific strategies together to refine strategies and identify partnership gaps.
- 1.3 Establish the task forces and advisory committees necessary to implement strategies identified in the Plan.
- 1.4 Build partnerships to enhance current funding and assist with financing community pilot projects beginning in early 2006.

2. By 2007, partner with an Iowa State University Health Promotion class to develop on the Iowans Fit for Life web site an inventory of area referral resources for physical activity and nutrition programs.

- 2.1 Create an inventory of nutrition and physical activity opportunities on the Iowans Fit for Life web site, including an inter-active mechanism for new programs to submit their information.
 - 2.1.1 Provide an opportunity for Iowans Fit for Life partners to add programs to the inventory.*
 - 2.1.2 Post the nutrition and physical activity program inventory on the Iowans Fit for Life web site.*
 - 2.1.3 Determine ways to notify communities of the programs that can be used for identifying healthy eating and physical activity opportunities in their areas.*

3. By 2007, create an Education Conference Task Force with members from the work groups, stakeholders and education partners to determine the need for, and identify the purpose of, a proposed bi-annual conference.

4. By 2007, work with the governor's office to develop/support statewide initiatives to increase healthy eating and physical activity opportunities.

- 4.1 Work with the governor's office to support initiatives in the intervention schools and communities
 - 4.1.1 Write press releases to announce and support school/community events.*
- 4.2 Create incentives for state employees that reinforce healthy lifestyles.
 - 4.2.1 Provide monthly insurance premium reduction for employees who participate in healthy behaviors and/or programs.*

5. By 2007, develop a social marketing and communication plan for the nutrition and physical activity initiative.

- 5.1 Assemble a task force to identify the social marketing elements in the work-group goals and strategic partners for a social marketing campaign.
- 5.2 Hire a consultant and/or communications position, subject to availability of funds..
- 5.3 Facilitate task-force meetings to develop or adopt a social marketing campaign related to nutrition and physical activity.
- 5.4 Direct the social marketing campaign to populations at high risk of obesity and related conditions.
- 5.5 Implement and evaluate the social marketing campaign and modify the messages to meet the needs of the project to most effectively target vulnerable populations.
- 5.6 Support and widely use messages developed through the Iowans Fit for Life social marketing and communication plan.
- 5.7 Support a recognition program to publicize best practices for healthy eating and physical activity, targeting child care, education, work sites, health care and older Iowans, and communities.

6. By 2008, provide nutrition and physical activity documents, tool kits, workbooks and resources on the Iowans Fit for Life web site.

- 6.1 Publish tool kits, information pieces and resources as appropriate and place in the state information clearing house so all materials are readily available.
- 6.2 Establish a way to update and maintain the most current resources on the Iowans Fit for Life web site.

7. By 2007, establish six new regional Community Health Consultant positions as health-promotion specialists with emphasis on physical activity and nutrition to prevent obesity and other chronic conditions.

- 7.1 Partner with Iowa State Extension, state colleges and universities with nutrition and physical activity/health-related programs, to facilitate the establishment health-promotion specialist positions.
- 7.2 Re-submit legislation to establish funding for these positions.

8. By 2010, identify model programs that exemplify healthy physical activity and eating environments.

Healthy Iowans 2010 goal: 13-1, 13-3, 13-4, 13-5, 16-3, 16-5, 16-6, 16-8
Socio-ecological model: community, ,organizational

PARTNER:
University of Iowa Prevention Research Center

- 8.1 Provide tools for child care, education, work sites, health care and older Iowans that encourage healthy physical activity and eating.

- 8.2 Work with the governor's office and an Iowans Fit for Life task force of partners who work with model programs to determine criteria for exemplary healthy eating and behaviors and a plan for recognition.
- 8.3 Award exemplary programs for child-care, education, work sites, health care and older Iowans, and communities.
- 8.4 Publish and disseminate best practices for exemplary healthy eating and behaviors.

9. By 2007, expand and implement an Iowans Fit for Life surveillance and evaluation system to facilitate data-driven decisions.

PARTNER: Epidemiology/Program Evaluation Committee

- 9.1 Compile and publish regular reports on nutrition, physical activity, obesity, and chronic disease in Iowa.
- 9.2 Establish data source guidelines.
- 9.3 Expand data collection partnerships.
- 9.4 Implement over-sampling of the Behavioral Risk Factor Surveillance System (BRFSS) telephone survey questions in intervention communities/counties.
- 9.5 Explore ways to increase high school participation in the Youth Risk Behavioral Surveillance System (YRBSS).
- 9.6 Explore ways to increase elementary and middle school participation in the Physical Activity and Nutrition Among Rural Youth (PANARY) initiative.

Integration with Existing Public Health Efforts in Nutrition Physical Activity and Chronic Disease Initiatives

Iowans Fit for Life will integrate with existing nutrition and physical activity initiatives in addition to other chronic disease prevention and control programs and programming that addresses the health of Iowans of all ages. The next few pages include a summation of some of the key programming at the Iowa Department of Public Health and with other key statewide partners.

Iowa Arthritis Program

The Iowa Arthritis Program's goal is to reduce the impact of arthritis and improve the quality of life of Iowans affected by arthritis. The program uses several approaches to reduce the impact of arthritis in Iowa by distributing a variety of awareness materials, aid health-care providers to care for people with arthritis, and provides several opportunities to use physical activity as a treatment for arthritis through aquatic exercise, self-help courses and the Arthritis Foundation Exercise Program.

Arthritis Foundation Exercise Program (formerly known as PACE – People with Arthritis Can Exercise) is an exercise program designed for people with arthritis and is lead by trained personnel. Gentle activities are performed sitting, standing, or on the floor. The exercises help increase joint flexibility, range of motion, and maintain muscle strength. Other benefits can include reduced pain and stiffness and improved functional ability and attitude. An educational component is also included.

Arthritis Foundation Self-Help Program is a group education program lead by trained volunteers. Topics include making and carrying out action plans; pain and fatigue management; medications; exercise; dealing with difficult emotions; healthy eating, and relaxation and stress management.

Arthritis Foundation YMCA Aquatic Program is designed for people with arthritis and led by trained instructors in warm water. Exercise in water prevents excess strain on joints and muscles. Physical benefits include decreased pain and stiffness.

Breastfeeding Promotion

Breastfeeding promotion in Iowa occurs through a multi-channel approach. The Iowa Department of Public Health with the Iowa Lactation Task Force, the Iowa WIC program, La Leche League of Iowa, Mother's Milk Bank of Iowa, the National Breastfeeding Campaign, and a Loving Support grant are working towards the *Healthy People 2010* goal of 75 percent of infants breastfed at birth and 50 percent breastfed at six months.

Cardiovascular Risk Reduction

Iowa's Cardiovascular Risk Reduction (CVRR) supports community-based approaches to serve populations at greatest risk for cardiovascular illness. Successful community-intervention strategies are shared to provide effective programming examples for targeted populations. Local agencies and organizations interact with other community and health-care leaders to enable a more holistic approach for families in high-risk environments. Local community programming, supported by cardiovascular risk reduction, assists families with multiple risk factors, and targets reducing overweight/obesity in Iowa's communities.



All cardiovascular risk reduction activities are planned to align with other department and state health initiatives, such as *Healthy Iowans 2010*.

Cardiovascular health directly and indirectly impacts several chapters and goals in *Healthy Iowans 2010*. They include: Chapter 3 - Diabetes, Chapters 5 - Educational and Community-based Programs, Chapter 9 - Heart Disease and Stroke, Chapter 13 - Nutrition, and Chapter 16 - Physical Education/Fitness.

Comprehensive Cancer Control

The Comprehensive Cancer Control program (CCC) brings together partners whose aim is to decrease cancer and the deaths and disabilities that occur because of the disease.



Iowa's cancer prevention and control plan includes the following priorities related to Nutrition and Physical Activity to reduce obesity and other chronic diseases:

- Prevention strategies to reduce tobacco use, obesity, sunburns, radon exposure, alcohol use, and barriers to using cancer risk assessment and DNA testing.
- The Iowa Consortium for Comprehensive Cancer Control has formed eight implementation groups, with one specifically addressing support of statewide efforts to reduce the prevalence of obesity in Iowa

Diabetes Prevention and Control

The Iowa Diabetes Control Program (DCP) is established and funded under a cooperative agreement with the Centers for Disease Control and Prevention. The Iowa Diabetes Network, a core capacity program, has been established. The network is a statewide coalition of health-care professionals, voluntary organizations, state governmental agencies, insurers, and interested associations. The network has established several educational opportunities and resources for local use. Adherence to National Standards of Care for diabetes is promoted through educational offerings, resources, and certified outpatient education programs.



T



The burden of diabetes is monitored through use of statewide data, the Behavioral Risk Factor Surveillance System, and claims data from various sources. The prevalence of diabetes in Iowa is increasing and is most likely due to the increase in the obesity rate and age of Iowans.

Early Childhood Iowa

Early Childhood Iowa is a statewide collaborative effort to build Iowa's Early Care, Health, and Education System. The Early Childhood Iowa Stakeholders are the catalysts for developing Iowa's comprehensive system by:

- Building linkages among early childhood initiatives.
- Identifying and fostering champions for early childhood initiatives.
- Developing results accountability for the system to support data-driven decision-making.
- Creating a commitment for broadening public will and investing resources for Iowa's Early Care, Health, and Education System.



- Developing and implementing a public awareness campaign to continue current efforts to raise awareness about early childhood issues.

The Early Childhood Iowa Stakeholders developed a Strategic Plan for building a comprehensive Early Care, Health, and Education system for Iowa. The Early Childhood Iowa Stakeholders' Strategic Plan includes: 1) Healthy Children, 2) Children Ready to Succeed in School, 3) Safe and Supportive Communities, 4) Secure and Nurturing Early Care Environments, 5) Secure and Nurturing Families. The Early Childhood Iowa Stakeholders are currently engaged in the process of implementing the strategic plan. The early childhood work group has been involved with the Early Childhood Iowa stakeholders. The Early Childhood Iowa Strategic Plan has specific goals and strategies that mirror the nutrition and physical activity comprehensive state plan. Current goals are:

- Increase public engagement and support for families with young children. Strategies to achieve this goal - Collaborate with organizers of community and neighborhood events to promote the development of activities for families with young children.
- Create a community family friendly work force policy. Strategies to achieve this goal - Partner with chamber of commerce in promoting family friendly policies, educate employers about early childhood issues and family friendly policies, and establish employer recognition for family friendly policies and practices.

Building Healthy Communities in Iowa through Harkin Wellness Grants

The Iowa Department of Public Health has established Harkin Wellness Grants to address disease prevention and wellness. The funding is provided through a Senator Tom Harkin earmark. The program has awarded \$2,700,000 to 28 Iowa communities for local projects that will significantly impact their health. One hundred thirty-eight Iowa communities applied for funding for a wide variety of community projects coordinated by coalitions including counties, townships, education agencies, school districts, public health organizations, health-care providers, and community-based nonprofit organizations.

Grantees are charged to focus on at least one of the following wellness priorities: nutrition, physical activity, mental health, and smoking cessation. Funds will be used for projects such as building bike paths, purchasing fitness equipment, or implementing nutrition education programs for children and adults, to name but a few.

Healthy Child Care Iowa

The Healthy Child Care Iowa campaign strives to improve the health and safety of Iowa children enrolled in early care and education settings by focusing on providing health and safety consultation, technical assistance, and training to Iowa child care providers through Child Care Nurse Consultants (CCNC). The CCNC are registered nurses who have completed a nationally approved curriculum through the Iowa Training Project for Child Care Nurse Consultants, a course of

study specific to working in the specialized child care and early education industry.

Healthy Child Care Iowa has adopted the five goals outlined in the Blueprint for Action from the Healthy Child Care America campaign:

1. Safe, healthy child care environments for all children, including those with special health needs
2. Up-to-date and easily accessible immunizations for children in child care
3. Access to quality health, dental, and developmental screening and comprehensive follow-up for children in child care
4. Health and mental health consultation, support, and education for all families, children, and child care providers
5. Health, nutrition, and safety education for children in child care, their families, and child care providers

Child Care Nurse Consultants provide education and consultation to children, families, and child-care providers about appropriate physical activity and nutrition. Many consultants have been trained in Team Nutrition and have strong collaborations with their local WIC programs.

Iowa Fit Kids Coalition

The Iowa Fit Kids coalition was established through the Iowa Department of Public Health to address childhood obesity. The coalition began as a task force and released a white paper on Prevention of Child and Adolescent Obesity in Iowa in 1997. The coalition is currently a subcommittee of the Iowa Nutrition Network

Iowa Nutrition Network

The Iowa Nutrition Network is a partnership of public agencies, private organizations, and communities dedicated to promoting healthy lifestyles among all Iowans, particularly among low-income individuals and families. The network believes that good food choices and physical activity are essential to maintaining and improving health. Primary funding for the Iowa Nutrition Network comes from the USDA Food Stamp Program. The network supports a state-level coalition of partners who meet on a quarterly basis. Three of the main initiatives of the network are Building and Strengthening Iowa Community Support for Nutrition and Physical Activity (BASICS), the Chef Charles Club and the Pick a better snack campaign.

BASICS provides federal funding for community coalitions to expand nutrition and physical activity education programs serving food stamp recipients and food-stamp-eligible populations. The goal of the program is to provide educational programs that increase the likelihood that low-resource audiences can make healthy food choices consistent with the dietary advice of the Food Guide Pyramid and Dietary Guidelines for Americans. To meet this goal, the Iowa

Nutrition Network provides traditional nutrition education resources combined with unique social marketing strategies. There are currently 100 schools participating in nutrition education efforts with a major focus on increasing fruit and vegetable consumption in addition to objectives related to physical activity.

The Pick a **better** snack™ campaign, which was funded and developed by Team Nutrition (Iowa Department of Education), the Iowa Nutrition Network (Food Stamp Nutrition Education, United States Department of Agriculture), and the Iowa Department of Public Health, was implemented in the spring of 2000.

The Pick a **better** snack™ aims to provide consistent nutrition messages to key target audiences of the campaign are low-income children, ages 2 to 12 years, and their parents and caregivers. The campaign includes simple messages with colorful fruit and vegetable graphics and can be applied in a variety of ways and include recipe cards, posters, grocery-store signage, bookmarks, achievement certificates, brochures, and billboards, as well as radio scripts. Venues for delivering campaign messages include activities by extension agencies, grocery stores, and schools as well as community and youth organizations. Success of this program is measured in both increased consumption of fruits and vegetables, but also increased acceptance (likeability) of fruits and vegetables.

The Chef Charles Club is a nutrition education project for older adults made possible by funding from the Iowa Nutrition Network, Iowa Department of Public Health, and Food Stamp Nutrition Education of the United States Department of Agriculture. The nutrition education program is designed for congregate meal participants.

As a result of participating in the Chef Charles Club, older adults will: eat more fruits and vegetables; be more physically active each day; prepare and cook foods safely; report fewer problems having enough money to buy the food they need. A monthly nutrition newsletter, bingo game, and instructor's guide for demonstrations are provided on the following topics:

- Fruit and vegetable intake.
- Physical activity.
- Food safety.
- Food security and resource management.

Lighten Up Iowa

Lighten Up Iowa is an annual five-month competition that encourages Iowans to develop healthy activity and eating habits. Iowans are encouraged to form teams of up to 10 people and then “go the distance!” Since its first year in 2003, over 39,300 Iowans have been involved with the program. During those two years 4.8 million miles of activity has been logged and 65,000 pounds have been lost. In addition, 25 other states have started Lighten Up programs and Lighten Up Iowa was a 2005 recipient of Iowa Medical Society’s Washington Freeman Peck Award.

Team competition is recognized in two divisions, weight loss due to healthy, appropriate diet and physical activity or accumulated activity in the form of miles. A team can enter either one division or both for their entry fee. Participants receive a training T-shirt, weekly nutrition and activity tips, and free entry into the Iowa Games fitness walk (February) or the Summer Iowa Games volkswalk (July).

Go the Distance began in 2004 as the youth component of Lighten Up Iowa. Go The Distance is a four-month team (10-30 members) competition designed to help youth increase their physical activity levels. Go The Distance is free, and teams can qualify for monetary awards at the conclusion of the program. In 2004, 2,837 Iowa youth on 1,150 teams logged 604,324 miles. Go The Distance Day is a one-day event for schools in May. The purpose is to inform youth about the benefits of physical activity every day and show them that being active is fun. Schools plan a 30-minute segment of consecutive aerobic activity. In 2004, 27,030 students from 97 schools participated in Go The Distance Day.

Office of Women's Health

The Iowa Department of Public Health (IDPH) Office of Women's Health works to promote healthy lifestyles for Iowa women. The office has a Women's Health Information Center web site for diverse and comprehensive women's health and family health information, <http://www.womenshealthiowa.info>. This site provides a wide range of topics including reproductive, parenting, mental health, and many more. The information provided is not intended for self-diagnosing or treating a health problem or as a substitute for consulting a licensed health care professional. The office also compiles an inventory of IDPH programs that address the unique health care needs of women. Twenty-eight programs incorporate women's health-related services into their public health programming, including Iowans Fit for Life.

Special Supplemental Nutrition Program for Women, Infants and Children (WIC)

WIC is a public health program that serves pregnant and postpartum women, and children under the age of 5. WIC provides nutritious foods, nutrition education, and referrals to other health-care agencies. Last year, 44 percent of all the babies born were eligible for Iowa's WIC program, and according to the U.S. Census, approximately 188,000 Iowans are under five years of age.

The Iowa WIC program has been using nutrition and physical activity education modules to prevent childhood obesity since 2004. The modules originally developed by the Pennsylvania WIC program are used to provide caregivers of children with a variety of health messages designed to decrease the incidence of childhood obesity and promote positive parenting skills in feeding young children.

Title V

Title V Maternal and Child Health provides preventive and primary care services for pregnant women, mothers, and infants up to age one year, preventive and primary care services for children, family centered, community based services for children and youth with special health care needs and their families. There are 25 local maternal and child health agencies and 13 regional Child Health Specialty Clinics across Iowa.

Through the Title V five year needs assessment obesity was identified as one of the top priorities for the state. A state performance measure was developed using the Iowans Fit for Life project as the lead. The performance measure will use data gathered from Iowans Fit for Life pilot intervention in communities across the state.

Tobacco Use Prevention and Control

The Division of Tobacco Use Prevention and Control is a comprehensive partnership among state government, local communities, and the people of Iowa to foster a social and legal climate in which tobacco use becomes undesirable and unacceptable. Every county in Iowa has the opportunity to apply for funds, based on their population, to be used to reduce the death and disease caused by tobacco use. These grass roots based Community Partnerships focus on the four goals set by the Center for Disease Control and Prevention (CDC):

- Prevent the initiation of and establishment of tobacco use in nonsmokers, especially among children and young people;
- Reduce the number of users of tobacco products
- Eliminate exposure to secondhand tobacco smoke
- Identify and eliminate the disparities related to tobacco use and its effects among different population groups.

Tobacco use is linked to overweight and obesity, both in adults and children. The Division of Tobacco Use Prevention and Control will be key partner with Iowans Fit for Life in helping Iowans achieve a healthier lifestyle by reducing the prevalence of tobacco use, improving nutrition and increasing physical activity.

WISEWOMAN Cardiovascular Research Study

The Bureau of Chronic Disease Prevention and Management is funded by the Centers for Disease Control and Prevention to test a nutrition and physical activity behavior modification intervention for Iowa women age 40 - 64 who participate in the Breast and Cervical Cancer Early Detection Program. The study also tests the integration of cardiovascular screening services into its current system of delivering the Breast and Cervical Cancer Early Detection Program. The WISEWOMAN research study is currently running in 15 sites across the state.

Integration with Other Statewide Existing Efforts with Nutrition, Physical Activity and Chronic Disease Initiatives

State Inventory of Existing Programs coming soon on:

www.iowa.gov/iowansfitforlife

Iowans Fit for Life Partnership (work group members)

Mike	Abrams	Polk County
Iradge	Ahrabi-Fard	NutriActive Healthy Lifestyle for Lower Elementary HPELS UNI
Linda	Albright	Henry County Health Center
Luann	Alemao	Luann Alemao & Associates
Joyce	Allard	IDPH
Janet	Allen Graeve	Mercy Hospital Medical Foundation
Diane	Anderson	Buena Vista CO Public Health & Home Care
Mollie	Anderson	Iowa Department of Administrative Services
Kathy	Andresen	Scott County Health Department
Cecelia	Arnold	National Catholic Rural Life Conference
Ron	Askland	Mercy Medical Center
Lynnelle	Bachelor	Community Health Care
Sally	Barclay	Nutrition Clinic for Employee Wellness - ISU
Matt	Bear	Meskwaki Diabetes Program
Larry	Beaty	Iowa Academy of Family Physicians
Cynthia	Beauman	North West Aging Association
Dawn	Beaver	Community Health Services of Marion County
Virginia	Bechtold	Council Bluffs Community Schools
Amy	Becker	Greene County Medical Center Public Health
Barry	Bennett	Iowa Department of Human Services
Kavitha	Bhat Shelbert	U of I-Weight Management Clinic
Pam	Biklen	Iowa Care Givers Association
Londa	Blom	Mercy Medical Center
Amber	Blomgren	IDPH
Julia	Blunt	Ottumwa Regional Health Center-Pediatrics Clinic
Tami	Blunt	Taylor County Public Health Agency
Elaine	Boes	Palo Alto Community Health
Theodore	Boesen, Jr	Iowa Nebraska Primary Care Association
Joe	Bolkcom	Senator
Rhonda	Boltz	Children First (Lee/Van Buren Empowerment)
Jane	Borst	IDPH
Rhonda	Bottke	Black Hawk County Health
Sheri	Bowen	Mills County Public Health Dept.

Mary	Bracken	IPTV
Mark	Braun	U of I - Board of Regents
Deb	Brekunitch	Covenant Medical Center
Wendy	Brewer	MICA
Marcia	Broell	Grundy Center Senior Center
Carolyn	Brown	La leche League of Iowa
Del	Brown	International Lions Clubs of Iowa
Timi	Brown	Covenant Medical Center
Rossany	Brugger	Department of Human Rights
Tammy	Bryant	Cerro Gordo CO Dept of Public Health
Heather	Budana-Smith	Mid-Sioux Opportunity, Inc. - WIC
Todd	Burstain	University of Iowa
Charlotte	Burt	Iowa Dept of Education
Connie	Buss	Boone County Hospital
Sharon	Campbell	Matura Action Corporation
Clydene	Canady	Mid-Sioux Opportunity, Inc. - WIC
Angela	Canales	Upper Des Moines Head Start
Nicole	Carkner	Quad City Health Initiative
Larry	Carl	Iowa Dental Association
Denise	Carlson	Partner
Brittany	Carnahan	American Home Finding
Dorothy	Carpenter	Iowa Medical Society Alliance
Sam	Carrell	Boys & Girls Clubs of Central Iowa
John	Carroll	Iowa Academy of Family Physicians
Jody	Caswell	Iowa Department of Human Services
John-Paul	Chaisson-Cardenez	Iowa Department of Human Rights
Lois	Chandler	Pottawattamie County WIC Program
Chris	Childers	Hillcrest Family Services
Kathy	Christenson	Denison Community School
Sally	Clausen	IDPH
Denise	Coder	Cass County Memorial Hospital
Nan	Colin	Visiting Nurse Association
Kevin	Concannon	Iowa Department of Human Services
Jane	Condon	Calhoun County Health Department
Judy	Conlin	Girl Scouts of Moingona Council
Mary Rose	Corrigan	Dubuque County-City Hall Annex
Kim	Courtney	Your Family Center
Debbie	Crawford	Waterloo Visiting Nursing Association
Ken	Daley	Iowa Association for Health, Physical Activity, Physical Education
Angela	Dalton	Bike to Work Week
Dixie	Daugherty	Van Buren County Hospital
Rick	Davis	Boone High School
Belinda	DeBolt	Page County Public Health
Tamee	DeCoursey	Community Action
Nancy	Degner	Iowa Beef Industry Council
Vernon	Delpesce	YMCA of Greater Des Moines
Amy	DeVault	Adair County Home Care
Nancy	Dew	SE Iowa Community Action
Lynnelle	Diers	Wapello County Public Health
Angela	Dillon	St Anthony HHA/Carroll County Public Health

Joseph	Dillon	University of Iowa College of Medicine
Patricia	Donohoue	Children's Hospital of Iowa at UIHC
Kim	Dorn	Community Health Services of Marion County
Karen	Doughan	Child Care Resource & Referral of Central Iowa
Stephanie	Downs	City of Ames
Jan	Drury	Iowa Veteran's Home
Chuck	Dufano	Johnson County Public Health
Thomas	Dunbar	Dunbar/Jones PLC
Brian	Dunn	Wellmark BC/BS
Janice	Edmunds-Wells	IDPH
Lori	Egan	Northeast Iowa Community Action Center
Connie	Ehlers	Iowa Vocational Rehab Services
Cindy	Elsbernd	Iowa Kidstrong, INC
Susan	Emmerich	La Clinica de Esperanza
Julie	Enga	Wellmark Blue Cross and Blue Shield of Iowa
Susan	Erickson	Iowa State University
Katie	Espenmiller	Lighten Up Iowa
Tom	Evans	Iowa Health System
Anthony	Farmer	Grinnell High School
Nancy	Farmer	Virginia Gay Hospital Home Health Agency
Sandra	Fiegen	Nutrition Programs & School Transportation
Dixie	Findley	Iowa Care Givers Association
Nadine	Fisher	Johnson County Public Health
Jerry	Fleagle	Iowa Grocery Industry Association
Amy	Fletcher	U of I - Health Iowa/Student Health Service
Kathy	Ford	Matura Action Organization
Marcy	French	Phillip W Myer
Karla	Fultz McHenry	Iowa Medical Society
Linda	Funk	Soyfoods Council
Judy	Gale	Matura Action Corporation
Linda	Gau	Home Care Services of Boone County Hosp.
Ted	George	Iowa State Board of Health
Mary	Gilchrist	University of Iowa Hygienic Lab
Vicki	Gill	Webster County Health
John	Gilliland	Iowa Association of Business and Industry
Denyse	Gipple	Grinnell Regional Public Health
Jill	Gleason	Heritage Area Agency on Aging
Julie	Goedken	Winneshiek CO Public Health Nursing Service
Linda	Goeldner	Iowa Nurses Association
Karen	Goff	Community Health Services of Marion County
Annemarie	Goldhorn	Black Hawk County Health Department
Stephanie	Goodrich	Dallas County Public Health
Lorrie	Graaf	IDPH
Fred	Greiner	Fareway Stores, Inc.
Bob	Grems	Regional Wellness Center
Steve	Gress	Sysco Food Services of Iowa, Inc.
Janet	Griffin	Wellmark
Barry	Griswell	Principal Financial Group
Greg	Gruss	Upper Iowa University
Teri	Gruss	Human Performance Resources

Della	Guzman	Iowa Health - Des Moines
Sonja	Haferbier	Bethany Life Communities
Gretchen	Hageman	IDPH
Dee	Hagmeier	KAME Pharmacy & Wellness Center
Nancy	Hahn	Henry Health Center
Jim	Hallihan	Iowa Games/Lighten Up
Margaret	Hallman	Iowa Lutheran Hospital-WIC Program
Kaye	Halvorson	Principal Financial Group
Robin	Hamre	Centers for Disease Control & Prevention
Elizabeth	Hanna	West Des Moines Community Schools
Mary	Hansen	West Des Moines Community Schools
Patti	Harding	Nutrition Programs & School Transportation
Nancy	Haren	Grundy County Public Health
Tanya	Hargrave-Klein	Mary Greeley Hospital
Cindy	Harms	Community Action of SE Iowa
Lynnelle	Haugen	Siouxland Aging Services, INC
Mark	Haverland	Iowa Department of Elder Affairs
Kristy	Havlik	St. Luke's Rehab
Sharon	Hawn	Johnson County Public Health
Pat	Headley	Mesquaki Settlement
Jana	Heefner	Dallas County Public Health
Alexa	Heffernan	Iowa Business Council
Lisa	Hein	Iowa Natural Heritage Foundation
Kim	Hellige	Ottumwa Community School District
Laurene	Hendricks	Iowa Arthritis Program - IDPH
Larry	Hensley	University of Northern Iowa
Ed	Hertko	Hertko Hollow Children's Diabetes Camp Foundation
Carol	Hibbs	Community Y of Marshalltown
Patricia	Hildebrand	Mid Iowa Community Action
Carol	Hinton	IDPH
Terry	Hoffman	Sioux City Parks & Recreation
Tina	Holdsworth	Denison Community Schools
Ellen	Holtwick	HACAP/WIC
Brenda	Hoskins	Iowa Nurse Practitioner Society
Elizabeth	Howe	VNA Clinton County
Bev	Huebner	Grinnell High School
Laurie	Huftalin	AEA 267 - Charles City
Nancy	Huisinga	Wright County Public Health
Sue	Hyland	Iowa Dental Hygienists Association
Julie	Ingersoll	Iowa Dept. of Human Services
Marilyn	Jackson	Wayne County Nutrition Coalition
Morgan	Jean	Jasper County Elderly Nutrition
Judy	Jeffrey	Iowa Department of Education
Marlene	Jepsen	Iowa Department of Education
Roxane	Joens-Matre	IDPH
Arlene	Johnson	IDPH
Haleisa	Johnson	Central Community Hospital
Tom	Johnson	Grinnell-Newburg Schools
Beth	Jones	Iowa Department of Public Health
Cheryll	Jones	Child Health Specialty Clinics

Marilyn	Jones	IDPH
Beth	Joslin	Johnson County Public Health
Kerry	Juhl	Wellness Council of Iowa
Cindy	Kail	Medical Center and Public Health
Grace	Kavanaugh	St. Luke's Health System
Deb	Kazmerzak	Iowa/Nebraska Primary Care Association
Lisa	Kazmerzak	Pella Corporation
Jody	Kealey	Child Health Specialty Clinics
Sue	Kell	Iowa Academy of Family Physicians
Tiffany	Kennedy	Scott County Health Department
Bethany	Kintigh	Adair County Home Care
Deb	Kirchner	Van Buren County Public Health
Cathy	Klaassen	Osceola Wellness Center
Katie	Kleemier	Riverfront YMCA
Cindy	Klein	YWCA-Waterloo
Susan	Klein	ISU Extension, Polk County
Bruce	Koepl	AARP-Iowa
Neal	Kohatsu	U of I - College of Public Health
Lisa	Korleski	IDPH
Katie	Kriener	Silver Sneakers
Wendy	Kritenbrink	WIC
Amanda	Kroells	Hispanic Education Resources
Shelby	Kroona	Siouxland District Health Department
Laura	Krouse	Farmer
Dan	Lake	Senior Olympics
Tim	Lane	IDPH
Jill	Lange	Dallas County Hospital
Kim	Lansing	American Cancer Society
Lucie	Laurian	U of I - Urban & Regional Planning
Mary	Lawyer	Iowa Department of Economic Development
Daniel	Lay	USDA-FNS
Penny	Leake	Winneshiek CO Public Health Nursing Service
Joyce	Legg	Tama County Public Health and Home Care
Kathy	Leggett	Blank Children's Hospital
James	Lehman	Genesis Health System
Richard	Leopold	Iowa Environmental Council
Schurman	Leora	Warren County Nutrition
Elaine	Leppert	Ottumwa Regional Health Center
Irene	Lewis-McCormick	Des Moines Area Community College
Louise	Lex	IDPH
Amy	Liechti	Riverfront YMCA
Joanne	Lighter	Community Health, Kossuth Regional Health Center
Jane	Linnenbrink	Iowa Veteran's Home
Ruth	Litchfield	Iowa State University Extension
Jeffrey	Lobas	Child Health Specialty Clinics
Ted	Lobello	Partner
Vera	Loening-Baucke	Children's Hospital
Stephanie	Loes	Healthy Linn Care Network
Erin	London	Iowa Health - Des Moines
Randy	Lueth	Engineering Plus, Inc.

Ann	Lundvall	Cerro Gordo CO Dept of Public Health
Peggy	Luukkonen	Siouxland Aging Services, INC
Betty	Mallen	Hancock County Public Health Services
Josh	Mandelbaum	Governor Vilsack's office
Jodi	Manson	Mercy Medical Center
Bonnie	Mapes	IDPH
Pat	Markham	Cass County Memorial Hospital
Barb	Marlin	Tri-State Medical Group
Emilia	Marroquin	UDMO Head Start
Jennifer	Mars	Area Education Agency 4
Rip	Marston	University of Northern Iowa & IAHPERD
Rachel	Mathy	West Central Development Corporation
Oksana	Matvienko	UNI
Cindy	Maulsby	Iowa Afterschool Alliance
Linda	McCabe	Burlington Pediatric Association, PC
Lorie	McCormick	Iowa Department of Human Rights
Martha	McCormick	ISU/Polk County Extension
Julie	McMahon	IDPH
Lori	Meighan	Eastern Iowa Community College District
Bruce	Meisinger	Black Hawk County Health Department
Kathy	Mellen	U of I - Student Health Service
James	Merchant	U of I-College of Public Health
Barb	Merrill	Iowa Child Care & Early Education Network
Dixie	Meyer	Community Health, Kossuth Regional Health Center
Gail	Meyer	Iowa Hospital Association
Anne	Mikita	CASI
Karen	Miller	Emmet County Public Health
Lori	Miller	Operation Threshold
Rae	Miller	Prairie Lakes Area Education Agency
Thomas	Miller	Depart of Justice
Terri	Mishler	Nutrition Consultant
Megan	Moeller	University of Iowa
Jean	Morgan	Jasper County Elderly Nutrition
Chuck	Morris	ISU Extension 4-H Youth Development
Barbara	Motsenbocker	WCDC-WIC
Jeanette	Mukayisire	YWCA
Natalie	Mullin	Healthy Henry County Communities
Jody	Murph	American Academy of Pediatrics
Alice	Musselman	Aging Resources of Central Iowa
Sally	Myers	Hawkeye Valley Area Agency on Aging
Jill	Myers-Gadelmann	IDPH
Kim	Nanke	Lighten Up Iowa
Edie	Nebel	Washington County Public Health & Home Care
Kathleen	Nelson	Hancock County Public Health Services
Linda	Nelson	Iowa State Education Association
Diana	Nelson-Moroz	Bethany Life Communities
John	Nesbitt	University of Iowa, Special Recreation for the Disabled International
Kathy	Nesteby	Iowa Commission on the Status of Women
Greg	Nichols	Board of Regents
Erik	Nieuwenhuis	St. Luke's Rehab Services

Faryle	Nothwehr	Department of Community and Behavioral Health, University of Iowa
Denise	O'Brien	Women, Food, & Agriculture Network
Mary	O'Brien	Visiting Nurse Services
Joel	Olah	Aging Resources of Central Iowa
Pam	O'Leary	Sencu Area Agency on Aging
Joann	Olson	Mercy College of Health Sciences
Lana	Oltrogge	Waterloo Senior Center
Cindy	Ossenkop	Cedar Falls Senior Center
Kathleen	Osterman	Sibley-Ocheyedan Schools
Don	Owens	IDPH-Tobacco Use Prevention and Control
Nancy	Parkin	Youth & Shelter Services
Emilea	Patterson	Hoerner YMCA
Lynh	Patterson	IDPH
Ron	Pearson	Hy-Vee Groceries
Cyndi	Pederson	Terrace Hill
Molly	Pelzer	Midwest Dairy Association and Dairy Council
Andrew	Peterson	Department of Community Behavioral Health - University of Iowa
Janet	Peterson	IDPH
Elaine	Phillips	WIC
George	Phillips	Iowa Chapter of The American Academy of Pediatrics
Cristy	Phipps	Boone Community
Judith	Pim	World Food Prize
Marsha	Platt	Child Care Resource & Referral of Central Iowa
Jan	Pleggenkuhle	Partner
Linda	Plummer	Blank Children's Hospital
Alana	Poage	Louisa County Public Health
Susan	Pohl	IDPH
Calla	Poldberg	Shelby County Public Health
Daniel	Pomeranke	Sioux City Community Schools
Cyndy	Powers	Pure Fishing
Arlene	Prather O'Kane	Black Hawk County Health Department
Catherine	Pratscher-Woods	Generations Area Agency on Aging
John	Preston	Area Education Agency 267
Kelly	Putnam	Mercy Medical Center
Patricia	Quinlisk	IDPH
Gilbert	Ramirez	Des Moines University
Denise	Ramsey	Iowa Department of Public Health
Kay	Rankin	Head Start Program, School of Education
Jan	Rauk	Winnebago Co. Public Health
Douglas	Reichardt	Holmes Murphy and Associates
Tom	Rendon	Iowa Head Start State Collaboration
Suzanne	Renfrow	Parents Anonymous of Iowa, INC
Jennifer	Rice	Black Hawk County Department of Public Health
Kathy	Ridnour	Department of Transportation
Wade	Riedinger	YMCA of Greater Des Moines
Sheila	Riggs	Wellmark BC/BS
Wendy	Ringgenberg	Des Moines University Osteopathic Medical Center
Lily	Ripperger	Area XIV Agency on Aging
Jan	Roberts	Community Health Care
Susan	Roberts	Drake University Agricultural Law Center

Gale	Roeder	Eastern Iowa Community College District
Linda	Rosenberger	Tama County Public Health & Home Care
Michele	Ross	Lee County Health Department
Rhonda	Ruby	Webster County Health
Bob	Russell	IDPH
Carlene	Russell	Bureau for Nutrition and Health Promotion
Matt	Russell	Iowa Network for Community Agriculture
Sheryl	Rutledge	Grinnell Regional Medical Center
Sandi	Ryan	IDPH
Ruth	Schemmel	Palmer Homecare Services
Sarah	Schlievert	IDPH
Stephanie	Schmitt	Operation Threshold
Beth	Schmitz	Orchard Place
Carol	Schneider	ISU Extension - Plymouth County
Craig	Schoenfeld	Wasker, Dorr, Wimmer, and Marcouiller, P.C.
Kate	Schroeder	Community Opportunities
Sharon	Schroeder	Siouxland District Health Department
Kelly	Schulte	IDPH
Leora	Schurman	Warren County Nutrition
Jeanne	Schwab	Audubon County Public Health
Todd	Seamen	City of West Des Moines Parks & Recreation
Christopher	Seeger	Iowa State University Extension
Rob	Semelroth	IDPH
Rizwan	Shah	Iowa Association of Peds & Children's Health
Sally	Shaver	Iowa Health Systems
Teri	Sheehy	NICAO
Cynde	Shephard	Wellmark BC/BS
Toni	Shropshire	Mary Greeley Hospital
Kathy	Slaughter	Department of Education
Amy	Smith	Johnson County Public Health - WIC
Holle	Smith	ISU Extension- Emmet Co.
Sherry	Smith	IDPH
Linda	Snetsalaar	University of Iowa
Judy	Solberg	IDPH
Barry	Spear	Iowa Health System
Nikki	Stahr	Midwest Dairy Association
Wanda	Steburg	Greene County Medical Center
Deb	Steffen	Floyd Valley Community Health
Amy	Stier	Iowa Chapter of The American Academy of Pediatrics
Lois	Stillman	Spencer Hospital Community Health
MaryAnn	Strawhacker	Heartland AEA 11
Sharon	Streng	Emmet County Public Health
Donna	Sutton	Greene County Medical Center
Pat	Swartzlander	Wayne County Nutrition Coalition
Holly	Szcodronski	IDPH
Anne	Tabor	University of Iowa Hospitals & Clinics
Marsha	Taylor	Timberland Village
Kevin	Teale	IDPH
Kevin	Techau	Iowa Department of Public Safety
Mary	Thissen	Davenport Community Schools - Monroe Elementary School

Ed	Thomas	Department of Education
Katherine	Thomas Thomas	Iowa State University
Beverly	Thompson	NICAO
Julia	Thorius	Nutrition Programs & School Transportation
Kim	Tichy	IDPH
Kris	Tiernan	Medical Associates
Carol	Timm	VWA or Pott County
Jan	Treftz-Allen	Genesis Medical Center
Jan	Trimble	Hoerner YMCA of Keokuk
Joni	Troester	University of Iowa
Wayne	Tudor	Sodexo Corporate Services
Jen	Van Liew	Visiting Nurse Services
Annie	Vanderwerff	Iowa Project Export Center on Health Disparities
Anna	Ver Ploeg	Visiting Nurse Services
Janice	Von Arb	Iowa Department of Human Services
Janice	Von Arb	Iowa Department of Human Services
Naomi	VonHollen	Medical Associates Clinic
Jeff	Vonk	Department of Natural Resources
Barbara	Vos	Marshalltown Medical & Surgical Center
Shannell	Wagler	Iowa Community Empowerment
Anita	Walker	Historical Building
Mary	Weaver	Iowa Rural Health Association
Janet	Wee	Iowa Academy of Family Physicians
Coletta	Weeda	Crawford County ISU Extension
Michelle	Welch	Avera Holy Family Health
Greg	Welk	Iowa State University
Sandy	Wells	Storm Lake Community School District
Janet	Wendland	Nutrition Programs & School Transportation
Penny	Westfall	Iowa Law Enforcement Academy
Karen	Whalen	Hillcrest Family Services
Ann	Wiebers	DHS-Financial, Health, & Work Supports
Kevin	Wilde	City of West Des Moines Parks & Recreation
Lynn	Wilson	Iowa Public Television
Gloria	Witzberger	Hawkeye Area Community Action Program
Annie	Wood	Visiting Nurse Services
Kristine	Wood	Mid-Iowa Community Action
Janan	Wunsch-Smith	Consultant
K J	Yaeger	Iowa Afterschool Association
Sharon	Yearous	Iowa School Nurse Organization
Nancy	Yelden	Clayton County Visiting Nurse Association
Randy	Yontz	American Heart Association
Deb	Yount-Woods	Iowa Farm Bureau Federation
Kristine	Zenk	St. Luke's Rehab
Fran	Zichal	Central Community Hospital
Francesca	Zogaib	YWCA
Pat	Zwanziger	Floyd County Community Nursing
Kristi	Zwiefel	WIC

Steering Committee/Process Leaders

Older Iowans

Alice Mussleman, Aging Resources of Central Iowa
 Jill Gleason, Heritage Area Agency on Aging
 Jean Morgan, Jasper County Elderly Nutrition

Health Care

Todd Burstain, University of Iowa
 Denise Coder, Cass County Memorial Hospital
 Ed Hertko, Hertko Hollow Children's Diabetes Camp Foundation

Educational Settings

Ken Daley, Iowa Association for Health, Physical Education, Recreation and Dance
 Judy Conlin, Girl Scouts of Moingona Council
 Cindy Elsbernd, Iowa Kidstrong, INC
 Kris Tiernan, Medical Associates
 Sharon Yearous, Iowa School Nurse Organization
 Brian Dunn, Wellmark Blue Cross and Blue Shield

Early Childhood

Mary O'Brien, Visiting Nurse Services
 Ann Tabor, University of Iowa Hospitals & Clinics
 Kelly Schulte, Early Childhood Iowa
 Gretchen Hageman, Title V

Community

Stephanie Loes, Healthy Linn Care Network
 Kevin Wilde, City of West Des Moines
 Jodi Manson, Mercy Medical Center
 Stephanie Downs, City of Ames
 Jan Trimble, Hoerner YMCA of Keokuk
 Annie Vanderwerff, Iowa Project Export Center on Health Disparities

Business and Agriculture

Sue Roberts, Drake University Agricultural Law Center
 Wayne Tudor, Sodexo Corporate Services
 Nancy Degner, Iowa Beef Industry Council
 Linda Funk, Soyfoods Council

Iowa Department of Public Health staff

Judy Solberg, Bureau of Nutrition and Health Promotion
 Carol Voss, Iowans Fit for Life
 Sarah Taylor, Iowans Fit for Life
 Roxane Joens-Matre, Iowans Fit for Life
 Holly Szcodronski, Bureau of Nutrition and Health Promotion, Breastfeeding
 Joyce Allard, Office of Communications and Public Health Education
 Janet Peterson, Bureau of Nutrition and Health Promotion, Health Promotion
 Don McCormick, Office of Communications and Public Health Education
 Janice Edmunds-Wells, Office of Multicultural Health

Interagency Task Force

Iowa Department of Education

Charlotte Burt – Student Health Services
Connie Ehlers – Vocational Rehabilitation Services
Kathy Slaughter – Communications
Ed Thomas – Physical Education/Health
Julia Thorius – Nutrition Programs and School Transportation

Iowa Department of Human Services

Jody Caswell – Child Care
Julie Ingersoll – Child Care

Iowa Department of Public Health

Joyce Allard – Communications/Health Education
Jane Borst – Family Health
Janice Edmunds-Wells – Multicultural Health
Gretchen Hageman – Early Childhood
Carol Hinton – Child Health
Arlene Johnson – Health Promotion/Cardiovascular Risk Reduction
Tim Lane – Health Promotion/Cardiovascular Risk Reduction
Louise Lex – Healthy Iowans 2010
Jeff Lobas – Health Promotion and Chronic Disease Prevention
Bonnie Mapes – Tobacco Use Prevention and Control
Julie McMahon – Health Promotion and Chronic Disease Prevention
Jill Myers-Geadelmann – Chronic Disease Prevention and Management
Don Owens – Tobacco Use Prevention and Control
Lynh Patterson – Policy, Legislation and Constituent Relations
Janet Peterson – Women's Health
Susan Pohl – WIC
Rob Semelroth – Tobacco Use Prevention and Control
Judy Solberg – Nutrition and Health Promotion
Kevin Teale – Communications

Iowa Department of Public Health - Iowans Fit for Life

Roxane Joens-Matre – Evaluation
Sarah Taylor – Physical Activity
Carol Voss - Nutrition

Iowa Department of Transportation

Kathy Ridnour – Bicycle / Pedestrian Planning

Iowa State University

Ruth Litchfield - Nutrition
Katherine Thomas Thomas – Health and Human Performance

University of Iowa

Faryle Nothwehr – Community and Behavioral Health

University of Northern Iowa

Larry Hensley – Health, Physical Education and Leisure Services

Epidemiology Committee

- Larry Hensley, Ed.D., University of Northern Iowa
Professor, Associate Director of the School of Health, Physical Education, and Leisure Services (HPELS). He is also the Director of the federally funded UNI – Youth Fitness and Obesity Institute
- Faryle Nothwehr, Ph.D., University of Iowa
Assistant Professor, Deputy Director, Prevention Research Center, Department of Community and Behavioral Health, Iowa City, IA.
- Daniel Russell, Ph.D., Iowa State University
Associate Dean of Research, College of Human Sciences
- Gregory J. Welk, Ph.D., Iowa State University
Assistant Professor, Department of Health and Human Performance. Dr. Welk serves as the Scientific Director of the FITNESSGRAM youth fitness program for the Cooper Institute

2004 Omnibus Budget Bill, SF 2298

“It is the intent of the general assembly that state agencies, local communities, and individuals begin exploring strategies and partnerships to create a statewide community network that supports health promotion, prevention, and chronic disease management. It is the expectation of the general assembly that such strategies and partnerships will energize local communities to transform their cultures into those which promote healthy lifestyles and which, collectively, transform the state of Iowa into one healthy community.”

Acknowledgements

Report prepared by:
Roxane Joens-Matre, M.S., Ph.D. Candidate
Jane Schadle, M.S.
Sarah Taylor, B.S.
Carol Voss, M.Ed.

We are grateful for contributions from:
Jessica Brinkmeyer
Kathleen Dickens
Iowa State University Health Promotion Class

Increasing Physical Activity and Improving Nutrition Health for Iowans Logic Model

