Chapter 16

Physical Activity and Fitness

Introduction

Not enough money or attention was given to the fitness of our population in 2000. In 2005, hardly a day goes by without an “obesity epidemic” article, news story, or opinion piece in the media.

Currently, the documentary “Supersize Me” is playing in theatres, and McDonalds has added a promotion encouraging healthier choices that include use of a pedometer. Ronald McDonald himself, now dubbed "chief happiness officer," has become the company's "ambassador for an active, balanced lifestyle," according to his Chief Creative Officer Marlena Peléo-Lazar. Ronald now is willing to go into schools under the guise of a “fitness trainer.”

Things have changed, but generating funds remains the most significant problem in promoting physical activity. That primary goal is now joined by some new challenges. Those include, but are not limited to, the term assigned to the epidemic and the plethora of activities being generated, and the corresponding need to coordinate those efforts.

The new top five focus areas are:
• Funding (as in 2000);
• Quality school physical education;
• Coordination of all efforts aimed at sedentary lifestyle and poor nutrition;
• Continued engagement of partners to promote active lifestyles; and
• Promotion of environmental and policy efforts to encourage activity.

The ultimate goal of this chapter and the above areas is at least 30 minutes of physical activity for all Iowans. The epidemic is one of poor nutrition and inactivity or sedentary lifestyle. It is recognized that many in these categories are not overweight, and many overweight people are fit.

The measurements include, but are not limited to:
• A baseline with 30 minutes of activity;
• Progress in minutes of school programs;
• Miles, weight and behavioral changes resulting from various programs; and
• Policy changes and impact.

Dramatic progress occurred in the American lifespan addition in the 20th century. During the next century, the goal is to be equally successful in adding even more years of functional life. The spirit of this chapter is to foster more activity for youth, the elderly, rural Iowans, all minorities, and temporarily or permanently disabled residents – in short, all Iowans.

As the Olmstead decision, a U.S. Supreme Court decision prohibiting discrimination against persons with disabilities, is implemented, more Iowans with disabilities will be living in communities around the state. Barriers to their participation must be identified and reasonable accommodation to physical activity initiated. Current efforts to make it easier to walk in communities will also accommodate wheel chairs, crutches and walkers. Programs that are recognized and funded will need to reflect this effort.

Today, more than ever, physical activity offers great potential for increasing a wide range of factors that contribute to better health and additional years of functional living. Few, if any, initiatives combine the preventive potential and relative low cost of increased physical activity.

In the United States, approximately 250,000 deaths per year have been attributed to physical inactivity. In 1994, sports specialists Powell and
Blair of the American College of Sports Medicine reported that approximately one-third of deaths from coronary heart disease, colon cancer, and diabetes were due to physical inactivity.

The release of the surgeon general’s report, Physical Activity and Health, as well as other significant research, continues to point out the broad range of beneficial effects of regular physical activity.

The programs included in this chapter have the potential for reducing cardiovascular disease, preventing various cancers, preventing and decreasing injuries, improving mental health, and slowing disease development in Iowa’s aging population.

Physical activity provides a rare opportunity. The more recreation is available and the more that Iowa communities encourage walking, the more attractive Iowa becomes for tourists. Improvement in these areas can also help improve neighborhood safety, and reduce crime and even drug use. The cost is low, while the potential health benefits are in the billions of dollars. Related social benefits are nearly endless.

According to experts, no drug is as useful for sustained health as a lifetime program of physical exercise. This is as important to planning in the next century as it was in the 20th century.

The incidence of coronary heart disease (CHD) is approximately twice as high among sedentary men as among those who exercise regularly. The risk of inactivity is only slightly less than that of smoking, high blood pressure, or high blood cholesterol. The benefit to prevent chronic heart disease alone is sufficient for an increased investment in the promotion of physical activity among all Iowans.

Combined with good nutrition, physical activity can help stem the growing number of overweight and obese Iowans. Reducing obesity alone will impact a wide variety of conditions, including arthritis, cancer and stroke. Obesity combined with its demographics makes this a very crucial issue for Iowa.

The most noteworthy demographic for Iowa is its rapidly aging population. One Iowa county already has the highest national percentage of people over aged 65 (20%) and the entire state will reach that level by 2020. More active seniors are apt to need less care, require less medical resources, and be more productive.

Physical activity will be a major factor in maintaining the vitality of Iowa’s elderly. It may also foster the vitality of the state, as reflected in its physical and fiscal condition. The benefits of physical activity can be realized at age 8 or 80 and the activity level of 80-year-olds will impact the quality of life of 8-year-olds.

Some ethnic minority and low-income populations are less physically active than the general population (U.S. Department of Health and Human Services, 1996). The physical activity initiative covered in this chapter promotes regular activity among such diverse groups as the elderly, low-income Iowans, women, the overweight, persons with disabilities, all of Iowa’s ethnic populations, and rural and urban residents.

This chapter includes details of a multi-faceted approach to all populations. On the community level, efforts will be made to impact the environment and encourage policies to promote "walkable" communities that encourage walking and development of accessible recreational resources.

Broad-based efforts to promote physical activity via the physical education (including adaptive P.E. courses) of children and youth, wellness programs, community initiatives to promote physical activity, and media campaigns will reinforce the message that life-long activity is crucial for all Iowans. On another level, support for user-based strategies, such as marked routes for neighborhoods, will be developed and applied at the neighborhood level.

A "spectrum-of-prevention" – a term developed by the California Department of Health Services – will be followed. This spectrum includes use of individual knowledge and skills; education of community members and health-care providers, such as doctors, nurses, and pharmacists; development of groups
interested in effecting beneficial, political action, and organizational change.

Such efforts will include messages to businesses to develop healthy work environments and worker-wellness programs. They include techniques like those detailed in the 5+5 Program, a national program encouraging people to eat five servings daily of fruits and vegetables and be active for at least 30 minutes most, if not all, days of the week.

A profile of Iowa shows that employers could save over $700 million a year by developing physical activity programs, according to formulas by the Centers for Disease Control and Prevention (CDC) and statistics from the U.S. Census.

The following observations from Promoting Physical Activity among Adults, a CDC handbook published by the U.S. Department of Health and Human Services, are noteworthy.

- The physical work capacity of an individual can be improved by regular physical activity.
- Work performance is improved with enhanced strength, flexibility and endurance.
- Regular exercise results in improved mood, a better self-concept, an increased feeling of well being, and diminished anxiety.
- Employers can benefit economically from improving the physical fitness of employees.
- Evidence is accumulating that regular and habitual physical activity extends life.
- Those who are sedentary are about twice as likely to develop coronary heart disease (CHD) as those who are active. People who are sedentary have a 40% higher chance of dying of coronary heart disease than those who are active.
- In general, the higher the level of habitual physical activity, the lower the risk for coronary heart disease; but physical activity must be regular, frequent and long-term.
- Adults with a sedentary lifestyle have approximately a 50% higher risk of developing hypertension compared to physically active people.
- Increased activity can help prevent hypertension, be useful in treating hypertension, and may prevent the development of coronary heart disease and other hypertension-related diseases.
- Preliminary evidence suggests that being sedentary may increase the risk of some types of cancer, such as those of the colon and female reproductive system.
- Osteoporosis is favorably influenced by physical activity, which may decrease the likelihood of developing bone fractures and losing bone density.
- Physical activity can, in many people, improve the course of several health problems, including coronary heart disease, diabetes mellitus, hypertension, obesity, peripheral vascular disease, and mental depression.

The goals of this chapter will be achieved by gains in the quality and quantity of physical education, better work-site wellness programs, greater collaboration between community programs and resources, more local efforts targeted to specific populations, more environmental and policy initiatives, and more comprehensive statewide campaigns. These efforts also will increase awareness of the quality of the infrastructure for pedestrians, the terms of a model insurance contract, and state media messages.

The rational and achievable goal of encouraging all Iowans to become aware of these physical-activity goals will mean making 1% of Iowa’s sedentary population more active during each year of the decade.

This translates roughly to 20,000 people each year. It is achievable, but before it can be reached, support – primarily financial – must be allocated.

The physical activity chapter team believes that proper funding is crucial to reach this goal. Budgeting 33 cents per Iowan per year would create a one million dollar campaign to help stamp out the medical consequences of physical inactivity. The chapter goals proposed here can recover that dollar investment many times over.
Goal Statements & Action Steps

16–1 Goal Statement
Establish financial funding that targets sedentary Iowa lifestyles and a plan that includes support for planning, local efforts, environmental projects, model policy initiatives, and education.
Baseline: See Rationale.

Rationale
The Centers for Disease Control and Prevention (CDC) developed a formula that calculates the annual savings of $643 per adult in a physical activity program. Therefore, in Iowa, the annual cost for a sedentary lifestyle is over one billion dollars. Combined with the related conditions of overweight and obesity, the financial and human cost to Iowa is staggering and getting worse. The need for a goal to reduce these totals is crucial and becoming more so. Funds received will be used to foster partnerships, recognize outstanding efforts, and convene a multi-disciplinary conference and other initiatives.

Although the message for all Iowans is that regular physical activity is recommended, the rate of diabetes has tripled in the African-American population in the past 30 years. That target audience, then, has a greater need to hear about the advantages of physical activity in preventing and controlling diabetes.

Physical fitness programs are not the province of one organization. For example, in Illinois, the Supplemental Program for Women, Infants and Children (WIC) clinics promote physical activity. Also, more nutrition materials are treating physical activity as a daily requirement. And, substance abuse programs have used healthy sports programs for years to promote a substance-free and active lifestyle.

One million dollars a year translates to 33 cents per Iowan, or $50 per targeted person. Given the impact on public health, a million dollars would be an appropriate and symbolic sum to apply to the risk of sedentary lifestyles. The chapter team believes that all the goals detailed in this chapter require a significant and systematic change in attitude, approach, support, and most importantly, funding, for physical activity.

When compared to current costs of all factors resulting from a sedentary lifestyle, a prevention budget of one million dollars is about equal to what Iowa currently loses in 12 hours in medical costs and lost business. Today, the majority of Iowa deaths are from lifestyle-related illnesses.

Chronic diseases have replaced communicable diseases as the most significant public health problem. The death rate from coronary heart disease in Iowa is 112.7 per 100,000 and from stroke 24.2 per 100,000. These, as well as other chronic diseases, can be significantly reduced by regular physical activity. The prevention of just 10 heart attacks could save more than one million dollars. These 10 people represent .0005% of Iowa’s yearly target population.

More states, from North Carolina to Michigan to California, are equipping themselves to promote physical activity and increase the public’s health by creating physical activity foundations. They are funding those organizations and supporting resulting campaigns. The American Heart Association, American Lung Association, and American Cancer Society have all had victories in their efforts to change behavior, and the risks of leading a sedentary lifestyle warrant a similar campaign.

A proper financial package could unite efforts in schools, churches, work sites, and communities. These expenditures have the potential of saving thousands of lives and billions of dollars by 2010.

16–1.1 Action Step
By 2010, aggressively seek funding annually from all local, state and federal sources to fund physical activity programs in Iowa for all populations. Continue to support the role of the Iowa Health and Fitness Foundation and explore grants and the possibility of fundraisers. Continue to work for collaboration among all revenue sources for a coordinated effort. (An Iowa Department of Public Health action step.)
16–1.2 Action Step
By 2006, meet with key department personnel to discuss a 5-year budget for supporting existing program goals to reduce sedentary lifestyles and to decide how to incorporate new initiatives. (An Iowa Department of Public Health action step.)

16–1.3 Action Step
By 2006, create a mini-grant funded by grant or foundation monies to develop diverse grass-roots initiatives to create a campaign that reaches a wide range of targeted population groups. (An Iowa Department of Public Health and Iowa Health action step.)

16–1.4 Action Step
By 2005, continue to develop or locate a variety of materials that are culturally sensitive and reflect the importance of an active lifestyle, and distribute them to various organizations to ensure the message is echoed in a variety of "voices" to all Iowans. These messages will be monitored and evaluated to determine their effectiveness. (An Iowa Department of Public Health action step.)

16–2 Goal Statement
Certify 500 Physician-based Assessment and Counseling for Exercise (PACE) clinicians – 50 of whom are doctors – or similar programs. Baseline: See Rationale.

Rationale
Any successful campaign to encourage more physical activity will be greatly enhanced by the support of primary care physicians and other clinical staff that counsels patients and/or clients.

The Physician-based Assessment and Counseling for Exercise (PACE) is a professionally developed and evaluated effort to facilitate behavior change. The traditional trust in primary care physicians and counselors, combined with specific information and recommendations, should result in significant returns from the cost of training current and future physicians, their staff, and other counselors.

This two-pronged approach covers current and future practitioners. Offering this training to those currently practicing in Iowa will ensure that the PACE principals have a direct impact. Institutionalizing PACE in the training programs of future doctors and counselors reaches more people and gains stature as an expected procedure (protocol). Initiatives by the Iowa Medical Society and Wellmark to encourage similar counseling shall also be encouraged and supported, as will all efforts to encourage healthy choices.

16–2.1 Action Step
By 2005, develop a training program for current practitioners that will include professional education credit via continuing medical education units (CMEUs) to be offered at convenient times and be financially appealing. (A Des Moines University, Iowa Medical Society, and University of Iowa action step.)

16–2.2 Action Step
By 2006, work with Iowa education facilities to make physical activity counseling part of the curriculum for clinical staff (e.g., nurses, dieticians, physician assistants, etc.). (An Iowa Department of Public Health and University of Iowa Health Sciences action step.)

16–2.3 Action Step
By 2005, work with the Iowa Medical Society, its Youth Obesity Advisory Committee, and Consensus Panel to create effective protocols for practitioners. This is designed to develop cultural competence for Latino/Hispanic or African-American families. (An Iowa Department of Public Health and Iowa Medical Society action step.)
16–3 Goal Statement
Establish an enhanced comprehensive strategy that shares the main physical activity message with as many Iowans in as many environments as possible. This includes a wide spectrum of resources from such areas as the Internet, neighborhood groups, and religious groups, and includes an attempt to develop partnerships and promotions geared toward Iowans of all ages and backgrounds, with special attention to seniors, minorities and other special populations. Baseline: See Rationale.

Rationale
The main physical activity message will be based on the recommendations of the surgeon general’s Report on Physical Activity and Health and other current research. Iowans who hear a consistent message from the media, the Iowa Department of Public Health, their doctors, at school, in their work environment, at senior citizen centers, their places of worship, and other sources will be more likely to embrace that message.

Creating versions of the message for places of worship and other neighborhood sites will allow a core message to be tailored to each specific population. The physical activity message must be heard loudly, clearly and often by all of Iowa’s diverse populations.

The process of developing a community profile has been well documented in the 5+5 Program guide that was developed by the Iowa Department of Public Health. This process has already proven effective in promoting partnerships and encouraging more physical activity, but much more work is needed to deliver this basic message to all Iowans.

Behavioral Risk Factor Surveillance System (BRFSS) data were reviewed in the April 21, 1999, Journal of the American Medical Association (Vol. 281, No. 15 p. 1373). The purpose was to determine if or how much the prevalence of physical activity was associated with the perceived safety of a neighborhood. This association proved to be true for women and the elderly.

Conversely, perceived neighborhood safety can be increased by more outdoor activity. "Eyes on the street" can impact a wide range of behavior from watching for traffic speeders to more serious offences. By creating and promoting walking communities, people can create neighborhoods that are victorious and vibrant. More walkers can equal less crime; in turn, less crime can promote more physical activity.

16–3.1 Action Step
By 2010, establish a series of meetings with Iowa clergy and other community and special interest groups such as ethnic organizations, groups of varying ages, neighborhood organizations, and people with disabilities. The meetings should:

- By 2006, determine what the groups are doing toward physical fitness and seek their input;
- Through 2010, share proposed literature and programs; and
- Through 2010, evaluate the effectiveness of current efforts and determine if other support or meetings are needed.

(An Iowa Department of Public Health and Active Iowa Movement Foundation action step.)

16–3.2 Action Step
By 2006, after receipt of funding, create a mini-grant program to provide $1,000 to $2,000 to various, diverse organizations to create physical activity combined with neighborhood efforts. The grants will be offered to churches, neighborhood organizations, and others and be designed to create awareness of the need for regular physical activity for all Iowans. (An Iowa Department of Public Health action step.)

16–3.3 Action Step
By 2006, create materials that include articles, brochures and program items that deal with the relationship between safety and physical activity. The materials will be designed to encourage organizations interested in promoting neighborhood environments to address the relationship between physical activity and safety. (An Iowa Department of Public Health action step.)
16–4 Goal Statement
Create strategies that share the physical activity message with special populations, especially people with disabilities, and with high-risk populations. Baseline: See Rationale.

Rationale
The traditional image of a fitness center is one filled with trim young bodies, those least in need of the offered activities. This image must change in order to take into account all Iowans, including the elderly, disabled and minorities. The possibility of increased memberships should make clubs interested in promoting physical fitness among these special groups.

The link between premature death and lack of physical fitness (as verified in a study by Kenneth Cooper's Aerobic Center in Dallas) applies to all Iowans and is the primary health rationale for increased physical fitness. In an article for the Research Digest of the President's Council on Physical Fitness and Sports (March 1999), Dr. Janet A. Seaman writes, "People with disabilities can enhance the functioning and health of their heart, lungs, muscles and bones in most cases through regular physical activity. Flexibility, mobility and coordination can be improved, lessening the negative impact of some conditions or slowing the progression of others." Such positive social, mental and economic benefits exist for all Iowans and thus need to be encouraged and facilitated for all Iowans.

16–4.1 Action Step
Through 2010, continue regular communication with fitness providers that examines programs on their accessibility to persons with disabilities. (An Iowa Department of Public Health action step.)

16–4.2 Action Step
By 2005, create targeted physical activity promotion for low-income populations and high-risk groups who have limited access to recreation, highlighting available resources. (An Iowa Department of Public Health action step.)

16–4.3 Action Step
By 2006, disseminate physical activity materials to consumers through rehabilitation facilities, school programs, Special Olympics, physicians, and other programs to provide encouragement and information to Iowans with disabilities. (An Iowa Department of Public Health action step.)

16–5 Goal Statement
Continue to recruit and improve worksite wellness programs. Baseline: See Rationale.

Rationale
The Iowa Wellness Council is working to make Iowa the healthiest state in the nation. By developing more and better worksite wellness programs that complement efforts in the schools, communities, and other intuitions, the council is a vital ally in the promotion of physical activity. This comprehensive community model includes environmental conditions, policy and other aspects to create well communities that encourage and support physical activity. Worksites are one of the three most crucial components to creating a dynamic environment that results in healthier communities and provides models for other Iowa communities on the means to, and value of, healthy communities.

16–5.1 Action Step
By 2006, develop a marketing plan that defines benefits and aggressively market wellness and the Wellness Council of Central Iowa via the Internet and other avenues. The Council currently has 141 members. The goal is to recruit 40 new members annually. (A Wellness Council of Central Iowa action step.)

16–5.2 Action Step
By 2006, initiate efforts to partner more effectively with insurance providers and assist with their efforts to promote wellness to their clients. (A Wellness Council of Central Iowa action step.)
16–6 Goal Statement
Create and disseminate a detailed list of best or expected practices that provide Iowa students an educational environment that teaches and fosters a healthy active lifestyle. Baseline: See Rationale.

Rationale
In the report of the National Centers for Chronic Disease Prevention and Health Promotion (CDCP) entitled *Unrealized Prevention Opportunities: Reducing the Health and Economic Burden of Chronic Diseases*, the following statement was perhaps the most significant: "Because ingrained behaviors are difficult to change, the greatest return on investment lies in reaching people early, before unhealthy behaviors are adopted."

By national norms, Iowa boys and girls are slightly heavier and possess more body fat than those in other states. Furthermore, only 56% of Iowa boys and 61% of Iowa girls have attained the recommended health standards for cardiorespiratory fitness.

For immediate and future returns, it is imperative that physical activity be a regular component in Iowa schools. Healthy, active children not only perform better as students but also develop habits that will affect the quality and quantity of their lives. Physical inactivity is a major health hazard that for many begins during the school years.

The immediate benefit of physical activity is an increased supply of oxygen to the brain. Such activity also facilitates the development of blood vessels that, besides oxygen, carry other essentials – such as water and nutrients – needed for learning.

Physical activity also facilitates nerve development and maximum development of healthy hearts and lungs. According to the Iowa Department of Education, 13 studies on exercise and brainpower indicate that physical activity is beneficial for developing brains and preventing deterioration of older brains.

According to the National Health and Nutrition Examination Survey III, 21% of adolescents aged 12 to 19 are overweight. As sedentary options increase, efforts to encourage physical activity need to keep up.

16–6.1 Action Step
By 2005, develop and distribute a database on physical activity and Iowa youth that will include a new Iowa survey of physical education programs and any unique or successful programs. (An Iowa Department of Public Health and Iowa Association for Health, Physical Education, Recreation and Dance action step.)

16–6.2 Action Step
By 2005, provide educators with strategies and opportunities to facilitate a shift toward wellness within their own schools and communities. (A Regents Institutions, Iowa Association for Physical Education, Recreation and Dance, and Iowa Department of Education action step.)

16–6.3 Action Step
By 2006, provide ongoing support for the Iowa Department of Education and the Iowa Association for Health, Physical Education, Recreation and Dance to recognize and reward outstanding physical education programs with participation on a physical education task force in the Active Iowa Movement Foundation and by other means. (An Iowa Association for Health, Physical Education, Recreation and Dance action step.)

16–6.4 Action Step
By 2006, locate communities that are forging partnerships among businesses, schools, hospitals, parks, and recreation offices; and facilitate that trend in other communities. (An Iowa Department of Health action step.)

16–6.5 Action Step
By 2005, create five new physical activity consultant positions at area education agencies to advocate and use the Healthy Iowa Lifestyle curriculum. Facilitate the development of School-Wide Activity Team (SWAT) resources to provide technical assistance based on assessment outcomes to peers for the general development of comprehensive, quality physical activity programs. (An Iowa Department of Education action step.)
education. (An Iowa Department of Education action step.)

16–6.6 Action Step
By 2005, develop strategies that urge school districts to implement coordinated school health programs and that help overcome existing barriers, such as inadequate funding. (An Iowa Department of Education, Iowa Department of Public Health, Iowa Institutes of Higher Education, and Iowa Coalition for Comprehensive School Health action step.)

16–7 Goal Statement
Create an electronic media plan that takes full advantage of the Internet, the Iowa Communications Network, and other technologies that includes development of a comprehensive web site, provides an array of physical activity options for most days of the year, and allows the continued growth and refinement of e-mail FITNET and physical activity support chat rooms. Baseline: See Rationale.

Rationale
In 1997, the Iowa Department of Public Health created FITNET, a daily e-mail service promoting regular physical activity and the national 5-A-Day program. It was initially delivered to a list of 18 entities, but now goes to over 50,000. The only expense is for writing the messages – just pennies per day.

16–7.1 Action Step
By 2007, refine FITNET to include an "Iowa only" list to be used to target and refine messages, and share other Iowa web sites willing to redistribute the information. (An Iowa Department of Public Health action step.)

16–7.2 Action Step
By 2005, pull together a group of public and private resources to design an Active Iowan web site. (An Iowa Department of Public Health; Iowa Department of Education; Iowa Association for Health, Physical Education, Recreation and Dance; Central Iowa Wellness Council; Governor’s Council on Physical Fitness and Sports; Register’s Annual Great Bike Ride Across Iowa [RAGBRAI]; and IOWA GAMES action step.)

16–8 Goal Statement
Work with the Iowa Department of Transportation and all appropriate entities to promote environments that are physically appealing and conducive for regular physical activity. Baseline: See Rationale.

Rationale
On June 9, 1998, President Clinton signed into law the Transportation Equity Act for the 21st century (TEA-21) that authorized highway, highway safety, transit, and other surface-transportation programs for the next six years. TEA-21 builds on initiatives established in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the last major authorizing legislation for surface transportation.

This legislation provides significant funding for the development of alternative transportation projects that can focus on pedestrians instead of cars. The money provides Iowa with a significant opportunity. The challenge is to make sure Iowa uses the money to encourage walking, cycling and recreation in general.

Freeways and other transportation projects have discouraged pedestrian traffic. An increasing number of people are seeing the negative impact of such planning and are encouraging more comprehensive planning. In this, Iowa can look to the city of Cedar Falls, Iowa, as a model of what can be done with highways and recreational trails.

16–8.1 Action Step
Through 2010, continue regular communication with the Statewide Transportation Enhancement Program Advisory Committee to promote cycling and pedestrian options. (An Iowa Department of Public Health action step.)
16–9 Goal Statement
Create consistent survey items to deal with the surgeon general’s Report on Physical Activity and Health recommendations through measurements of the Iowa Behavioral Risk Factor Surveillance System (BRFSS) in order to formalize the measurements, increase the efforts that are measured, and publicize broadly. Baseline: See Rationale.

Rationale
"Sedentarism," according to the June 1999 issue of the American Journal of Public Health, is an independent risk factor currently lacking a consensual definition. The writers of this chapter agree that a uniform definition is needed at the state, national and international levels.

The Iowa Behavioral Risk Factor Surveillance System (BRFSS) measures activity on a scale developed prior to the release of the surgeon general’s report. Although the BRFSS is valuable in providing trend data, it would be more valuable if questions were crafted to reflect the 30-minutes-per-day physical activity benchmark. In addition to BRFSS measurements, increased funding will allow target measurements to better define who is inactive and the degree of success that various initiatives have produced.

16–9.1 Action Step
By 2005, work with the Iowa Department of Public Health’s statistics bureau, the Iowa Behavioral Risk Factor Surveillance System, and the Youth Behavior Risk Factor Survey personnel to identify and eliminate hurdles to consistent measurement. (An Iowa Department of Public Health action step.)

16–10 Goal Statement
Increase the proportion of school-age children who meet the Center for Disease Control and Prevention recommendations for physical activity and physical education. Baseline: See Rationale.

Rationale
Youth Behavior Risk Factor Survey 2001 Iowa data show that children fall far short of the recommendations for vigorous physical activity (26%), moderate physical activity (71%), physical education (20%), daily physical education (86%), and moderate-to-vigorous physical activity (22%). From 1986 to 2000, only 23% of all Iowans met the recommendations for physical activity. Adults who are physically active had critical experience during childhood, including learning motor skills (competence), developing confidence in their ability to learn and perform motor skills, trying a variety of physical activities, and learning the value of physically activity to a healthy lifestyle. School physical education programs fill a vital role in developing a physically active population. They contribute to, but do not fill all needs for, physical activity during childhood.

In the best case scenario, elementary school students would have 30 of their 60 minutes of daily activity in physical education class five days of the week. The other 30 minutes would need to be provided in other programs (e.g., extracurricular, recess). On weekends and vacations, all 60 minutes of activity would be out-of-school.

16–10.1 Action Step
By fall 2005, educate superintendents, principals, and school-board members about the recommendations for 150 and 225 minutes per week of physical education at the elementary and secondary levels from the National Association of State Boards of Education (NASBE), the National Association of School Boards (NSBA), the Council of Chief State School Officers (CCSSO), and the CDC’s Division of Adolescent and School Health. (An Iowa Department of Public Health, Iowa Partners for Healthy Kids, and Iowa Fit Kids Coalition action step.)

16–10.2 Action Step
By 2006, educate physical education teachers about the recommendations on physical education curriculum and goals from the American Academy of Pediatrics, the Center for...
Disease Control and Prevention (CDC), the U.S. Department of Health and Human Services, and the National Association of State Boards of Education. (An IAHPERD action step.)

**16–10.3 Action Step**

Through 2010, advocate for model programs and best practices based on CDC’s strategies for promoting physical activity, recommendations from the American Academy of Pediatricians and the model policies from the National Association of State Boards of Education. Specifically, these policies address daily physical education, specialist teachers, adequate facilities and equipment, elimination of exemptions, and appropriate student-teacher ratios. (An Iowa Department of Public Health and American Heart Association action step.)

**16–10.4 Action Step**

By 2007, increase the number of schools with physical education programs meeting the recommendations from the National Association of State Boards of Education (150 and 225 minutes per week at elementary and secondary respectively, with specialist teacher, appropriate student teacher ratios, and no exemptions). (An Iowa Association for Health, Physical Education, Recreation and Dance action step.)

**16–10.5 Action Step**

By 2007, institute a policy change in licensing physical education teachers consistent with the “Teacher Quality Act” so that such teachers cannot be licensed by meeting state minimums. This includes elementary classroom teachers who are currently endorsed to teach physical education through grade eight. They may not have had a single physical education course yet are licensed to teach physical education in grades K-6, and with the two-up and two-down rule can teach in the middle school through grade eight. (An Iowa Department of Education and Iowa Association for Health, Physical Education, Recreation and Dance action step.)

**16–10.6 Action Step**

By 2010, increase the number of extracurricular opportunities for children and educate parents about the importance of physical activity consistent with the CDC’s strategies for promoting physical activity. Specifically, include non-competitive physical activities in after-school and extracurricular programs. To increase their levels of physical activity and fitness, young people can benefit from: families who model and support participation in enjoyable physical activity; school programs – including quality, daily physical education; health education; recess; and extracurricular activities. These programs will help students develop the knowledge, attitudes, skills, behaviors, and confidence to adopt and maintain physically active lifestyles, while providing opportunities for enjoyable physical activity.

Also, after-school care programs provide regular opportunities for active, physical play; and youth sports and recreation programs offer a range of developmentally appropriate activities that are accessible and attractive to all young people. (An Iowa Department of Public Health, Iowa Department of Education, Iowa Parks and Recreation Association, and Iowa Association for Health, Physical Education, Recreation and Dance action step.)

**16–10.7 Action Step**

By 2006, work with the Iowa Department of Education to help schools implement quality, daily physical education and other physical activity programs using the three CDC strategies: 1) With a full-time state coordinator for school physical activity programs; 2) As part of a coordinated school health program; and 3) With support from relevant governmental and nongovernmental organizations. (An Iowa Department of Public Health and Iowa Department of Education action step.)
Physical Activity & Fitness
Chapter Team

Team Facilitator
Tim Lane
Iowa Department of Public Health

Team Members
Ann Black
AARP Iowa Communications

John Baker
Des Moines Public Schools Physical Educator

Larry Hensley
University of Northern Iowa

Kathleen Janz
University of Iowa

Kerry Juhl
Wellness Council of Central Iowa

John Pletchette
Winterset Parks and Recreation Department

Joy Schiller
Des Moines University

Katherine Thomas, Ph.D.
Iowa State University

Val Unkrich
Iowa Association for Health, Physical Education, Recreation and Dance

Iowa Weslyn