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PREVENTION AND WELLNESS PROGRAM

HEARING

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

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PREVENTION AND WELLNESS PROGRAM

FRIDAY, APRIL 16, 2004

U.S. SENATE,
SUBCOMMITTEE ON LABOR, HEALTH AND HUMAN SERVICES, AND EDUCATION, AND RELATED AGENCIES,
COMMITTEE ON APPROPRIATIONS,
Des Moines, IA.

The subcommittee met at 9:30 a.m., at the AIB College of Business Activity Center, 2500 Fleur Drive, Des Moines, Iowa, Hon. Tom Harkin presiding.

Present: Senator Harkin.

OPENING STATEMENT OF SENATOR TOM HARKIN

Senator HARKIN. Thank you all for being here this morning for one in a series of hearings that we're having on wellness and health. First let me recognize and thank some people. First I want to thank Nancy Williams, the president of AIB, and Marianne Nielsen, who is a director of advancement here at AIB, right here both, Marianne Nielsen and Nancy Williams, the president of AIB, thank you for having us here.

Let me also thank Sarah O'Neill, director of activities at AIB too. Thank you, Sarah. Chris Schmidt, director of facilities at AIB for helping us get in here. Jay Byers, who is here, is representing Congress Leonard Boswell, and I talked to Leonard yesterday. He couldn't be here, he's in other places in his district, but thank you for being here, Jay.

Some other people I want to recognize, Tom Coe, who is with the P.E.4LIFE group. We came out from Washington for this meeting. He has just put a heart monitor on me and I'm doing all right so far. Vernon Delapeace, CEO of the YMCA here in Des Moines, thank you for being here, Vernon. Mary Hanson, who's director of the Iowa Department of Public Health is here. Mary, thank you for being here. And Julie McMahon, who is the director of the Division of Community Health for the Iowa Department of Public Health, who is here. We thank all of you for being here.

This morning, due to the shortage of available captioners, our captioning will be done by two AIB students—I hope I get these names right—Daria Shariari and Megan Caster. Thank you both for doing this and I appreciate your willingness to come and caption this event and I ask you all for your indulgence if they miss a word or two, but we'll try to speak plainly and clearly so you understand what we're talking about.

Again, I want to thank you all for coming. Within the next several months, I, along with others, will be introducing legislation

aimed at encouraging healthy lifestyles and preventing chronic disease. I've been soliciting ideas and gathering information all across the country for the last several months. But before I give final shape to this legislation, I wanted to get more input from people here in Iowa.

Wellness is something that's difficult to define but easy to understand. It means eating right, exercising regularly, and developing healthy habits now in order to prevent major problems in the future. This is mostly just common sense. Iowans who take their cars in for regular maintenance understand the basic concept. You either pay a little now to keep things in good shape or you pay a whole lot later to fix and mend things.

Well, it's the same with national health priorities. In the United States, we fail to make an up-front investment in prevention, so we end up spending hundreds of billions on hospitalization, treatment, and disability. This is foolish and it clearly is unsustainable. Right now we're spending more than $1.5 trillion each year on health care in the United States. Fully 75 percent of that total is accounted for by spending on chronic diseases, and what most of these chronic diseases have in common is that they are preventable.

Overweight and obesity are fast becoming our Nation's leading public health threat. In fact, several weeks ago, the Centers for Disease Control said that poor diet and lack of physical activity is the number two leading cause of death in the United States, contributing to at least 400,000 deaths annually. It is a shocking fact that more than two-thirds of Americans are now overweight or obese, and more than 15 percent of our children are overweight.

Obesity takes a terrible toll on an individual's health. It can lead to diabetes, heart disease, high blood pressure, cancer, and numerous other chronic diseases. Incredibly, obesity causes more chronic conditions than either smoking or alcoholism. In fact, being obese has an effect that is roughly comparable to aging 20 years.

The costs are not only medical, they are economic as well. The Surgeon General estimates that direct and indirect costs of obesity in the United States come close to $120 billion annually. But obesity is by no means the only culprit. Tobacco use is still the number one killer of Americans. In 2002, 61 million Americans, 26 percent of our population, smoked cigarettes. In Iowa the rate was a little lower, about 23 percent. But despite decades of education efforts aimed at reducing tobacco use, nearly one in four Iowans still light up. Iowans know that this is bad for them and most want to quit, and we need to help them succeed.

When it comes to tobacco use prevention, we need to refocus our efforts directly toward our children. Keep in mind that 90 percent of all long-term smokers started as teenagers or younger. Every day in America more than 4,000 kids try their first cigarette. Another 2,000 children become daily smokers. One-third of these newly addicted smokers will eventually die from smoking-caused diseases.

Mental health is also an important, but a very unacknowledged problem. The Surgeon General reports that mental disorders collectively account for 15 percent of the overall burden of disease from all causes. Under treated and untreated mental disorders cost the

Nation more than $204 billion annually. Again, many of these disorders can be prevented, and millions of people living with mental illness can recover if provided treatment and support. This is one of the reasons I've worked so hard on what we call the Paul Wellstone Mental Health Parity Act, which will provide for mental health parity in our health systems along with physical health.

Many people oppose a government role in this area. They say that preventable disease is a matter of personal responsibility. I agree that personal responsibility is critical, but I also believe that government has a responsibility to make sure that people have the information, the tools, and the support, and the means they need to make healthy choices.

I interrupt my formal remarks here by saying that I wanted to have a little thing before the hearing this morning. I wanted to get some people and take a little walk around Gray's Lake and then walk up to AIB. I thought it would be a nice way to kick off the hearing. Well, you can walk around Gray's Lake, but you can't walk from Gray's Lake to here because there are no sidewalks. Think about how many streets are now being built in America, in our suburbs and everywhere else, and there are no sidewalks. Everything that the government now seems to be doing is discouraging you from exercising.

I saw a figure not long ago, I forget it right now, but it's quite startling. As a kid, I grew up riding a bike everywhere. I rode a bike when I was in college. But I saw the figures indicating that today fewer kids and adults are bicycling than what they did in the past. Well, where are the bike paths? How can you ride a bike along a busy highway or a street with all those cars going by and you don't have any place to ride a bike? So again, I mention this as a government responsibility to begin to do things to encourage people or support people in trying to have a healthy lifestyle.

As adults, we also have a responsibility to protect our children. Every year, kids are barraged with billions of dollars in tobacco, alcohol, and junk food marketing, all of it aimed at persuading them to make an unhealthy choice. I always say that the golden rule of holes is this. If you find yourself in a hole and it's getting up to your head, stop digging. Well, we've dug a big hole by failing to emphasize prevention and wellness, and it's time to stop digging and time to start climbing out of the hole. And it's going to take all sectors, it's going to take a comprehensive approach, everything from school-based, preschool, workplace-based, home-based, community-based, government-based, all of them working together.

Today we'll hear from folks who are doing important and innovative work in encouraging individual wellness and healthy communities. I thank them for coming today. I look forward to their testimony and I'd like to say two more things. First, I want to thank the chairman of this subcommittee, my good friend Arlen Specter of Pennsylvania. Senator Specter and I have switched roles here numerous times over the last 14 years. I've been chairman, he's ranking member, he's chairman, I'm ranking member, back and forth. But as he is fond of saying, and I agree with him, it's been a seamless transfer. We have worked together very closely over all these years on health matters that pertain to the American people,

and I want to thank him for allowing me this opportunity to have this hearing here in Des Moines.

Second at the close of our formal remarks, I will engage in some questions with our panelists, but I'd also like to open it up to the audience, and time permitting, we'll have some questions, or if you want some statements or you have some input, some ideas, suggestions, we'd like to hear it. I would just ask that for the recorder's sake that you just give your name and please spell your name so that the recorder can get it right.

So with that, let's go to our witnesses. I will introduce each one in the order that they will be making their testimony. First, we welcome Dr. Tom Baranowski. He's the professor of pediatrics and behavioral medicine at Baylor College of Medicine in Houston, Texas. Dr. Baranowski's research is directed toward understanding why children eat the foods and engage in the physical activities they do, as well as designing and evaluating programs to help change these dietary and physical activity behaviors. His areas of interest include fruit and vegetable consumption, obesity prevention, and physical activity. Dr. Baranowski will discuss chronic disease prevention and the cost to our economic health, specifically pertaining to physical inactivity and poor nutrition.

After Dr. Baranowski, we'll go with Mr. Rick Schupbach and then we'll got to Dr. Carolyn Cutrona, then Mr. Len Olsen, Ms. Rhonda Ruby, and we got our clean-up hitter, someone you're really going to like to listen to, Tom Oldham right over there and what he's doing at Lincoln High School. So Dr. Baranowski, welcome, and the floor is yours.

STATEMENT OF DR. TOM BARANOWSKI, Ph.D., PROFESSOR OF PEDIATRICS BEHAVIORAL NUTRITION AND PHYSICAL ACTIVITY, BAYLOR COLLEGE OF MEDICINE

Dr. BARANOWSKI. Senator Harkin, thank you for pronouncing my name properly, it was terrific. It's a great privilege to speak before this committee. I'll skip a couple of paragraphs that said who I was, being you did such a nice job of it.

I'm here today to address the broader issues of chronic disease prevention, and of special interest to me, chronic disease prevention among children. As shown in table 1 in my testimony, 5 of the 10 leading causes of death in the United States are chronic diseases whose causes are largely or partially related to diet and physical inactivity.

Accounting for fully two-thirds of deaths, the principal diseases of nutritional origin also account for an immense fraction of disability due to disease and the major share of medical costs for disease treatment as shown in table 2 in my testimony.

Medical care costs for heart disease alone were $51.8 billion in 1985. The cancers cost $41 billion. Type II diabetes cost $45.2 billion. These numbers are even higher in 2004 because the population is larger and older. Further, in addition to these social economic costs, there are huge personal costs in terms of premature loss of loved ones, disruptions of gratifying lives, pain and sorrow, which are much more difficult to quantify.

As I'm sure you are well aware, we are currently immersed in what can be termed an epidemic of obesity. However, you may be less aware of the fact that obesity is the principal underlying con-

tributor to many of the major chronic diseases. Thus, for example, the dramatic rise in the incidence of diabetes in childhood and adolescence is directly the result of the increasing prevalence of obesity in children. In fact, the current prevalence rates of obesity and overweight are so high as to be alarming. Over half of all adults and approximately three-quarters of some ethnic/gender subgroups are overweight or obese. In middle schools in Houston among the minority students, half of the children are overweight or obese.

The economic impact of obesity's role in the medical costs of the major chronic diseases of American adults has been calculated and it is frankly staggering. Today, most of the health care dollar is spent on treating these terrible diseases. While every effort should be maintained to treat existing cases of these diseases to minimize their burden, far more funding needs to be spent on prevention efforts upstream of the current treatment or downstream paradigms. Prevention is obviously always preferable to treatment in any circumstances, from both practical and fiscal perspectives. Prevention will serve to lessen the chronic disease burden on future generations, which, in turn, will minimize the social, economic, and personal costs.

It's now abundantly clear that much of chronic disease morbidity and mortality is due to lifestyle behaviors. In fact, obesity is the result of an imbalance of two daily behaviors, calories consumed and an individual's level of physical activity. It's no surprise then that a recent report from the Centers for Disease Control and Prevention indicated that the two leading causes of death in 2000 were tobacco use and poor diet and physical activity. The other causes of death paled in comparison. The authors projected that poor diet and physical activity will soon overtake smoking as the leading cause of death, and urged a greater priority be placed on prevention.

Thus, more than one-third of American deaths can be prevented by changing the smoking, diet, and physical activity practices of our children—of our citizens. Since poor diet and physical activity behaviors are the principal contributing causes of obesity, and since obesity is the leading underlying cause of nutritionally-related causes of death, a substantial investment is needed in obesity-related behavioral research to better understand how and why we have gotten where we are. In an annual NIH budget of $24 billion, approximately $379 million was spent on obesity in fiscal year 2003, about $400 million will be spent on obesity in fiscal year 2004, and $440 million in fiscal year 2005, and most of this will be spent on biological issues, not behavioral issues. Clearly, more funding must be spent on obesity and particularly on obesity prevention.

Finally, why is a child's—why is a children's behavioral scientist speaking about chronic diseases of late adult life? All avenues of medical science now point to the fact that the prevention of chronic diseases should be initiated early in life among children. Diet and physical activity habits are learned in childhood. Chronic disease factors like blood pressure elevated among children tend to remain elevated into the adult years.

PREPARED STATEMENT

There is some reason to believe that behaviors are more easily changed among children than among adults. Once excess weight is put on, it is almost impossible to take off. Despite these factors, many schools are minimizing or closing their physical education programs, high fat and high sugar foods are being marketed to children. National policy must carefully consider what can be done to enhance the diet and physical activity practices of our citizens and especially our children. This will have a huge impact on national health care costs and the quality of our children's lives.

Thank you for your time and attention. I'd be happy to answer questions.

[The statement follows:]

PREPARED STATEMENT OF DR. TOM BARANOWSKI

CHRONIC DISEASE PREVENTION

Senator Harkin and members of the U.S. Senate Committee on Appropriations, it is a great privilege to speak before this committee.

I am trained as a health psychologist, and do research on influences on children's diet and physical activity practices, and I design, implement and evaluate programs to change children's diet and physical activity practices.

I am here, however, to address the broader issues of chronic disease prevention, and of especial interest to me, chronic disease prevention among children.

As shown below in Table 1, five of the ten leading causes of death in the United States are chronic diseases whose causes are largely or partially related to diet and physical inactivity.

TABLE 1.—DEATHS AND PERCENTAGES OF TOTAL DEATHS FOR THE FIVE OF THE TOP 10 LEADING CAUSES OF DEATH IN THE UNITED STATES, 2001

	Number	Percent
Diseases of the Heart	700,142	29.0
Malignant Neoplasms	553,768	22.9
Cerebrovascular Diseases	163,538	6.8
Chronic lower respiratory Diseases	123,013	5.1
Diabetes Mellitus	71,372	3.0

Source: National Vital Statistics Reports, Vol. 52, #9, Nov. 7, 2003.

Accounting for fully two-thirds of deaths, the principal diseases of nutritional origin also account for an immense fraction of disability due to disease and the major share of medical costs for disease treatment as shown in Table 2 below.

TABLE 2.—HEALTH CARE COSTS FOR MAJOR CHRONIC DISEASES IN 1995 USING 2002 DOLLARS

[In billions of dollars]

	Estimated total cost
Heart Disease	51.8
Cancers	41.0
Breast	
Endometrial	
Colon	
Type 2 Diabetes	45.2
Osteoarthritis	(64.0)
Hypertension	24.1
Obesity	117.0

Source: Several NIH web sites.

Medical care costs for heart disease alone were $51.8 billion in 1995. The cancers cost $41 billion; Type 2 diabetes cost $45.2 billion. These numbers are even higher

in 2004 because the population is larger and older. Further, in addition to these social economic costs, there are huge personal costs in terms of premature loss of loved ones, disruptions of gratifying lives, pain and sorrow, which are much more difficult to quantify.

As I'm sure you are well aware, we are currently immersed in what can be termed an epidemic of obesity. However, you may be less aware of the fact that obesity is the principal underlying contributor to many of the major chronic diseases. Thus, for example, the dramatic rise in the incidence of diabetes in childhood and adolescence is directly the result of the increasing prevalence of obese children. In fact, the current prevalence rates of overweight and obesity are so high as to be alarming (see Table 3). Over half of all adults and approximately three quarters of some ethnic/gender subgroups are overweight or obese.

TABLE 3.—PREVALENCE OF OVERWEIGHT AND OBESITY AMONG ADULTS (20+ YEARS OLD) BY MAJOR ETHNIC AND GENDER GROUPINGS

[In percent]

	Women	Men
Non Hispanic Black	77.3	60.7
Mexican American	71.9	74.7
Non Hispanic White	57.3	67.4

Source: NIDDK web site.

Recently, the economic impact of obesity's role in the medical costs of the major chronic diseases of American adults has been calculated (Table 4 below) and it is frankly staggering.

TABLE 4.—COSTS FOR CHRONIC ILLNESSES ATTRIBUTABLE TO OBESITY

	Directly due to obesity	Indirectly due to obesity
Heart Disease (Billions)	$8.8	.....
Cancers:		
Breast (Billions)	1.1	$1.8
Endometrial (Millions)	310.0	623.0
Colon (Billions)	1.3	2.2
Type 2 Diabetes (Billions)	52.8	
Osteoarthritis (Billions)	5.3	15.9
Hypertension (Billions)	4.1	.....
Obesity (Billions)	61.0	56.0

Source: Several NIH web sites.

Today, most of the health care dollar is spent on treating these terrible illnesses. While every effort should be maintained to treat existing cases of these diseases to minimize their burden, far more funding needs to be spent on prevention efforts "upstream" of the current treatment or "downstream" paradigms. Prevention is obviously always preferable to treatment in any circumstance, from both practical and fiscal perspectives. Prevention will serve to lessen the chronic disease burden on future generations, which, in turn, will minimize the social, economic and personal costs.

It's now abundantly clear that much of chronic disease morbidity and mortality is due to lifestyle behaviors. In fact, obesity is the result of an imbalance of two daily behaviors, calories consumed and an individual's level of physical activity. It's no surprise then that a recent report from the Centers for Disease Control and Prevention indicated that the two leading causes of death in 2000 were tobacco use and poor diet and physical activity. The other causes of death paled in comparison. The authors projected that poor diet and physical activity will soon overtake smoking as the leading cause of death, and urged a greater priority be placed on prevention.

TABLE 5.—LEADING CAUSES OF DEATH IN THE UNITED STATES IN 2000

	Numbers of deaths	Percent of total
Tobacco	435,000	18.1

TABLE 5.—LEADING CAUSES OF DEATH IN THE UNITED STATES IN 2000—Continued

	Numbers of deaths	Percent of total
Poor diet & physical activity	400,000	16.6

Source: Mokdad, et al, Actual causes of death in the United States, 2000. JAMA, 2004; 291:1238–1245.

Thus, more than one-third of American deaths can be prevented by changing the smoking, diet and physical activity practices of our citizens.

Since poor diet and physical activity behaviors are the principal contributing causes of obesity and since obesity is a leading underlying cause of nutritionally –related causes of death, a substantial investment is needed in obesity related behavioral research to better understand how and why we have gotten where we are. In an annual NIH Budget of $24 billion, approximately $379 million was spent on obesity in fiscal year 2003, about $400 million will be spent on obesity in fiscal year 20004, and $440 million in fiscal year 2005 (source: www.nih.gov/news/fundingresearchareas.htm). Clearly more funding must be spent on obesity, and particularly on obesity prevention.

Finally, why is a children's behavioral scientist speaking about chronic diseases of late adult life? All avenues of medical science now point to the fact that the prevention of chronic diseases should be initiated early in life among children. Diet and physical activity habits are learned in childhood. Chronic disease risk factors (like blood pressure) elevated among children, tend to remain elevated into adult years. Diet and physical activity practices learned in childhood tend to continue into the adult years. There is some reason to believe that behaviors are more easily changed among children than among adults. Once excess weight is put on it is almost impossible to take off. Despite these factors, many schools are minimizing or closing their physical education programs; high fat and high sugar foods are being marketed to children. National policy must carefully consider what can be done to enhance the diet and physical activity practices of our citizens and especially our children. This will have a huge impact on national health care costs and the quality of our children's lives.

Thank you for your time an attention. I would be happy to answer questions.

LOB QUESTIONS

Question. What research has been done on school based obesity prevention programs for children, and how are they working?

Answer. First, there have been remarkably few school based or non-school based, obesity prevention programs among children. Of those conducted, most have not changed some aspect of body composition. Of those that worked, most were pilot studies that do not normally work in more rigorous larger trials, or they worked for subsets, but not all of the students. There is no clear guidance from the published studies on what to do for school based obesity prevention.

Question. Does this suggest that we should not fund more research in this area?

Answer. No. The NIH has made an enormous investment in biological research over the last 50 years. It is only in the last 10 years or so where the treatments have been targeted at molecular systems, e.g. cell receptors, and have had substantial impact on disease without substantial side effects. The same investment must now be made in the behavioral sciences. We need to better understand why people eat the food they do, and are, or are not, physically active. Research must then be conducted to convert this knowledge into effective programs and evaluate them. This will require substantially more funding for behavioral science and related research.

Question. What do you believe are the three highest priority issues for research in this area?

Answer. First we need a clear picture of what are the major contributors to obesity. Some luminaries believe lack of physical activity is the major culprit; other equally admirable luminaries believe it is mostly diet. There are adherents for the contribution of TV, electronic games, fast food, enhanced portion sizes, etc. If we knew the five major causes of obesity, we would have clear guidance for the design of programs to maximize the effects. Of course the five major causes probably vary by age, and perhaps by gender.

Second, we need a better understanding of why people do or don't do, the behaviors that are the major contributors to obesity. This knowledge will guide programs designers on what mediating variables to target.

Third, we need research on controlled diet and physical activity. For example, most of national dietary guidance is based on the national dietary guidelines and

food guide pyramid, but there has never been a study that assesses what happens when people eat a diet based on the dietary guidelines and food guide pyramid. What will it do for obese or moderately overweight people? for those with an elevated blood pressure or cholesterol? There are several recent versions of the food guide pyramid and more have been proposed. None have been compared for effects on outcomes. The same kind of research is needed with physical activity. What will 30 minutes of moderate to vigorous physical activity 6 days a week do for adults or children who are overweight? Is physical activity valuable primarily in longer doses, or do multiple, shorter doses have the same effect? While some of this research on physical activity has been done, this is very difficult research to do and much more is necessary.

A number of my colleagues would argue that the primary research need is for more community-based interventions. In my opinion, since most of our community based interventions have not worked well, or not worked at all, these three kinds of research will provide much needed guidance to the community based interventions.

STATEMENT OF RICK SCHUPBACH, CO-DIRECTOR, P.E.4LIFE INSTITUTE, AND PHYSICAL EDUCATION TEACHER, GRUNDY CENTER ELEMENTARY SCHOOL, GRUNDY CENTER, IA

Senator HARKIN. Dr. Baranowski, thank you very much for that testimony, and now we'll move to Mr. Schupbach, the Grundy Center Elementary physical education specialist is Mr. Rick Schupbach. He was selected the 1993 Iowa Elementary Physical Educator of the Year, and in 2001 was recognized as only the third Excellence in Education Award winner in Grundy Center Community School District history.

On May 1, 2003, get this, the Grundy Center Elementary physical education program was recognized as the first P.E.4LIFE Institute at an elementary school in the entire Nation. Rick Schupbach.

Mr. SCHUPBACK. Thank you, Senator Harkin, and if I could ask you to draw your attention to the screen, and the audience as well, and excuse me for having my back to you. It is indeed a pleasure to be here today and I thank you for this forum, and I want to thank you on behalf of all physical education teachers, not only in the State of Iowa but the Nation, for your visionary leadership in the area of not only health and wellness, but in physical education, especially with the PEP program legislation.

Along with that, I'd like to take this opportunity, and I would be remiss if I did not recognize my school superintendent, Mr. John Stevens, who is here today with me. Mr. Stevens has been a visionary for health and wellness and physical education at the local level as you have on the national level, so it's very important that he is here with me today.

As I begin my presentation, I want you to use your imagination. Dr. Baranowski did an excellent job of capturing the problem in our society today. What I would like to do is talk about what I perceive as a preventive, proactive, prescriptive solution, and that is quality physical education.

So I'm going to ask you to use your imagination, and I want you to imagine a world where physical education just isn't another class to be completed, but a destination for a different kind of learning. Two such examples I have time to share with you today at the P.E.4LIFE Institute in Grundy Center that we do are the heart adventure challenge course where students represent red blood cells as they travel through the circulatory system. The SOS challenge course, where they have problem-solving teams and have to perform fitness tasks in order to be able to save themselves.

At Grundy Center I'm proud to say that we believe in the mind body connection, that we believe that physical education represents the lifestyle learning lab. Unfortunately, No Child Left Behind has left physical education behind and it has concentrated solely on the mind at the expense of the body. And as a result of that, we have children today that are being educated not as a whole child, but only their mind. I am proud to say that at the Grundy Center P.E.4LIFE Institute, we believe in sound mind, sound body. There's more to education than math, reading, and science.

To do that, you have to document your results. We have the opportunity and the vision to document our students' heart rates on a daily basis. We have revolutionized physical education with report card systems and meal planners and assessments where they can take what they do in fitness testing and track it over the lifetime that they are in school. We can document the effort that students put into physical education on a daily basis, providing printouts for every 5 seconds of their heart rate in P.E. They must invest in their own health to see a return, and we must be able to collect data like every other area of education.

I want you to imagine a world where P.E. is articulated K–12 and it expands outside the walls of the gymnasium and into the community. That's what we've been able to do at Grundy Center. One of the creative ways in which we've been able to do that is to put heart monitors on people in different careers. It's called "the day in the life of," and as you look at this screen, you can see the different days in the life of, and what we've found out is that every career without exception is sedentary, and we know that 9 out of 10 teenagers if they are inactive as youth will become inactive as adults. So what we have to do is be able to get them active, get them to invest in their own health. Is it any wonder we have an obesity crisis when we know that all occupations are sedentary? It's part of how we can inspire one another.

I want to welcome you to an awakening and to the new P.E., and it comes not a minute too soon for any kid who has been picked last, consigned to right field, or left dangling halfway up the climbing rope. The idea is to get away from the jock culture, the fastest, the strongest, the most athletic, instead start all kids on the road to lifelong fitness, and that starts with no humiliation.

I believe that Grundy Center in some small way is serving as a beacon of light, as a lighthouse, not only for our students, but also for our community, also for our State, and as being named the second P.E.4LIFE Institute, for our Nation as we train people who come to our P.E.4LIFE Institute from around our Nation, in fact from around the world. We've had visitors from Finland.

Our approach is a STAR-TEC P.E. approach, where we allow every child to be a star, and we provide success through assessing and reporting. We use technology, education, and community health. That's our physical education program. It starts with a design, and we must design what takes place in our classrooms. Many times physical educators are our own worst enemies and create our own black eyes. We must step up and we must be accountable for our actions, and so the design that I wish I had time to go through and show you all of the different things that are going

on in the educational setting in the classroom setting in Grundy Center.

I truly believe that we have the secret for healthy living. It is a lifestyle education approach. I would like to end and conclude my comments on the most personal and intimate level that I can. Seven years ago tomorrow, I was diagnosed with cancer. I had a tumor the size of my fist in my chest, and as I went to the Mayo Clinic to be treated, my doctor said to me that I was fortunate that I happened to be in as good a shape as I was, I was in training for my second half-marathon at the time. My regiment called for 120 hours of chemotherapy, IV, on four different occasions. Most of the time what killed people that had my type of cancer was the chemotherapy protocol. However, Dr. Ronald Richardson said to me, Rick, you are fortunate because you are in the best shape of your life.

I know there are great teachers around this Nation in all subject matters, and I know they all think what they are doing is the most important thing. I want you to understand that I am passionate about what I teach and I want you to know that no matter how important those other subject matters seems, it's very important to understand that they could not stand in front of you today and say that by living their profession, it helped to save their life. By living my profession, I believe it helped to save my life.

PREPARED STATEMENT

I thank you for your time and I thank you for your advocacy for our mission and our goal and I look forward to you visiting P.E.4LIFE Institute in Grundy Center shortly to join us in a living, breathing model. Thank you.

[The statement follows:]

PREPARED STATEMENT OF RICK SCHUPBACH

Thank you, Senator Harkin, for the opportunity to offer testimony here today. My name is Rick Schupbach and I am a Physical Education Teacher at Grundy Center Elementary School in Grundy Center, Iowa. I have been teaching physical education for 20 years, 14 of those in Grundy Center. I also serve as the Co-Director of the P.E.4LIFE Institute in Grundy Center.

First, I would like to introduce my Superintendent, John Stevens, who is with me today. As you will hear in my testimony, transforming Physical Education programs so they are relevant and effective in the 21st Century requires a partnership with the entire school system, not just the PE teachers. We need visionary administrators who understand and are committed to the healthy body, healthy mind connection. We are fortunate in Grundy Center to have John Stevens as that kind of educator.

Before talking about the exciting things we are doing in Grundy Center, I would like to take a moment to commend you, Senator Harkin, for your exemplary leadership on the issue of promoting health, wellness and prevention, especially with regard to programs aimed at children. Your leadership in the success of the Carol White Physical Education Program (PEP) is making a tremendous difference in communities around the country. Now in its fourth year, the PEP program grants are invigorating PE programs and attracting more young people to healthy and active lifestyles. We are proud of the work you do and look forward to continuing together in the years ahead.

My testimony today will focus on the importance of quality physical education in our nation's schools and specifically what we have been able to accomplish in Grundy Center. We believe quality PE must be part of any national strategy to promote health and wellness. Our understanding of physical education, which we call P.E.4LIFE, means meeting the needs of every student, not just the athletically inclined; it means grading students on effort and progress toward the goal, not on skills and innate abilities; it means using technology and innovative teaching to

reach kids where they are, not pulling them to where we want them to be, only to lose them as soon as the bell rings; it means linking students, teachers, school administrators, business leaders and even senior citizens to build truly healthy communities. And perhaps most importantly, Grundy Center's P.E.4LIFE program means putting the fun back into sports, fitness, recreation and exercise in a way that inspires all students to want to be active every day of their lives.

We have made tremendous progress in our community. Now, by serving as a P.E.4LIFE Institute, we attract and train others who come to see how to improve their physical education program.

We have all heard the statistics about the health crisis facing our nation's youth. Probably one of the most widely used and significant is the Center for Disease report that the percentage of children ages 6 to 11 who are overweight has increased nearly 300 percent during the past 25 years. These numbers continue to astonish as one evaluates older demographics as well.

As described in the news media, these numbers have reached epidemic proportions. It is an interesting paradox though. Never before have children and youth had better access to health care and have experienced lower rates of disease and disability. But the indicators of health status linked to physical activity are regressing. As a result children, for the first time in 100 years, may have a shorter life expectancy than their parents.

The accompanying health problems as a result of this trend present a great problem in our society. Diseases like Type 2 diabetes, previously referred to as "adult-onset diabetes," are on the rise among our children. It has been estimated that the health care cost of being overweight and obese now exceeds $100 billion annually. Just last month, newspaper headlines across the country reported new data attributing lack of physical activity and poor diet to 400,000 deaths per year. This makes physical inactivity and bad nutrition the second leading cause of preventable death in the country, just behind tobacco. The statistics go on and on.

I am proud to say Grundy Center is at the forefront of a national movement to halt and reverse these trends, starting with our children and expanding into the whole community. One of the key aspects of this change has been the recognition led by organizations like P.E.4LIFE that our methods of teaching physical education needed to change. As a result, we have made our P.E.4LIFE program fun, innovative, integrated, motivational and accountable. With proper reinforcement and teaching, scores of kids who in traditional PE were scorned and turned off are becoming engaged and motivated. And these are the ones who make up the epidemic we are trying to fight.

The P.E.4LIFE Physical Education program in Grundy Center is founded on the concept of lifestyle education. We developed our curriculum to educate students to meet the needs of their future lifestyles. My focus is to help students make healthy lifestyle choices they would not have made unless we intervened. Based on a lifestyle education model developed by Beth Kirkpatrick, a native Iowan, our program has been adapted specifically for the elementary school setting.

We develop and implement innovative P.E.4LIFE activities that link to other educational concepts. We strive to integrate learning, starting inside the walls of the gymnasium and reaching out into the community. Let me mention a couple of examples:

—Dance pads and game rider bikes using video technology to motivate students to engage today's students' interest in investing in their own health.

—Community Fitness Center housed within the walls of the school.

—Heart Adventure Challenge Course—Students take on a large scale obstacle course by traveling as blood cells through the circulatory system.

—SOS Adventure Course—A game in which students, stranded on an island, must work together through numerous physical and mental challenges for the team to be saved.

—Technology applications such as the pocket PC, the PE manager report card program and the TriFit assessment program integrated into the physical delivery system.

—Math Projects—Using their own heart rate data, students learn graphing and data collection skills, as well as trend analysis.

—Music Education—Music is a constant in our PE classes. Coordinated with our elementary music curriculum, different classical music composers are introduced to fourth and fifth graders each month during warm-ups. Contemporary music is cued to the aerobic phases of our workouts.

Not only are students learning valuable educational concepts, they're learning how to live active, healthy lives.

Using a wide range of activities, unique class format design technology and interactive learning stations, Grundy Center has a program that addresses a different

aspect and concept of lifestyle education in each PE class every day. In the fourth and fifth grade, students work throughout the year to design their personal lifestyle plans, with regular opportunities to revise their selections. Continually participating in thought-provoking activities requires our students to challenge their choices. This process also encourages parents to take an active role in their child's health through helping them work on obtaining their goals throughout the year.

Technology can be a key determinant in getting kids healthy and active. Heart rate monitors, in particular, are transforming physical education. At the level of the individual student, heart rate monitors allow every child to be successful in PE. Use of monitors encourage students to set and attain goals that are appropriate for them. I teach kids that it doesn't matter how fast they run, as long as they meet their target heart rate. I can't emphasize how liberating this is for students, as well as for me. Technology like heart rate monitors can be the great equalizer, allowing everyone to be a winner and no one a loser.

At the same time, the value of technology extends beyond motivation. Through immediate computer printouts of the every student's heart rate, I get verifiable feedback to see if I am indeed providing the class format and activities necessary to impact cardiovascular fitness. I can use objective data to make a fair assessment of individuals and the class as a whole.

And it allows us to connect with families. We send heart rate printouts home to every parent. This has proven very positive, especially to encourage family discussion connecting fitness and health.

I personally believe use of this kind of technology is absolutely critical to the future of physical education for another reason: Accountability. I can show—visually, graphically, objectively—how participating in physical education is improving our students' health and wellness. We are fully equipped to respond to our Superintendent, School Board and parents when they want to validate the critically important class time and resources our PE requires. In Grundy Center, we welcome the opportunity to demonstrate the cardiovascular benefits a quality physical education program has on students. We can show it. Cutting PE in Grundy Center would mean cutting the heart out of the child's education. I sincerely believe for our country to embrace PE the way it needs to, the physical education profession needs to embrace the accountability we can deliver through technology.

A wonderful affirmation of our program's impact has been how Grundy Center's middle and high schools are embracing the Lifestyle Education approach to physical education. In 2001, we secured private foundation funding to create a state-of-the-art "Community Fitness Center" in our school. More than $130,000 was provided. Initially, aerobic and strength training equipment, along with heart rate monitors and fitness evaluation software, were made available to 6–12th graders. We have seen the quality of their PE experiences improve. Even more exciting, however, was the ability for us to expand physical education beyond the gym and into the community. On any day in Grundy Center, you may find a district judge, grocery clerk, firefighter or eighty year-old retiree working out and recording her heart rate in the Community Fitness Center.

Let me mention one example of how we have extended beyond our school walls and engaged our community. We developed our "A Day In The Life Of" program to teach our students how different careers and lifestyles impact one's health. We went out to the community and put a heart rate monitor on various citizens, and asked each to wear it all day. After a full day's work, we downloaded the information to learn how heart rates fluctuated throughout a routine workday. The results demonstrably showed our students just how sedentary many career paths can become. Our students were shocked to see how few adults reached a target heart rate for any period of time, day after day. It made the point that every person has to consciously decide to be active, whether by riding a bike, walking to the grocery store, playing a sport or working out in a gym.

In addition, this exercise spoke directly to many adults who had no idea of their own physical inactivity. Sue Havel, a local hairstylist, thought since she was on her feet all day she was getting valuable exercise. After seeing the heart rate data prove otherwise, Sue changed her life. She now is a regular at the Community Fitness Center, and happier and healthier for it.

I can't tell you how proud it makes me to see young people inspiring adults and adults inspiring young people to take control of their health in this way. And when we see senior citizens on the treadmill alongside a middle school student, as I do in Grundy Center, it's hard to tell who is inspiring whom, which is even better!

There is no doubt the change I am talking about takes time to realize. When I first began to develop the elementary school curriculum, which is called "Energizing and Educating for Healthy Lifestyles", our gymnasium was housed in the basement of a 70 year-old building. It wasn't anything special. Over time, we formed teams

from the community to clean and restore the gym floor, I painted the gym myself one summer, and volunteers helped to build a student fitness area.

Several years later, a new elementary school was built. Thanks in part to our collective roles in improving the old facility, community members and I were involved in designing the new gymnasium. This collaboration resulted in a truly effective teaching environment that today includes many child-centered learning ideas that allows our program to flourish:

—PE teacher's office is central with windows for two way viewing;
—Restrooms and drinking fountains are inside the gym so no child leaves the teaching-learning setting;
—Gymnasium is situated so that no one from outside class walks through and distracts attention;
—Gravionic bars are built into the walls for decompression exercises that build strength and develop appropriate posture;
—Equipment and heart monitor storage areas are built into facility design;
—Personal spaces are painted on gym floor and numbers are painted on the wall to aid in class management protocols;
—Student workstation to record concepts and heart rate data is adjacent to gym;
—Rock climbing wall was recently built within the gymnasium.

Change takes time, and it takes vision. And if this country is to make the change toward health and fitness that we all know we have to, frankly, the physical education profession needs to change as well. We need to embrace P.E.4LIFE programs that promote technology, accountability, and community outreach. The University of Northern Iowa is attempting to revolutionize physical education training at the college level. Starting next year, eight top UNI graduate students will immerse themselves at the P.E4LIFE Institute in Grundy Center, teaching and living in the community to see firsthand how comprehensive health and wellness promotion can take hold. We believe Grundy Center is a national model that can be replicated across the country. We want more programs to come to the PE4LIFE Institute and then go back home and change they way they do things. Just last month, 10 people from Des Moines trained with us and returned here to transform their PE programs into P.E.4LIFE programs.

We've all heard stories about humiliation in the old way of teaching PE. Being the last kid picked, suffering through elimination games, forced to compete in games that weren't fun—I acknowledge these perceptions hamper PE even today.

Yet it is self evident that quality physical education, provided the right way, is an integral component to deal with obesity-related diseases, sedentary lifestyles and soaring health care costs that plague our country today. We can show people the old PE is out. We can prove to school boards that PE can and should be accountable just like other core subjects. Physical education can be a catalyst for entire communities to become active and healthy.

Physical education in the 21st Century means educating every child in a way that is relevant to his or her life experiences. It means a STAR TECH PE approach where we provide *Success Through Assessment, Reporting, Technology, Education and Community Health Physical Education.* To truly take our PE programs where they have never gone before. We have the means and the experience to engage young people, to teach how and why to be active, and to give them the tools to live a healthy life. As a professional physical educator, I believe we are at a time of fundamental rethinking and retooling in what we do. I could not be more excited about the progress we are making in Grundy Center. It is revolutionary. And it is what is needed for us to address the challenges we face.

Thank you for the opportunity to express my views. I am happy to answers any questions.

Senator HARKIN. Very good. Thank you. Who's taking care of my schedule, John? Make sure I get up there as soon as possible. I really do, and I mean that, I'm going to get up there very soon. Of course, you're going to be out of school pretty soon, darn it. Well, is it okay if I come in the summertime, anyway?

Mr. SCHUPBACK. Any time you want. We'd be happy to have you.

STATEMENT OF DR. CAROLYN CUTRONA, DIRECTOR, INSTITUTE FOR SOCIAL AND BEHAVIORAL RESEARCH, IOWA STATE UNIVERSITY

Senator HARKIN. All right. Well, thank you very much, Rich. Now I'm going to go to Dr. Carolyn Cutrona, Professor of Psychology, Iowa State University. Dr. Cutrona has studied exten-

sively rural mental health issues and the effects of economic stress on rural parents. Her areas of interest include coping with stress, social support, close relationships, health psychology and marital relationships. Dr. Cutrona will discuss the challenges we face regarding the current state of the mental health system and specifically rural mental health issues. In addition, Dr. Cutrona will also address how mental health and chronic disease are intertwined and can trigger one another, and will also address stress prevention. Dr. Cutrona, welcome.

Dr. CUTRONA. Thank you. Good morning, Senator Harkin, fellow Iowans. I am the director of the Institute for Social and Behavioral Research at Iowa State University and a professor of psychology. For 10 years the Institute for Social and Behavioral Research was home to an NIH-funded Center for Rural Mental Health. And we continued to conduct both applied and basic research in this area, so I'm very grateful for the opportunity to share information on mental health and wellness issues, especially as they apply to a rural America. I should note that in 1992 we were pleased to have Senator Harkin present to celebrate the opening of our facility when we first became a center for rural mental health.

Nationally, as many Americans are hospitalized for severe mental disorders as for cancer. Over the course of their lifetime mental disorders affect one-third to one-half of the U.S. population. At any given time 20 percent of adults suffer from mental illness of some sort. Between 12 percent and 22 percent of youth under the age of 18 are in need of mental health services. An estimated 7.5 million children and adolescents suffer from one or more mental disorders.

Mental disorders are among the most disabling of chronic diseases. Furthermore, compared to other chronic diseases, mental disorders strike earlier in life, often in the teens to mid-20s. According to a report from the U.S. Surgeon General, depression is the leading cause of disability in the United States. Let me say that again. Depression is the leading cause of disability in the United States. In addition to the personal suffering of patients and their families, mental health disorders are very costly to society. According to the National Advisory Mental Health Council, in the year 1990 mental illness cost the United States an estimated $75 billion, and it's surely gone up considerably since then.

Mental and physical health are closely intertwined. For example, depression and anxiety often accompany and complicate other diseases, like heart disease and cancer. One study found that the presence of depression among first heart attack survivors was linked to earlier death. The presence of depression among first heart attack survivors was associated with earlier death. Among all illnesses and health behaviors, mental disorders are among the leading contributors to what they call disease burden, defined as years of life lost to premature death and number of years weakened by disability. So clearly this is a very serious health issue.

Let me talk briefly about mental illness in rural America. The prevalence of mental disorders are similar in rural and urban areas. The suicide rate, however, among adult males and children is higher in rural areas than in urban areas of the United States. Among Midwestern farmers, during the farm crisis of the 1980s, the suicide rates grew to four times the national average. Com-

pared to urban dwellers, when you look at individuals who suffer from serious mental illness, 1-year symptom outcomes are worse among rural compared to urban residents. Youth between the ages of 15 and 24 are the most likely to receive inadequate treatment for serious mental illness than any other age group. This problem is more severe for rural than urban youth. Health officials in rural areas place mental health and mental disorders near the top of their list of health priorities.

There is a severe shortage of mental health professionals in rural America. The most severe shortages in rural areas are of psychiatrists, especially child psychiatrists. Again, children with severe mental illnesses are the most underserved, especially in rural areas. Seventy-five percent of rural counties lack a psychiatrist, 95 percent lack a child psychiatrist. Fully 50 percent lack a doctoral level psychologist or master's level social worker. Only 1 in 14 rural hospitals provide psychiatric services, and only 14 percent of total rural hospital beds are designated for psychiatric care. Rural residents are more likely than urban residents to rely upon primary care physicians for mental health care. Primary care physicians often received inadequate training in the diagnosis and treatment of mental illness.

There are many approaches to meeting the mental health needs of rural Americans. It is critically important to provide those who suffer from mental illness with state-of-the-art treatments that are affordable and accessible. In addition, we need to turn our attention to the prevention of mental disorders. There are a variety of strategies for doing this and perhaps we can discuss this in depth in the question and answer period. Let me stop for the time being.

Senator HARKIN. If you have a couple more minutes, I'm always willing to give.

Dr. CUTRONA. Well good, let me go ahead.

Senator HARKIN. Just a couple more minutes to wrap up, maybe.

Dr. CUTRONA. Very good. So, how do we increase access to mental health care? Incentives must be increased to encourage mental health professionals to locate in rural areas of the country.

Senator HARKIN. How do you do that?

PREPARED STATEMENT

Dr. CUTRONA. Federal reimbursement rates for Medicaid patients must be increased to lessen the income disparity for mental health providers who work in rural versus urban areas. Specialized training in rural mental health should be added to graduate training programs in psychology, social work and other mental health professions to increase the rural competence of mental health care providers. The ability of primary care physicians to provide competent mental health treatment should be increased through training, clinical practice guidelines, utilization, routinely a brief mental health screening instruments, and greater, stronger linkages between primary care physicians and mental health providers. Telemedicine, in which specialists at a distance provide consultation, training, supervision and even direct services via videophone technology is growing in popularity. A number of mental health telenetworks have been established to provide specialty consultation and training in the mental health area. We must reimburse critical as-

pects of mental health care, including thorough assessment, especially with children. It's very complex, assessing exactly what the nature of the child's mental health disorder or issue is. These are costly, they must be reimbursed. Treatment while problems are still small rather than waiting until problems are severe. Having these kinds of treatment reimbursable is critical.

[The statement follows:]

PREPARED STATEMENT OF CAROLYN E. CUTRONA

Good morning, Senator Harkin. My name is Carolyn Cutrona. I am the Director of the Institute for Social and Behavioral Research and a Professor of Psychology at Iowa State University. For ten years, the Institute for Social and Behavioral Research at Iowa State was home to an NIH-funded Center for Rural Mental Health and we continue to conduct both basic and applied research in this area. We are grateful for the opportunity to share information on mental health and wellness issues, especially as they apply to rural America.

SCOPE OF THE PROBLEM

Nationwide, as many Americans are hospitalized for severe mental disorders as for cancer. Over the course of their lifetime, mental disorders affect approximately one-half of the U.S. population. At any given time, approximately 20 percent of adults and 25 percent of the elderly suffer from mental illness of some sort. Between 12 percent and 22 percent of America's youth under age 18 are in need of mental health services. An estimated 7.5 million children and adolescents suffer from one or more mental disorders. Mental disorders are among the most disabling of chronic diseases. Compared to other chronic diseases, mental disorders strike earlier, often in the period extending from the teens to the mid-twenties. According to a report from the U.S. Surgeon General, depression is the leading cause of disability in the United States.

In addition to the personal suffering of patients and their families, mental health disorders are very costly to society. According to the National Advisory Mental Health Council, in the year 1990 mental illness cost the United States an estimated $74.9 billion.

Mental and physical health are closely intertwined. For example, depression and anxiety often accompany and complicate other diseases, like heart disease and cancer. One study links depression to early morality among first heart-attack survivors. Among all illnesses and health behaviors, mental disorders are among the leading contributors to disease burden, defined as years of life lost to premature death and number of years weakened by disability.

MENTAL ILLNESS IN RURAL AMERICA

The prevalence of lifetime and recent mental disorders are similar in rural and urban areas. The suicide rate among adult males and children is higher in rural than in urban areas of the United States. Among Midwestern farmers during the farm crisis of the 1980s, the suicide rate grew to four times the national average. Compared to urban-dwellers, worse one-year symptom outcomes were found for rural residents with a serious mental illness, especially if the illness was accompanied by substance abuse. Youth between the ages of 15 and 24 are more likely to receive inadequate treatment for serious mental illness than any other age group. This problem is more severe for rural than urban youth. Health officials in rural areas place mental health and mental disorders near the top of their list of rural health priorities.

AVAILABILITY OF MENTAL HEALTH RESOURCES IN RURAL AMERICA

There is a severe shortage of mental health professionals in rural America. Although the supply of specialty mental health professionals in the United States grew substantially in the 1990s, the increase in rural areas has been minimal. In 1999, 87 percent of designated Mental Health Professional Shortage Areas in the United States were in non-metropolitan counties, which are home to over 30 million people. The most severe shortages in rural areas are of psychiatrists, especially child psychiatrists. Seventy-five percent of rural counties lack a psychiatrist; 95 percent lack a child psychiatrist; 50 percent lack a master's or doctoral level psychologist or social worker. Twenty percent of non-metropolitan versus only 5 percent of metropolitan counties lack mental health services. Non-metropolitan counties have

an average of less than two mental health clinics, compared to more than 13 in metropolitan counties. Only 1 in 14 rural hospitals provide psychiatric services and only 14 percent of the total rural hospital beds are designated for psychiatric care.

Rural residents are more likely than urban residents to rely upon primary care physicians for mental health needs. Studies have shown that primary care physicians do not always provide optimal treatment for mental illness. For example, patients treated for depression by primary care physicians are more likely than those treated by psychiatrists to have an incomplete recovery and to suffer a relapse. Primary care physicians often receive inadequate training in the diagnosis and treatment of mental illness. Their heavy case loads demand brief visits, in which mental health concerns cannot be adequately addressed. They may lack expertise regarding when to make referrals and they often lack local specialists to whom to refer seriously mentally ill patients.

TWO APPROACHES TO THE PROMOTION OF MENTAL HEALTH

There are many approaches to meeting the mental health needs of rural Americans. It is critically important to provide those who suffer from mental illness with state-of-the-art treatments that are both accessible and affordable. Increasingly, however, we should turn our attention to the prevention of mental. After a brief discussion of strategies for increasing the supply of mental health resources to rural Americans, attention will turn to preventive strategies that may be more cost effective in the long run.

INCREASING ACCESS TO MENTAL HEALTH CARE

Incentives must be increased to encourage mental health professionals to locate in rural areas of the country. Federal reimbursement rates for Medicaid patients must be increased, to lessen the income disparity for mental health providers who work in rural versus urban areas. Specialized training in rural mental health should be added to graduate training programs in psychology, social work, and other mental health professions to increase the cultural competence of mental health care providers. Rural-connected individuals should be recruited by graduate training programs in the mental health disciplines and encouraged to practice in their home communities. State and federal support should be available to students in these programs.

The ability of primary care physicians to provide competent mental health treatment should be increased through training, clinical practice guidelines, utilization of screening instruments, and creating greater contact of primary care physicians with mental health professionals via a variety of linkages.

Integrated treatment that addresses both psychological health and physical health may advance both cost and quality objectives in the system of care. The coordination of mental health services with primary health care has been found to contribute to reductions in health care costs. Improving the link between primary care physicians and mental health specialists is of great interest to rural mental health experts. A range of collaborative relationships can be envisioned, in which primary care physicians hire, share space with, or confer off-site with mental health specialists.

Telemedicine, in which specialists at a distant site provide consultation, training, supervision, and direct services via videophone technology, has grown in popularity. A number of mental health telenetworks have been established. They have been used for direct psychiatric encounters (patient interviews), crisis response, medication management, and consultation on admission, commitment, and discharge. A recent survey of rural Iowans found that approximately two-thirds of respondents expressed willingness to use telemedicine for mental health services and three-fourths would recommend this service to a friend. As expected, older respondents were less willing than younger respondents to use telemedicine, and expressed concerns about confidentiality, impersonality, lack of knowledge about technology, and problems with vision or hearing.

THE NEED FOR PREVENTIVE INTERVENTIONS

The last twenty years have seen an explosion in programs to prevent a wide range of mental illnesses and problem behaviors. Evidence has accumulated that preventive interventions are cost effective. Some mental health problems that are resistant to treatment in adulthood can be prevented through intensive preventive interventions in childhood. There is evidence that some disorders accelerate in severity over time. If their onset can be prevented, boundless suffering and years of lost productivity can be avoided.

Relatively little is known about the precise causes of mental illness. Many types of mental illnesses result from a combination of genetic predispositions and life ex-

periences. It is possible to inherit a tendency towards a disorder like depression, but only to succumb to the disorder if faced with overwhelmingly negative life conditions. Similarly, it is possible to inherit a tendency towards impulsivity and a short attention span, but with firm, consistent parenting, never to develop problem behaviors such as delinquency or drug abuse.

Although we do not know the precise cause of most mental illnesses, we have learned a great deal about risk factors and protective factors associated with mental illness.

Risk factors increase the probability over time that a mental illness will develop. Seven types of risk factors have been identified. These include constitutional handicaps (e.g., neurochemical imbalance or sensory disabilities), skill development delays (e.g., low intelligence or attentional deficits), emotional difficulties (e.g., emotional immaturity, low self-esteem), family circumstances (e.g., abuse, parental mental illness, poor parental supervision), interpersonal problems (e.g., peer rejection, social isolation), school problems (e.g., poor school performance, and alienation from school), and ecological risks (e.g., neighborhood poverty, racial prejudice).

Protective factors decrease the probability that mental illness will develop, especially among persons who are subject to one or more risk factors. Protective factors include characteristics of the individual (e.g., intelligence, social skills, temperamental characteristics), the quality of the individual's interactions with others (e.g., a close relationship with parents and prosocial peers), and the quality of the larger environmental context (e.g., good quality schools, a good relationship between the family and the community).

Preventive interventions that systematically decrease exposure to risk factors and increase access to protective factors have been the focus of concentrated research efforts for approximately two decades. These interventions closely parallel more familiar prevention efforts in the public health domain, such as anti-smoking campaigns or laws mandating the use of seat belts.

PRINCIPLES OF EFFECTIVE MENTAL HEALTH PREVENTIVE INTERVENTIONS

Two decades of research on preventive mental health interventions yield the following general principles.

1. Preventive interventions that start at an early age are the most effective. Some of the most effective preventive interventions begin in preschool.

2. Short-term interventions produce only short-term results. Multi-year programs are the most likely to produce enduring benefits.

3. Preventive interventions are best directed at risk and protective factors rather than at specific symptoms or syndromes. Because the same risk and protective factors influence a wide range of mental illnesses, it is cost effective to target these factors and potentially influence multiple mental health outcomes.

4. Preventive interventions should be aimed not only at building childrens' competencies and coping skills, but also at modifying their environments, including home, school, and community. Optimizing parenting quality is an especially important component of preventive interventions. A second critical component is optimizing the quality of the school climate for school-aged children.

5. There is no single program component that can prevent mental illness and problem behavior. A package of coordinated, collaborative strategies and programs is required in each community.

6. To create sustainability of preventive intervention programs, programs must be integrated into existing community structures. In this way, communities can develop common conceptual models, common language, and procedures that maximize the effectiveness of programs for individuals with varying levels of need. Schools, in coordination with community organizations (e.g., community mental health centers, Departments of Human Services, community youth organizations, County Extension Offices) can work together to offer sustained preventive programming to youth and families.

TYPES OF PREVENTIVE INTERVENTIONS TO ENHANCE MENTAL HEALTH

There are three different types of preventive mental health interventions: universal, selective, and indicated. Universal preventive interventions target the general public or a whole population group. Participants are not selected based on individual need. In the public health domain, childhood immunization programs are an example. In the mental health domain, a wide range of universal preventive interventions have shown good results. For example, preventive programs have been developed to prevent violence by exposing children to a school-based curriculum that teaches nonviolent conflict resolution, decision-making skills, and anger control. Programs to reduce drug and alcohol use have also been developed. One successful pro-

gram included in-school programming on decision-making and resistance to peer pressure in addition to training for parents on effective parenting skills. Universal preventive interventions have been developed to ease the transition from elementary to middle school. These in-school programs focus on individual skill-building and creating a supportive school environment. One such program showed significant reductions in measures of maladjustment and mental illness, lower rates of alcohol and tobacco use, and less violent behavior six years after the program.

Selective preventive interventions target individuals or subgroups based on the presence of biological or social risk factors that increase the probability of developing mental disorders. A number of selective preventive interventions have been designed to help children who are at increased risk for depression, either because they have a depressed parent, or because they have shown elevated depressive symptoms themselves. The interventions typically take place in schools and focus on the overly negative thought patterns and beliefs that often underlie depression. Such programs have been successful in lowering the rates of depression among youth. Other school-based preventive interventions have successfully targeted anxiety disorders or suicidal behavior. Preventive interventions have also been developed to serve children and families who have experienced family disruptions, including parental divorce and parental death. Such programs are successful in reducing future child depression and substance abuse.

Finally, indicated preventive interventions target individuals who are identified as having early signs or symptoms related to mental disorders but who do not yet meet formal diagnostic criteria for a mental illness. An indicated preventive intervention is embedded in a larger universal intervention called Fast Track (Conduct Problems Prevention Research Group, 1999a). The program is designed to prevent conduct disorders and associated adolescent problem behaviors. This program involves 50 elementary schools in four urban and rural locations. The universal intervention includes a multi-grade curriculum throughout the elementary school years. The indicated intervention offers youth who are identified in kindergarten as manifesting a high level of problem behaviors a series of interventions that involve the family (e.g., home visiting, parenting skills, case management), the child (e.g., academic tutoring, social skills training), the school, the peer group, and the community. Results of the first three years indicate significant reductions in special education referrals and aggression both at home and at school for targeted children.

SUMMARY

Residents of rural America suffer from mental illness at approximately the same rate as those of urban areas. However, rural residents have much lower access to mental health services. A variety of directions for reducing mental illness in rural America were suggested. Some of these include increasing the availability of mental health specialists. Another approach to mental illness, in both rural and urban settings, is to dedicate resources to the prevention of mental illness. When preventive interventions are implemented in early childhood and target the child's skills, the family environment, and the school environment, research shows that many kinds of mental health problems can be prevented or reduced in severity. A new model of collaboration among community organizations is needed in which programs with demonstrated effectiveness can be built into the structure and routines of community life.

Senator HARKIN. I'd like to go to some of the health prevention intervention, especially in early childhood with you during our question and answer sessions.

Dr. CUTRONA. Very good.

STATEMENT OF LEN OLSEN, CHIEF EXECUTIVE OFFICER, OTTUMWA REGIONAL HEALTH CENTER

Senator HARKIN. Thank you, Dr. Cutrona.

Now we will turn to Mr. Len Olsen. Mr. Olsen is the CEO of the Ottumwa Regional Health Center. This health center offers a comprehensive wellness program for their employees, and I also understand you're involved in providing wellness programs for the private sector and some businesses. And you can talk about that because I met one of those one time and was very intrigued by what you're doing there. Incentives include reduced health insurance

premiums for participation and meeting individual health goals. So, welcome Len, and please tell us what you're doing in Ottumwa.

Mr. OLSEN. Well, thanks for the opportunity to be here again today, Senator Harkin. And I want to thank a couple of people that talked me into being here today and that's Elaine Leppard, our Wellness Coordinator. Elaine, if you could raise your hand. And Jo Ellen Randall, our vice president of Human Resources and who is in charge of wellness for our hospital and for the public program. So they really are responsible for the program.

I'm speaking today more as a participate and an advocate rather than an architect of this program. But I want to go back a little bit to the Grundy Center presentation. You know, when I was growing up on a dairy farm in rural Minnesota, my exercise consisted of milking cows, shoveling things out of a gutter, cleaning calf pens, picking mustard weeds out of a field. And I stayed in pretty good shape doing that but I think I'd have rather gone to Grundy Center, however, because it looked like a lot more fun. But it points out how much our lifestyle's changed. I worked hard as a kid and now that's changed pretty dramatically.

But to get to our program, as the head of a regional health center that employs some 960 people, I'm very much aware of the impact of increasing health costs on Iowa employers. It's a big problem. Over the last 8 years Ottumwa Regional has been instrumental in developing a work site wellness program that we call Healthy Choices. This program was not designed to be a quick fix. But over the last 8 years I think we are seeing the potential that the program has for helping contain health care costs and having our staff live a healthier lifestyle.

The program was developed in 1997 in order to respond to rising health insurance costs, as many employers have experienced. We used a task force of employees to help develop ideas, and it was determined early on that it wasn't sufficient just to provide health insurance or sick coverage, as you said earlier, that we had to promote wellness and the individual health of employees and their families. I think one of the goals is that if we teach our employees how to live healthier lives they can help teach their kids how to lead healthier lives as well.

When we looked at our claims history, 48 percent of our health insurance claims were related to lifestyle, or behavioral issues, such as drug and alcohol abuse, poor pre-natal care, smoking, poor diet and lack of exercise. It was this resolution that led Ottumwa Regional to embark on the Healthy Choices journey. One of the key elements was creating a supportive rather than a punitive environment. A positive environment can help employees to turn healthy choices into healthy habits. Senior management's support for the program was essential in getting it off the ground, and my predecessor and Jo Ellen were a big part of that. Employees were encouraged, actively encouraged, to enroll in the program. Employee wellness games were formed to provide input on program design, encourage co-workers to participate and provide support to those who chose to make lifestyle changes. As one of the people that had to do that when I came to Ottumwa Regional, that support is important. Building a health culture is a big job, one that we continue to work on and improve upon to this day.

Let's talk a little bit about the program design. From the beginning we were focusing on the individual through one-on-one counseling and education. You do have to sit down with Elaine, in a room, get weighed and do things, and respond to her questions. So it's a little tough at times. But what the staff does is help you set realistic goals for you. And they give you the tools to achieve these goals, and then there's a reward system if you make those—if you achieve those outcomes. One of the biggest is you get a cut on your health insurance premiums, a significant difference. In fact, from our highest health premium rate to our lowest, on a family plan, is about $3,000 a year difference, if you achieve those healthy lifestyle goals. So it's not insignificant.

The goals initially, however, were to get as many people enrolled in the program as possible, whether or not they used our health insurance. We wanted to reward those who are willing to maintain or achieve a healthier lifestyle. Of course, you got a reduced health insurance premium if you did achieve your goals. And we also sought to reduce absenteeism, kind of a hidden cost of not having a healthy lifestyle. And we've got some statistics to prove that we've made improvements in that area. Initially the plan was only offered to employees but now it is extended to spouses.

Some of the key components. It's a comprehensive program that has a number of health risk assessments. And our goal is to decrease risk factors that have been proven to increase the likelihood of chronic diseases, such as diabetes, heart disease, cancer, etcetera. So let me give you an idea of what some of those components are.

Annually, you have to have a blood screening of cholesterol, blood sugar, also have your blood pressure taken, get weighed, have a body, this says body fat but we call it body composition, don't we Elaine? Makes it sound better. And now, waist to hip ratio measurements. So you have to go in and do this confidentially. You fill out a health risk appraisal, or a form that every participant has to fill out, and asks you a variety of questions. And then you sit down, the staff analyzes both the information from the laboratory work, their measurements and the self-assessment and they sit down and set goals with you.

So, 4 years ago after I had sat down with Elaine, and I had the cholesterol challenge. I guess I had a choice to go on medication or to change some lifestyle issues, like eating better and exercising more. So I chose the latter. The health screenings allow employees and the wellness staff to identify and take corrective action on those health risks that could result in a major illness if they're left untreated. There are those who choose not to take corrective action and we provide awareness and education, and some materials for them to take home.

To the incentives. There's really three parts to the incentive component. The core benefits, we provide a lot of things, screening devices, that are free of charge. Mammograms, nicotine patches if you want to stop smoking, the cholesterol screening, weight reduction programs and support and smoking cessation classes; don't cost you anything. Then, we've got a plan for our insurance, as a I said earlier. On the most expensive plan, for those folks who chose not to set a goal or not participate in the program, we pay 60 percent of

the employee's premium, they pay the balance. That goes up to us paying 90 percent of the premium if an employee meets all of their health goals and criteria.

Now, I'll give you a personal story. I think I was on Level B, partial compliance, and when I met the plan goals that we had established I saved $70 a paycheck, or about $1,800 a year. Now, imagine a dietary worker who may be making $8 or $10 an hour, $1,800 to $3,000 a year is a big deal. In fact, it's almost a car payment in some cases. So, that's the benefit you can get out of Healthy Choices.

We also give something called Healthy Bucks, which is $100 a year, per employee, to anybody who participates and completes a health risk assessment. And they can spend that on a variety of things that are health-related.

Everybody wants to know about outcomes. And I want to stress that a wellness investment is not a short-term payoff; you've got to be in it for the long haul. The unhealthy habits that we see across the Nation today didn't happen overnight and they're rapidly reaching epidemic proportions, as we heard earlier. But through our Healthy Choices program we as an employer try to help our employees make better choices and live a healthier lifestyle. It will take years to pay off. But think about this one example—and I was close to this. One employee on a cholesterol-reducing drug would cost our health plan $1,300 a year and the employee $240 a year. By getting my cholesterol down, we both won. I don't pay out the $240 and my employer doesn't pay out the $1,300 a year. Pretty good investment, I'd say. That's a short run gain.

For employees who already have healthy lifestyles, our wellness program assists with maintaining this lifestyle by the incentives I've talked about. And currently, 98 percent of our employees participate in our Healthy Choices program. Ninety-eight percent.

So, you want to talk about—we're going out in the community. This is something that we've begun to market as a product. Elaine goes out and spends a lot of time calling on businesses. But let's talk about some of our success stories that we can share with every business.

In 1996, before the program started, 21 percent of our wellness participants at OHC used tobacco products. Currently, 7 percent are using tobacco products. Employees who had body mass indexes of over 28 percent, which is close to the obesity limit, two-thirds of our people were at or exceeded this limit in 1996, compared to 37 percent today, a halving of that number. The health status of our employees began to show positive results in the first 3 years and it continues today. And I talked about absenteeism earlier; we've had a 24 percent reduction in absenteeism rates with participating Healthy Choices employees versus those who do not.

So we're confident that healthier lifestyles are making a difference in our organization but we know our work is not done. We know that to remain competitive as an employer the health of our employees has to be part of our strategic plan. Instead of being a victim as a result of skyrocketing health care costs, organizations need to be a catalyst for creating healthy, innovative and productive employees.

PREPARED STATEMENT

We have brought this out in the community. The city of Ottumwa and L-John Incorporated, both located in Ottumwa, have implemented our Healthy Choices program in their workplace. Musco Sports Lighting, with corporate headquarters in Oskaloosa, also came onboard with Healthy Choices, and we provide services to their locations in Iowa, along with regional offices across the United States. And Elaine gets to get on their private plane and fly around and do these things, so that's got to be fun.

So, to close, we have about 1,800 area employees and their spouses participating in this program and we're very excited about it.

[The statement follows:]

PREPARED STATEMENT OF LYNN OLSON

Thank you for the opportunity to appear before you today to share with you the success of our wellness program at Ottumwa Regional Health Center. As President and CEO of a regional health center in southeastern Iowa, I am very much aware of the skyrocketing cost of health care costs and the impact on Iowa corporations.

Over the past eight years, Ottumwa Regional Health Center (ORHC) has been instrumental in developing a worksite wellness program, known as Healthy Choice$. Currently, our participation rates in this program are at 98 percent. The success of this program did not happen in six months, a year or even two years; however, I can stand here today and tell you that we are beginning to enjoy the fruits of our hard work.

The Healthy Choice$ wellness program was developed in 1997 by a group of employees participating in a benefit task force at Ottumwa Regional Health Center in Ottumwa, IA. The task force's purpose was to focus on what could be done to reverse the unfavorable upward trend in health claims resulting in significant premium increases. Because of the high cost of premiums, it was becoming more cost effective for the healthier employees to go elsewhere for health insurance coverage versus participating in the group plan. We were faced with the risk of offering a plan that was unaffordable, potentially driving employees to go elsewhere, or dropping the coverage and no longer being insured. It was determined that in addition to providing the coverage for illness and injuries, our organization needed to include an organized system to improve and maintain the individual health of our employees. An analysis of the claim history indicated that 48 percent of our claim dollars were spent on behavioral/lifestyle related cases (drug and alcohol, poor prenatal care, smoking, poor diet, lack of exercise, etc.) At this time, the initiation and implementation of a worksite wellness program occurred.

STEPS IN BUILDING A WELLNESS PROGRAM IN THE WORKPLACE

Healthy Choice$ is a program that focuses on lowering the health risks of the participants through education and one-on-one counseling. The plan measures a participant's health, helps them to establish realistic goals, provides the tools to achieve those goals and rewards them for achieving and maintaining those goals with significantly reduced premiums.

The program was designed to achieve the following outcomes:

—Increase the number of participants in the plan (spread the risk over a greater number of people)

—Reward those who were willing to maintain or achieve a healthier lifestyle

—Reduce the claims of that were related to lifestyle choices

—Reduce the absenteeism rate by creating a "healthier" employee

Initially, the plan was offered to employees. It is now offered to employees and their spouse.

INCENTIVES

In order to meet the outcomes that were designed for this program, incentives surrounding wellness achievement were essential. Using national guidelines, the reduction in risk factors was the criterion that was implemented.

The Healthy Choice$ program consists of three incentive components:

Core Benefits.—Screening and wellness benefits made available to all employees. Mammograms, nicotine patches, cholesterol screening, weight reduction and smoking cessation classes.

Health Allowance.—This is the incentive system that offers multiple levels of premium reductions offered to employees participating in the program.

—*Plan A: Employer pays 60 percent of premium*.—Employee chooses not to improve their health or to establish goals. Employees are not rewarded or punished for their choice of non-participation.

—*Plan B: Employer pays 70 percent of premium*.—Employee doesn't meet the healthy criteria but establishes goals to be met within one year.

—*Plan C: Employer pays 75 percent of premium*.—Employees doesn't meet the healthy criteria but has met a goal from the previous year. Goals must again be established for the next year.

—*Plan D: Employer pays 90 percent of premium*.—Employee meets/maintains the health criteria.

Healthy Bucks.—Reimbursement of items/services that employees purchase to maintain or improve their health. At this time we allow $100.00 per employee and is given to any employee who participates and completes a health risk assessment.

PROGRAM COMPONENTS

Healthy Choice$ is a comprehensive program that targets employee health risks. Decreasing risk factors that have been proven to increase the likelihood of chronic diseases such as diabetes, heart disease, cancer and diabetes is the focus of our program. The components of this program are:

—*Biometrics*.—Annual screening of cholesterol, blood sugar, blood pressure, weight, body fat levels and waist-hip ratios.

—*Data collection*.—Health risk appraisals are completed by all Healthy Choice participants in order to evaluate the effectiveness of the program and to make changes as necessary.

—*Intervention/goal setting*.—One on one with the employee and a trained wellness professional. Review of the biometric measurements and with the use of coaching, goals are set by the employee. Every quarter, employees meet with the wellness staff individually to assess their progress.

The health screenings allow employees and the wellness staff to identify and take corrective action on health risks that could result in a major illness if left undetected and untreated. For those individuals who chose not to take corrective action, awareness and educational material is provided. One of the goals of Healthy Choice$ is to keep the employee coming back every year and eventually the decision is made by the individual to take action to improve his/her health. These are changes that do not occur overnight. It can take three to four years for an individual to begin making the behavior change.

BABY STEPS

The unhealthy habits that we are seeing across the nation today did not happen in a day. We believe in taking small steps when helping employees set their annual health goals; and in some instances, we work towards preventing further erosion of the unhealthy lifestyle. Instead of a deficit approach, we build on the individual's strengths when helping them set their health goals. For those employees who already have healthy lifestyles, our wellness programs assists with maintaining this lifestyle by the incentives that are offered.

CREATING A SUPPORTIVE AND HEALTHY ENVIRONMENT

As Healthy Choice$ evolved over the last 8 years, it was evident that this wellness program included all of the elements of a comprehensive work site wellness program. However, in order to continue the vision of substance and growth of this program, creating a supportive environment was crucial to the overall success of Healthy Choice$. A positive environment can help employees to turn healthy choices into healthy habits. Senior management modeling and supporting healthy behavior is important in creating the well workplace. As the old cliché states, "if you talk the talk, you have to walk the walk." Employee wellness teams provide the empowerment and peer role modeling in making lifestyle changes. Building a healthy culture is a big job and one that we currently are striving towards.

THE SUCCESS STORY OF HEALTHY CHOICE$

In 1998, Ottumwa Regional Health Center marketed Healthy Choice$ to other employers in the community. The City of Ottumwa and Al-Jon, Inc. both located in

Ottumwa, Iowa implemented the wellness program in their workplace. Masco Sports Lighting, with corporate headquarters in Oskaloosa, Iowa came on board with ORHC and we now provide services to their locations in Iowa along with their regional offices across the United States. Currently, we have over 1,800 individuals participating in Healthy Choice$.

MAKING THE CONNECTION TO EMPLOYEE HEALTH IMPROVEMENT

In 1996, 21 percent of the wellness participants at ORHC used tobacco products and currently 7 percent are using tobacco. Employees who had BMI's over 28 percent in 1996 were at 66 percent compared to current BMI rates at 37 percent. The health status of the employees started to show positive health behavior change within three years. ORHC employees who participated in Healthy Choice$ last year had a 24 percent reduction in absenteeism rates when compared with non-participating employees.

We are confident that we are making progress in developing healthier lifestyles in our organization; however, we know that our work is not done. We know that if we are to remain competitive, the health of our employees has to be part of our strategic plan. Instead of being a victim as a result of the skyrocketing health care costs, organizations need to be the catalyst for creating healthy, innovative and productive employees.

STATEMENT OF RHONDA E. RUBY, REGISTERED NURSE, WEBSTER COUNTY DEPARTMENT OF PUBLIC HEALTH

Senator HARKIN. Sounds great. Well, thank you very much, Len. That's great.

Now we'll turn to Ms. Rhonda Ruby, Registered Nurse, Webster County Department of Public Health. Ms. Ruby started a joint seniors-HeadStart—interesting—mall walking program. Webster County created a mall walking program that has expanded into a community-wide effort to encourage healthier lifestyles among all ages and sectors of the county.

Well, that sounds very interesting.

Ms. RUBY. Okay. All right.

Senator HARKIN. Ms. Ruby.

Ms. RUBY. Thank you. Can you hear me okay?

Senator HARKIN. Sure.

Ms. RUBY. All right. Thank you for having us here today. This is so exciting, for us to be a part of——

Senator HARKIN. Pull that in a little bit closer maybe.

Ms. RUBY. Closer?

Senator HARKIN. To you.

Ms. RUBY. Okay. This is so exciting for us to be a part of this and I'm going to change the direction a little bit. Instead of a testimony I'd like to just have a brief conversation with you about what we've been doing in Webster County. It's really exciting for us to present this program because we've had so much success with it. We have several wellness programs, initiatives, policies in effect in Webster County that I would love to tell you about and I would love for you to come visit us so we can show you. But the big one we want to focus on is our Mall Walkers Program. And I just want to pre-empt that by saying we started this because in April 2002 we did a community needs health assessment where our residents identified cardiovascular disease as their number one concern. We took that information and from that we instituted several wellness prevention paradigms. The big one that you guys are concerned with is our Mall Walkers and HeadStart Program. The reason this is so effective and so important is it truly is a comprehensive, family-centered wellness prevention paradigm. And this program is

available to anybody in the community. It is available to all ages, all races, incomes, ethnicity and health disparities. We in fact have children in the program that are disabled and we have people in our Mall Walkers Program that are impaired.

The format for the program is very simple. We have a Mall Walkers Club that people can walk at the mall at their convenience. Each month they turn in the minutes that are logged and the fruits and vegetables that are consumed. We monitor that information at the end of each month and each week we have a nurse at the mall that checks their blood pressure and continues to assess their cardiovascular status.

How we tied in the HeadStart piece was, each month we'd bring a different class from our HeadStart population to walk with our mall walkers at the mall. So we have children from the age of 3 walking with mall walkers anywhere from age 18 to 80. And with our local HeadStart program we don't just bring the children, we bring the children, the day care staff, parents, foster grandparents; and each month we do a short educational piece with our mall walkers. It's been hugely successful in Webster County.

We started it in 2000 and each year that program has grown. When we first started back in September 2000, I think we had something like 86 participants, which is great, that's progress. As of last year between our local HeadStart populations and our enrolled mall walkers we have 270 people in our program. We have been able to make huge, huge changes with this program. It was possible because of the community support that we have for it. In our program, we have the mayor enrolled as a mall walker; we have our local board of supervisors enrolled; we have legislatures enrolled; we have the entire community involved and embracing this program.

PREPARED STATEMENT

The impact that we have been able to make has been tremendous. We have two of our local board of supervisors that we persuaded to join our Mall Walkers Club. One did not know he was diabetic and we did a screening and found him to be a diabetic and he has subsequently been treated for that. We had another board of supervisors member who was hypertensive and did not know that he was and has subsequently been treated for that. And just last week we performed a Wellness County Day where another board of supervisor was diagnosed as diabetic as well. So the impact for the community has been tremendous. We've been able to involve all facets of our community and it's been open to all the citizens, all ages, and we've had a tremendous amount of community support from it. It's been a huge success in Webster County.

Senator HARKIN. That's wonderful, too. You've got both, you've got the elderly and the young together.

Ms. RUBY. Yep, uh-huh.

Senator HARKIN. Pretty interesting, I like that a lot. Well thank you very much.

Ms. RUBY. You bet.

Senator HARKIN. You know, we'll have more to talk about this later on.

Ms. RUBY. Uh-huh, Uh-huh.

[The statement follows:]

PREPARED STATEMENT OF RHONDA E. RUBY

Senator Harkins, Ranking Member and other Members of the Committee: On behalf of all residents of Webster County, we would like to thank to everyone for allowing us the opportunity to share our stories of success and highlight our accomplishments. It is a privilege to offer our views and suggestions on how we feel it would be most beneficial to improve community wellness and institute disease prevention. We were pleased to read Senator Harkins comments from his Press Release, stating top legislative priority will be given to a Wellness and Disease Prevention Initiative. We too, have given this matter top priority. We believe by appearing before this committee, we have a wonderful opportunity to showcase the comprehensive efforts put forth by our agency to reduce cardiovascular and stroke risks by targeting Iowa's overweight and obesity conditions in Webster County.

Our agency, along with the Iowa Department of Public Health has been waging a battle against the obesity epidemic for many years. As you know, staggering obesity rates have also coincided with increases in cardiovascular and stroke related illnesses. This was of great concern to us, and we decided it was essential to improve our own community's health and well-being. We did this by instituting several wellness prevention paradigms. Our goal was to empower citizens with information and resources that allowed them to take charge of their health and make informed decisions. With this in mind, we challenged the community to concentrate on nutrition and physical activity and make it a part of their daily lives. Our programs specifically focused on at risk individuals and stressed education, awareness, screening and prevention of obesity through worksites, busineses, and the community at large. The results have been phenomenal.

We have witnessed first hand the remarkable success produced from a consistent focus on disease prevention and wellness promotion. The wellness paradigms implemented in this region are evidence of how powerful prevention and consistency can be when dealing with the complex issue of obesity. The programs were able to show direct, statistical outcomes that resulted in increased amounts of physical activity and proper nutrition among citizens, as well as decreased obesity rates and associated illness. Through the use of education, awareness, and screenings, our wellness investments in the community have paid off in the form of healthier, more knowledgeable citizens.

WHY THE MALL WALKERS PROGRAM WAS INITIATED AND HOW IT HAS EVOLVED

To understand the success of the wellness projects implemented in the last four years, it is important to recognize why these programs were vitally necessary for the community. One of the foremost reasons our agency focused on cardiovascular disease risk reductions, was due to Webster County residents identifying Cardiovascular Disease as their number one health concern in a Community Needs Assessment, completed in April of 2000. Since then the Webster County Health Department, along with the Iowa Department of Public Health have been committed to reducing the prevalence of Cardiovascular Disease, Stroke, Obesity, and Overweight in Webster County. Which benefits all of Iowa.

Once the results of the needs assessment were compiled, we introduced several wellness initiatives to encourage people to engage physical activity and increase their consumption of fruits and vegetables daily. These simple behaviors changes could potentially impact hundreds of people and reduce cardiovascular risks dramatically. All of the health programs implemented over the past few years have been well received and highly successful in the community, especially our innovative program called the Mall Walker's Club, which named their group the Crossroads Pacers.

This program was initiated in September of 2000, and the format was simple; participants could engage in exercise at their convenience in the comfort of a clean, safe mall environment, and use self-direction to consume the recommended amount of fruits and vegetables daily. Each month participants were required to log the amount of activity and proper nutrition engaged in and was asked to turn logs into the Wellness Coordinator for monitoring. This program has been hugely successful with citizens of all ages and the program has grown in leaps in bounds over the past four years. The kickoff for this program was a major community event that engaged many influential members. We had a legislator, city council members, the entire Webster County Board of Supervisors, and the mayor in attendance to show community support. We initially signed up 86 participants and have expanded the program since then to include 150 dedicated participants. We've had many success stories with the Mall Walker's Club, including a local board member who was un-

aware he was Hypertensive and Diabetic. Following a physician referral from our screening process, they were able to successfully treat his chronic diseases and he made the necessary lifestyle changes to stay healthy.

The success of this program has been rooted in its fundamental but inventive design. To increase participation we launched an aggressive marketing campaign through the community by offering registration at different worksites and businesses to encourage sign up. Each week we placed a nurse at the mall to promote registration and also to monitor the cardiovascular status of enrolled participants. To keep interest in the program at a high level, we placed a new display table at the mall each month for participants to view a wide array of information. We exhibited fun and creative displays that promoted health and wellness. The topics ranged from signs and symptoms of a Heart Attack or Stroke, to extensive obesity related information, Diabetes awareness, and many other health related issues. This display table was well received from the community and we experienced positive responses from participants and other community members.

These few simple strategies proved to be effective tools persuading citizens to join our club, and this program planted the seed for other wellness initiatives to follow that focused on a family centered approach to health. This lead to developing a family centered wellness prevention program for our local Head Start. This project focused on age directed preventative health by allowing the children enrolled in Head Start to walk each month at the mall with parents, foster grandparents, and other members of the Mall Walker's Club. This was a powerful alliance between young people and elderly citizens, and made age directed preventative health vital.

WEBSTER COUNTY'S COMMUNITY'S APPROACH TO WELLNESS

As mentioned, our wellness initiatives were in response to the community's concern about Cardiovascular Disease. Since that time we have made it paramount to involve the community in our wellness efforts. We have done this through a variety of grants, but also through a tremendous amount of community collaboration. This has been the cornerstone for success in constructing a community approach to wellness. We have built solid and strong relationships with entities that previously shied away from new and groundbreaking projects. We have been able to break the barrier between private and public industry to create a coexisting team that has served the entire community. Our highly successful Mall Walkers Club was a biproduct of the community's approach and belief in wellness. Through community participation and "buy in's" from our citizens we have been able to effect many positive wellness changes. At the end of this report we have included several feature articles that have appeared in our local newspaper as evidence of the support and community embrace our programs have received. The following collaborations were a result of Webster County's community approach to wellness:

—Creating the Webster County Cardiovascular Disease Coalition with numerous community partners, including the public school system, Community and Family Resources, and Trinity Regional Medical Center. This group works cohesively to institutionalize prevention programs and polices throughout Webster County and meets each quarter.

—Collaborating with local restaurants in Webster County to assess healthy food choices available at each place. Following collaboration we created the Webster County Dining Guide to educate citizens on healthy food choices available at each restaurant. A community policy was put in place requiring all participating businesses to distribute the guide.

—Collaborating with city and county officials to assess trail system availability for outdoor physical activity in our region. Following collaboration we created the Webster County Trail Guide to inform citizens on sites available for outdoor exercise. A community policy was implemented requiring participating entities to maintain the trail system for usage and to continue distribution of trail guides.

—Screening 125 of the Mall Walker's Study Group for cardiovascular risks including height, weight, blood pressure, BMI, waist circumference, flexibility, glucose, and lipid profiles.

—Collaborating with the Crossroads Mall and the local Head Start program to conduct monthly walking sessions with children, parents, foster grandparents, and other members of the Mall Walker's Club.

—Collaborating with the Crossroads Mall to conduct weekly blood pressure assessments for Mall Walkers.

—Collaborating with Crossroads Mall to assess water supply availability and making water available to those walking in at least three locations along the route.

—Collaborating with seven licensed says in Webster County to arrange visits to each to educate staff, parents, and children regarding the benefits of healthy eating and exercise. Educational information was kept on file each month at the daycares for all parents and staff. A community policy was put in place requiring all participating business to continue to offer healthy food choices and exercise. A second environmental policy was also implemented at the daycares requiring all keep their sidewalks and playgrounds suitably maintained for usage.
—Collaborating with seven licensed daycares in Webster County for their children to plant and harvest miniature gardens at each business.
—Collaborating with the Crossroads Mall to exhibit a creative display table each month promoting health and wellness.
—Collaborating with five employers in Webster County to perform 1,600 wellness screening for employees that included height, weight, BMI, blood pressure, glucose, and total lipid profiles.

IMPACT ON THE COMMUNITY

One of the greatest achievements of our projects has been witnessing first hand the dramatic impact we've had on community health and well being. We have been able to reach large segments of the population that were at risk for cardiovascular related problems. We have received many accommodations from the community for our dedication to health and fitness. Although we understand all of efforts may not be measurable for many years, we have been able to directly measure the following outcomes:

—500 children from seven licensed daycares were educated monthly regarding the benefits of healthy eating and exercise. Following education, 100 percent of participating children were able to identify proper amounts of fruits and vegetables and physical activity needed daily to be healthy.
—500 parents of children from the seven licensed daycares were educated on the benefits of healthy lifestyles, and symptoms of heart attack and stroke. Following education, 95 percent of parents and staff were able to identify heart attack and stroke warning signs.
—500 children from the seven licensed daycares in Webster County planted and harvested miniature gardens at their daycare. Following planting, 100 percent of participating daycares reported success with garden harvesting.
—200 employees and health care providers from all licensed daycares received a power point presentation training session on the hazards of adult and childhood obesity's education. Following education, 100 percent of trainees were able to verbalize hazards associated with obesity.
—2,200 copies of the Webster County Dining Guide were distributed to area restaurants. Following distribution, 13 percent of citizens reported changing eating habits after viewing the guide.
—700 copies of the Webster County Trail Guides were distributed to Webster County businesses. Following distribution, 10 percent of citizens reported increased trail system usage.
—125 Mall Walkers were screened for cardiovascular risk factors in 2001 and again in 2002. Following post assessments 10 percent of enrollees had improved cardiovascular status in at least one area.
—125 Mall Walkers were screened monthly to assess amount of fruits and vegetables consumed and amount of activity engaged in. Following monthly monitoring, 25 percent reported increased amounts of exercise.

One of the success stories we use to promote community-impacted health was one that involved a preschool child we taught in the daycares about fruits and vegetables and exercise. This preschoolers' mother recently had a baby, and when we visited the mom for a routine post-partum visit, we asked the mother about the baby's eating habits. We were delighted to hear the preschool child tell the mom that the "the baby needs five fruits an vegetables everyday." This is a powerful of a statement about the impact our efforts can make, even with young children.

STATEMENT OF THOMAS OLDHAM, PRESIDENT, JUST ELIMINATE LIES (JEL), IOWA YOUTH TOBACCO PREVENTION ORGANIZATION

Senator HARKIN. Now we'll go to our last witness, Mr. Thomas Oldham. He is the president of something called Just Eliminate Lies. It's an Iowa youth tobacco prevention organization. Tom attends Lincoln High School here in Des Moines. Just Eliminate Lies raises awareness about the dangers of tobacco and organizes teens

to fight the tobacco industry's efforts to manipulate them into using their products. Tom, tell us more.

Mr. OLDHAM. Thank you. Well first of all, I just wanted to thank everyone for the chance to be here and talk about what JEL is and what can be done in the future for prevention across the United States of America. But I speak here on behalf of over 7,000 Iowa teenagers who are involved with the JEL program. It's a massive program with massive support all throughout the State and I think it's really an amazing thing to have so many teenagers come together, at such a young age, about one topic. And I really do not think that there's ever been quite the support for a program like this, at least in the youth base, as there is for ours.

I also think I come here to speak on behalf of the over 400,000 innocent Americans who die every year at the hands of Big Tobacco. And when I was 13 years old I was brought into the world of tobacco prevention. I was brought in at first on a different level though, of what I am now. At 13 years old I was a smoker. Me and some friends had started in 8th grade. I don't know why, I guess I probably will never know, but we just started smoking. And at the time, these youth-led movements, when I started to get in—when I was smoking were starting to get visible. And if it wasn't for the Iowa Tobacco Prevention Organization, I don't know where I'd be right now. I feel I was saved by becoming involved.

Now, these youth organizations at the time were using tactics nobody had foreseen. They were using harsher advertisements and new kinds of direct action and so on. People had been taking notice and a clear line was drawn between the comprehensive tobacco control programs and the less than desirable have-to programs that are rampant in the tobacco industry. Change was taking place and lives were being saved and the State programs were getting recognition, not only for their actions but the results. But as the years passed so were the comprehensive State tobacco prevention programs. As more and more of them were forming and sounding the alarms their legs were cut out from underneath them. Successful programs were losing money rapidly with politicians dipping their hands into the tobacco settlement money like it was a rainy day fund. Not only this but the tobacco industry was increasing spending in the State with successful programs and by cutting out the funding for those successful programs you enhance the progress of the tobacco industry while curbing the efforts of the anti-tobacco movement.

The issue is clear and the right thing to do is extremely easy to do but across the United States not many people are doing anything about it. As Senator Harkin's Wellness and Disease Prevention Initiative is a step in the right direction, currently health care costs related to tobacco across the United States topples $75 billion annually. Because of this and other smoking-caused government spending, the average household tax burden because of tobacco problems is $525 a year. As a result, hardworking Americans, the majority of these non-smokers, are paying big bucks for a preventable disease.

Currently tobacco use is the number one killer. It kills more Americans annually than alcohol, AIDS, car crashes, drugs, fires,

murders and suicide combined. It's inexcusable and outrageous especially when the situation is so easy to take care of.

Now, I believe the first way to fix the problem is raising the funding of the State's tobacco control programs to CDC-recommended levels. That way not only will the States have comprehensive prevention programs but comprehensive cessation programs too. All too often States are given money to have a prevention program and then when people see these funds and programs and want to quit, or want to know how they can quit, there's never any resources there for them to do so.

The State's youth fund movements have a positive impact on young people all over. If we can raise the visibility of our programs and in turn raise awareness our programs will turn our colossal results. But when our lawmakers agree to cut funding for programs and either use our money for non-tobacco related issues, they curb our efforts to save lives and they become just as responsible for the death of thousands every year, as the tobacco industry. In order to combat the problem our lawmakers must act.

Now, for a moment I'd like to talk about just the reason why that our movements are always under threat. There's always something that's trying to bring us down, or whether people realize that or not. For an example, I'd just like to mention something that's happening right now. Every year, or every 2 years in Iowa we did the Iowa Youth Tobacco Survey, and that's how our program runs. If we don't have any new information how can we provide the results that we have? Well, this year that survey is in jeopardy of being cut. So if we do not do the survey this year, next year we're going to be going off of information from 2 years past. And that information is good. In 2 years of being a program we lowered high school usage in the State of Iowa by 11 percent, and middle school usage by 23 percent.

Now, another way of prevention is raising the tobacco excise tax. In Iowa one of our initiatives this year was just that. The governor decided to raise the tax in time of crisis but this is exactly what prevention shouldn't be. We should be raising the tax in less needy times. That way we can prevent those times from ever occurring in the first place. Across the country, if we had significant, regular increases in the tobacco excise tax we would save thousands of lives, reduce health care spending by millions of dollars, and bring in millions of dollars for the States. It's a win-win-win situation.

Passing smoke-free ordinances for workplaces across the country is another way we can reduce tobacco use. In passing these ordinances you can protect everyone from secondhand smoke, which kills over 53,000 innocent Americans every year. Along with cessation programs, smoke-free workplaces prove to be a winning strategy. FDA regulation, funding for the CDC's Office on Smoking and Health and a national cessation quit line are all of the ways we can work to prevent tobacco use and save lives.

Now, the one way I think we can get all this done is very simple. And that is removing the tobacco industry's hands out of our lawmakers' pockets. Annually the tobacco industry spends over $5 million in campaign contributions around the country. Our lawmakers are influenced by these contributions and in turn are preventing

comprehensive tobacco control programs from accomplishing the tasks that the settlement money was supposed to be used for.

PREPARED STATEMENT

If we raise the State's prevention programs to CDC-recommended funding, have regular significant increases in the tobacco excise tax, provide strong cessation services in every State and remove the tobacco industry's place in government, we will save thousands of lives and bring in millions upon millions of dollars to this country. If we don't, I believe that in 50 years we'll look back and be shocked as the world's greatest democracy that one industry had free reign on its citizens. I believe now is the time to do something about it while we still can and before the problem gets too out of hand and there's no looking back. Thank you.

[The statement follows:]

PREPARED STATEMENT OF THOMAS OLDHAM

Thank you for the chance to appear here and speak on behalf of the thousands of Iowa teenagers who are working to prevent tobacco use among their peers. I believe I come here not only on behalf of Iowa, but also for the 400,000 innocent Americans who die every year at the hands of Big Tobacco.

At 13 years old, I was brought into the world of tobacco prevention, and at the time, the youth led movements were getting more and more powerful. They were using tactics nobody had foreseen; harsher advertisements, new kinds of direct action, and so on. People had been taking notice, and a clear line was drawn between the comprehensive tobacco prevention programs and the less than desirable "have-to" programs that the tobacco companies were running. Change was taking place, lives were being saved, and these state programs were getting recognition not only for their actions, but their results.

But as the years passed, so we're these comprehensive state programs. As more and more were forming and sounding the alarms, their legs were cut out from underneath them. Successful programs were losing money rapidly, with politicians dipping their hands into the tobacco settlement money like it was a rainy day fund. Not only this, but the tobacco industry was increasing spending in states with successful programs, and by cutting out those programs you advance the progress of the tobacco industry while curbing the efforts of the prevention programs. The issue is clear, and the right thing to do is very easy, but across the United States, nothing is being done, and nobody is taking action.

Senator Harkin's "Wellness and Disease Prevention" initiative is a step in the right direction. Currently, the Healthcare costs related to tobacco in this country topple $75 billion annually. Because of this, and other smoking caused government spending, the average household tax burden is $525. In result, hardworking Americans, the majority of these non-smokers, are paying big bucks for preventable disease. Currently, tobacco use is the number one cause of preventable death in this nation, killing more Americans annually than Alcohol, Aids, Car Crashes, Drugs, Fires, Murder, and Suicide combined. This is inexcusable and outrageous, especially when the situation is so easy to take care of.

The first way is raising the funding of the states' tobacco control programs to CDC recommended levels. That way, not only will the states have comprehensive prevention programs, but comprehensive cessation programs. Too often states develop prevention programs that work, but have no aid for those who want to quit. The states' youth led movements have a positive impact on young people all over. If we can raise the visibility of our programs and in turn raise awareness, our programs will turn out colossal results. But when our lawmakers agree to cut funding for programs, and when they use our money for non-tobacco related issues, they curb our efforts to save lives, and become just as responsible for the death of thousands every year. In order to combat the problem, our lawmakers must act.

Another way is raising the tobacco excise tax. In Iowa, one of our initiatives this year was just that. The weather was fair this year and our Governor decided to raise the tax in times of crisis, but this is exactly what prevention shouldn't be. We should be raising the tax in less needy times, that way we can prevent those times from ever occurring. Across the country, if we had significant regular increases in the tobacco excise tax we would save thousands of lives, reduce health care spending

by millions of dollars, and bring in millions of dollars for the states. It's a win-win-win situation.

Passing smoke-free ordinances for workplaces across the country is another way we can reduce tobacco use. In passing these ordinances, you can protect everyone from secondhand smoke, which kills over 53,000 Non smoking Americans every year. Along with cessation programs, smoke free work places proves to be a winning strategy. FDA regulation, funding the CDC's Office on Smoking and Health, and a national cessation quitline are all other ways we can work to prevent tobacco use and save lives.

The one way we can get all of this done is simple. Remove the tobacco industry's hands out of our lawmaker's pockets. Annually, the tobacco industry spends over $5 million in campaign contributions around the country. Our lawmakers are influenced by these contributions, and in turn are preventing comprehensive tobacco control programs from accomplishing the task the settlement money was supposed to be used for.

If we raise the states' prevention programs to CDC recommended funding, have regular significant increases in the tobacco excise tax, provide strong cessation services in every state, and remove the tobacco industry's place in government we will save thousands of lives and bring it millions upon millions of dollars to the country. If we don't, we'll look back 50 years from now and be shocked that the world's greatest democracy let one industry have free reign on it's citizens. I believe now is the time to do something about it while we still can, before the problem gets too out of hand and there's no looking back.

Senator HARKIN. Tom, thank you very much for that great testimony and thank you for being here today. Someone handed me a note, I didn't see him when I came in, but I want to recognize someone else who I've known for many years and who has always been a great leader in terms of physical fitness and making sure, as someone said there, it's not just the mind but also the body, because he's worked on both of those in so many ways. Bill Pulliam is here. Bill, where are you? Someone said you were back there. Bill Pulliam, right back there.

One of our great basketball stars here in the history of the State of Iowa. Thank you for being here, Bill.

Well listen, I again want to thank all of you for being here and for your testimonies. I'd like to just ask a few questions. And I guess we'll open it up for maybe a little bit of a general discussion. I don't know exactly how much time I've got here but we'll move ahead. Oh, yes. After our hearing concludes, we're going to do a little walk around the track. And, is that why I have this heart monitor on? Okay. All right. Okay. So we're going to take a little walk around the track just as a, you know, just as a little bit of exercise. I brought my walking shoes with me, nothing special.

Let me start first with Doctor Baranowski. Again, you testified, others testified about the costs of fighting disease in this country, the health care costs associated with it. It's hard, to know exactly what steps we can take at the Federal level that will result in actual significant cost savings. A lot's being done on the local level; a lot of people here are doing things on their own. We have organizations like P.E. for Life and others, but is there anything else that you think that we can be doing on the Federal level? I'm looking for advice and suggestions.

Dr. BARANOWSKI. Yes sir. Thank you for the question. Without appearing to demean the very important efforts reported this morning, the existing programs that have been published to help people change their behaviors, even those designed by, implemented and evaluated by our best minds, are having, at best, modest effects and at worst no effect. This includes both programs designed to

change the environment in which these behaviors occur and those designed to change the behaviors. This suggests we need more research. These are behavioral problems and they need behavioral solutions. The NIH has made an enormous investment in biological research over the least 50 years. After 40 years of investment, it's only in the last 10 years or so where the treatments have been targeted at molecular systems, for example, cell receptors, and have substantial impact on the disease without substantial side effects. The same investment must now be made in the behavioral sciences. We need to better understand why people eat the food that they do and are or are not physically active. Research must then be conducted to convert this knowledge into effective programs and evaluate them. This will require substantially more funding for behavioral science and related research. In fact, I think the solution or part of the solution is more research.

Senator HARKIN. Let me ask you this. I have discovered in the last couple of years that the number one reason why young women drop out of college, for varying periods of time, is because of eating disorders. I became interested in that and I started looking at some of the data surrounding eating disorders in this country and I become quite alarmed. It's growing rapidly. I've talked to a number of mental health people about this, others expert in the field, and on the one hand we have obesity, on the other hand we have anorexia, bulimia, binge eating, various and sundry other eating disorders. And most of it's centered around anorexia and bulimia. It just seems to be we're getting a couple of messages that are hitting our young people. One, you're getting all the ads for this food and that food and, I don't want to pick on McDonald's, but just all those unhealthy choices that you have for soda and everything else. On the other hand, every magazine you pick up, for young women, especially, has pictures of, extremely thin women. That's why I'm a little concerned about stressing this idea of obesity because I don't want young people to begin thinking that they've got to look like these sticks that pass for models in our society. But more and more I see young women thinking that that's how they've got to look if they want to be accepted. I just wonder if you have any thoughts on that.

Dr. BARANOWSKI. Yes sir, that's a very important question. I have to admit I'm not a specialist in eating disorders and I defer to Dr. Cutrona. Perhaps she has some insight on eating disorders that's ordinarily considered a mental health problem. Alternatively, most of the work that we do is in the inner-city with ethnic minority individuals. In the middle schools and the high schools, 50 percent of the kids are overweight or obese.

Senator HARKIN. 50?

Dr. BARANOWSKI. Five-zero. 50 percent.

Senator HARKIN. In high schools?

Dr. BARANOWSKI. In middle schools and high schools. This is a shocking, shocking problem and the eating disorders that aren't as prevalent in the minority community, although clearly we need to address the concerns for eating disorders in the majority community, that there's a huge need for obesity prevention in all high school kids but particularly in the minority community. If we don't the declines that have been occurring heart disease mortality and

cancer mortality are all going to reverse and those are all going to start increasing enormously. The medical care costs associated with that are going to go out the window while we leave this problem unaddressed. We've got to address the obesity problem or we're going to pay for it in the long run.

Senator HARKIN. Do you have any thoughts on what I just brought up, Dr. Cutrona? Eating disorders among young women who are anorexic, bulimia, who think they've got to look like these sticks.

Dr. CUTRONA. I think that this can be used to illustrate a very important point, which is that you can't just address problems like this on the individual level. We have a young woman who's starving herself to death and we try to come up with a good treatment. We have to prevent this. We have to think about advertising, we have to think about the messages that young women receive. I think this is an appropriate context for public health campaigns that address our standards for young women, our standards for what is attractive, for what is healthy, making health what is our ideal rather than the stick-thin image that you're talking about. So I guess what I'm saying is this, along with most other mental health issues, has to be addressed on many levels, in the schools, in the home. You can't wait until the young woman is already perhaps on death's door. Women actually die from anorexia. We have to address this at the community level and it is a problem, although not as prevalent as Dr. Baranowski said as overweight. So a multi-tiered approach, I think.

Senator HARKIN. Well, I guess, getting back to the school-based programs, I guess if kids learn early on, in elementary school, again, a healthy lifestyle. Not that you have to look like a stick but you don't have to be obese but you can maintain a decent weight, body fat percentage and be very healthy. I guess you got to start early with these kids.

Dr. CUTRONA. Well, obviously as an educator I believe that pretty strongly, preventive, proactive in nature. The reactive health care system that we have isn't working. I mean, that's pretty simply said. I really don't think it's health care, I think it's sick care. And what we need to do is be proactive in our—I think this young man's a great example. Even though he started, there was an intervention program that was very—it was preventive in nature and it got to him early. That type of education, he became more educated. That's the key. I mean, for me, that's the key. Where do we have every child? In school. So we have to capture their imagination, their interests, and get them to invest in their own, their value, investing in their own health to see a reward or a gain in the future. So yes, I feel very strongly that more money's into the physical quality, physical education programs is a key component if we're going to attack this problem. Because we can't do it on the back side. It's not working. David Chenoweth says, a health economist, by year 2020 the health care system's going to collapse because of the rise in health care costs. Can we prevent that? What have we always said? You know, prevention, an ounce of prevention's worth a pound of cure. But where's all the funding going into? Into reactive programming. We have to channel that. That's why I believe what you're doing with the PEP bill is so critically

important. What you're doing in allowing funding to go into school systems to be able to do futuristic type of physical education programs, funding where there's lack of funding, because everything's saying and being mandated by No Child Left Behind. Math, reading and science. Math, reading, and science. At the expense of the child's health. And we believe, at Brittany Center, we believe it should be around the Nation, that if you cut physical education you're cutting the heart out of the child's education. And I don't think that, you know, we talked about the problem, we talk about it continuously, over and over and over, but then we need to come up with some viable solutions. And I believe, as an educator, that's what education's about. I think it worked for Tom and now, look at him. I mean, my goodness sakes. I feel honored to be sitting next to him. What an example he is for saying that something, you know, they intervened at a young age with him, some type of preventive program that helped change his life, change his healthy habits for a lifetime. Now look at him and look what he's doing. I cannot imagine at the age of 18, sitting up here and doing what he's doing, and that's the type of young person that we need to have and that comes through education. And that's where I believe the funding needs to occur.

Senator HARKIN. Well Tom, since you've been brought into this right now, just out of curiosity, you said you were about, how old were you when you started smoking?

Mr. OLDHAM. I was 13 years old.

Senator HARKIN. Do you have any, do you remember why? Was it peer pressure? What was it? Why did you start? I mean, because I can tell you, I was about maybe, let me think, I was probably around, oh, I suppose 12 or 13 when I started smoking.

Mr. OLDHAM. I'm not sure if it was peer pressure because me and my friends all kind of started doing it at the same time. So I think it was just outside influences.

Senator HARKIN. Outside?

Mr. OLDHAM. Like tobacco industry advertisements and things like that. As sad as it is, and it is often for a lot of teenagers still, is people think it's cool to, you know, light up a cigarette. They think it looks cool in their mouth or whatever. And I think that had a lot to do with it. We were very impressionable and the tobacco industry knows that. So they do what they can because they know if they do not target youth they'll be out of business in 30 years.

Senator HARKIN. Let me ask you this. How easy is it—how old are you right now?

Mr. OLDHAM. I'm 18 right now.

Senator HARKIN. Eighteen. How easy is it for teenagers to get tobacco? Is it easy or not?

Mr. OLDHAM. Oh, it's unbelievably easy.

Senator HARKIN. What?

Mr. OLDHAM. It's unbelievably easy.

Senator HARKIN. But people aren't supposed to sell cigarettes.

Mr. OLDHAM. Yeah, they're not supposed to sell cigarettes but I mean, that doesn't stop any teenager from going to someone who is 18 and—I mean, I'm even a perfect example. I've had people come up to me, of all people, and ask me to buy them cigarettes.

I'm this—now granted, it's not often public knowledge what I do but I mean, it's just like, a lot of people my age will do that for someone.

Senator HARKIN. Do you think raising the cigarette tax would have an impact?

Mr. OLDHAM. Absolutely.

Senator HARKIN. Just more expensive, kids won't—just, the money they have.

Mr. OLDHAM. Yeah. That is one of the things that people say raising the cigarette tax, well people are still going to smoke. And that's true. People will still smoke. But many adults will quit and even more teenagers will quit. Teenagers don't have that anticipal funds as oftentimes more adults do. I mean, I've heard from many, many people my age that, if we raised the tobacco tax, because I, you know, I talk to people about it all the time, and they say if we raise the tobacco tax I'm not buying anymore. And I'm like, well hey, then we're successful. So studies have shown that with every ten percent increase in the tobacco tax you reduce consumption by 3 to 5 percent.

Senator HARKIN. You know, Tom, I've been on the tobacco companies for years about their advertising. First there was Joe Camel, all the Joe Camel ads, how to be cool, geared towards young people. Then you had the Marlboro chits; you know, you get Marlboro points and you get all these gifts and stuff like that, anything to get young people into smoking. I came across one of the new ones here. First I thought these were candy when someone first gave them to me. It's called Liquid Zoo. I'll pass them around, you can look at them. It's strawberry flavored, kind of a fancy little box. I thought, my gosh, they're back to candy cigarettes again. And then I found out these are cigarettes. Liquid Zoo Flavored Cigarettes are an exotic blend of strawberry flavored, tobacco product that is sweet, fresh tasting and has a sweet aroma. Now who do you think they're marketing that to? Not to adults. Not to older people. Young people. And guess what? Made in the United States of America. Manufactured exclusively for Cretech International U.S.A. And in really small print it says, No underage smoking allowed. Have you ever seen these?

Mr. OLDHAM. No sir.

Senator HARKIN. Pass them around. Here's another thing I wanted to hold up, Tom, I think you'd be interested in. You've all seen Kraft Macaroni and Cheese, right? It's FDA regulated. The FDA regulates the content of what's in that box. And guess what? Kraft is owned by Philip Morris. Philip Morris also owns Marlboro Cigarettes. This is not regulated by the FDA. That's regulated by the FDA, macaroni and cheese, tobacco, not regulated by the FDA. Anybody make any sense of that? That's why we keep pushing to have the FDA regulate cigarettes as a drug delivery mechanism. We know that tobacco is a drug, nicotine is a drug, it is a highly addictive drug. It contains things like hydrogen cyanide, ammonia, arsenic, butane, carbon monoxide, formaldehyde and 40 other chemicals known to cause cancer, yet the FDA does not regulate it. So again, this shows you the contrast in our FDA regulations and the problems that we have in trying to get the FDA to regulate them. So we're going to continue to press for FDA regulations so

that they have to regulate it, plus stop this kind of nonsense here of how they're putting out these packages of strawberry flavored cigarettes.

Some of you who are my age or maybe a little younger than I remember the little candy cigarettes that we all were given to practice on when we were younger and stuff. I thought they were coming back. That's even worse.

I want to get back to you, Dr. Baranowski. You mentioned research.

Dr. BARANOWSKI. Yes sir.

Senator HARKIN. Give me some idea, can you give me two or three, four, whatever, what are the top areas that you believe that should be the highest priority research areas for childhood obesity.

Dr. BARANOWSKI. Thank you again for the question. First we need a clear picture of what are the major contributors to obesity. Some luminaries believe lack of physical activity is the major culprit. Other equally admirable luminaries believe it's most diet. There are adherents for the contribution of television, electronic games, fast food, enhanced portion sizes, etcetera. If we knew the five major causes of obesity we would have clear guidance for the design of programs to maximize the effects. Of course, the five major causes probably vary by age and perhaps by gender.

Second, we need an understanding, a better understanding of why people do or don't do the behaviors that are the major contributors to obesity. This knowledge will guide program designers on what mediating variables to target.

Third, we need control—we need research on controlled diet and physical activity. For example, most of the national dietary guidance is based on the national dietary guidelines and the food guide pyramid, but there has never been a study that assesses what happens when people eat a diet based on the dietary guidelines and the food guide pyramid. What will it do for the obese or the moderately overweight people? For those with an elevated blood pressure or elevated cholesterol? There are several recent versions of the food guide pyramid and more have been proposed. None have been compared for effects on outcomes.

The same kind of research is needed with physical activity. What will 30 minutes of moderate to vigorous physical activity, 6 days a week do for adults or children who are overweight? Is physical activity valuable primarily in longer doses or do multiple shorter doses have the same effect? While some of this research on physical activity has been done, this is very difficult research to do and much more is necessary.

A number of my colleagues would argue that the primary research need is for more community-based interventions. In my opinion, since most of our community-based interventions have not worked well or not worked at all, these three kinds of research will provide much needed guidance to community-based interventions.

Senator HARKIN. Thank you. It was just brought to my attention the other day—I'm going to find out more about it because I'm not going to mention the place but I will mention what it was—a new elementary school that was just built that has no playground. An elementary school built without a playground. I'm going to look into it more. I assume there's no Federal money involved but prob-

ably just State and local money but there ought to be some thought given to that when schools are built that way.

I wanted to get to Len Olsen here, because I met a person with A-John Company and what you're doing with them, right?

Mr. OLSEN. L-John, yes.

Senator HARKIN. L-John, I'm sorry, L-John. Now, what I was intrigued by your testimony was this idea of incentives.

Mr. OLSEN. Yep.

Senator HARKIN. So, you know, I believe in the carrot approach, I really do. I think, you know, there ought to be more incentives to push people to preventative health, to maintaining healthy lifestyles. You mentioned that in our testimony. I don't understand exactly how it works, but if you're in this program the company will pay 60 percent of your health premium but if you get certain indices up, what is that? You get up to 90 percent that they'll pay?

Mr. OLSEN. Right. I can give you a personal example of that one. Again, when I started, I needed to get my weight down a little bit, I needed to get my cholesterol down a lot. I had to set those goals. I didn't achieve them at first and I got bumped up to a higher—you get a little break for a while, kind of a grace period. Then I thought, well you know, I'll just do what I normally do and I'll be fine. I think a lot of people are that way, they don't want to change their behavior. I go back for the second test and don't pass, didn't meet the goals. Got bumped up, again. Eighteen hundred dollars a year. So now it gets your attention and your pride a little bit. Okay. So you make changes. And in my case—not everybody can do, some people need medication, their bodies are different. Sometimes you do have to exercise more, you do have to watch what you eat, how much and what kind. And so the next time I went back for an evaluation, and you get that down and what several people do, I think they're motivated, you know, we just had our more recent evaluation and I can tell you the buzz around the hospital was, my evaluation's coming up, I got to get my weight down, I got to behave, you know, I got to watch what I'm eating. And that's not false. I mean, they really are working at it. And I have a friendly rivalry with Danny Renfrew, one of our maintenance supervisors, and we have the same problem. We're both relatively okay on weight and physical activity but we struggle with cholesterol. So there's a little friendly rivalry and we talk about it. And so I believe incentives do work, with kids and with adults. I believe in personal responsibility. I think there is cause and effect. I think we are less active than we were 30 years ago. Talk about physical education, what the Federal Government can do. We used to have something called the Presidential Fitness Challenge when I was in elementary school. And we had to do tests. We had to get ready for doing the push ups and the sit ups and the chin ups and running the mile, girls and boys, this was egalitarian. And it's something you wanted to do well at and you were motivated to do well at. We had P.E. three times a week. We got to play games but we also did calisthenics. And yeah, there were the kids that were heavy and that suffered in that, and I do believe in no humiliation, I like to see the no jock approach, I think that's great. But you got to get people moving. Movement burns calories. And if we don't—if we're cutting that out with our kids, that's criminal.

Senator HARKIN. Are there other regional health center, at least in Iowa, that are doing anything like what you're doing? Do you know of any?

Mr. OLSEN. Arlene might know better than I do.

(Extensive response by someone off-mike)

Senator HARKIN. Watch this.

(Continuation of response by someone off-mike)

Mr. OLSEN. I think to add to that, what hospitals can do is kind of be beacons of healthy living. You know, Jo Ellen serves on our local Y board and they've started a program called Fit Kids. Is that what it's called, where we do after school programming for kids at risk? Getting them exercising, giving them better self esteem, and a lot of this is emotional health. I mean, it isn't just about the physical stuff, it's about why you're eating and dealing with what's going on up here. And the Y program tries to do that. And it's a partnership with the YMCA and the employers and the schools.

(Interjection by someone off-mike)

Senator HARKIN. Oh wait, wait, wait. We got to get you a mike because I'm sorry, please identify yourself. Please identify yourself for the record.

JO ELLEN RANDALL. Jo Ellen Randall. And this was a program that was started probably 3 years ago in Ottumwa where the YMCA is partnering with the school systems. And the Y has a bus and they go to the school systems, pick the kids up after school, they come back to the YMCA where they participate in fitness programs, also social programs, versus going home, watching TV, getting into the junk food. This keeps them active and it has been a very popular program. It continues to grow. We continue to look for funding to keep that program going because it is extremely important. And it also drives families in coming back to the YMCA to do things together because the kids want to be there. And then parents find that this is also an activity that they can participate in. So the healthiness of that is not only for the children but for the family also. So, an extremely good program.

Senator HARKIN. Maybe we ought to look at that as a source more for outreach. Ms. Ruby, you know, we're talking a lot about, you know, prevention in the first place, getting kids in school early on, but we have a whole generation of elderly people now who are leading sedentary lives, watching television. I think a lot of them were smokers or maybe still are smokers. Tell me about your getting elderly people involved. And it's my understanding, at least, that just with proper diet and proper exercise that a lot of the medical problems of the elderly kind of diminish, if you just get them on a good program. But how do you do that? I mean, you obviously have done it but how do we get more people involved, the elderly people involved?

Ms. RUBY. Well, the number one thing is you have to be very creative in your thinking. We didn't just go to the mall to recruit people for our program. What we did was, we had days when we went to a senior citizen center and signed up people for our program. We also have many, many community partnerships, one in particular is with our local hospital, where we went to cardiac rehabilitation and we signed up people. We also went to the diabetes center to see if there were people that would be interested in our programs.

So we approached several different programs within the community to join us and join our efforts and by being creative we have created a lot of community partnerships and we have been able, not just to get elderly people involved in our program but people who would really benefit from the physical activity, those people that are in cardiac rehabs, the diabetics. We've been able to get those health disparities by our community collaborations. And that's just from going out and being creative and working with the other programs within the community.

Senator HARKIN. As you, I don't know, you may not know this, but right now we have nutrition—we have a mandatory FDA requirement of nutritional labeling on packaged goods, when you go in the grocery store, right? You see all the packaged goods, you see what's on it, and anything, most of anything that's packaged has to have ingredients labeling. I have introduced legislation to also have the FDA mandate that certain restaurants and restaurant chains put on their menus certain information as to fats, trans fats, sodium, calories. It initially met with a wave of opposition. But I noticed that after we did this Ruby Tuesday's came out and said they were going to voluntarily do it, others have done it. But again, still kind of an opposition to this thing. Now, what's been the reaction? You established some kind of a dining guide. I'm not familiar with it, I know you mentioned it. What is it and how have you gotten—what's the public acceptance and the business acceptance been in the Fort Dodge area?

Ms. RUBY. Well, one of the other programs that we have done in Webster County is we surveyed 67 restaurants in our area to see what they offer for healthy dining choices. And we took that information and we compiled it and we made a healthy dining guide for our citizens in Webster County, and it has all of the popular restaurants, Wendy's, Appleby's, all of the places that people would dine out. And I wish I would have brought one today but I did not. And it's a form that identifies what each restaurant has in the way of healthy foods, if they offer skim milk, if it's a non-smoking environment. There's just a list of information that we have on there for the residents of Webster County so they know where healthy places are to eat. And what we did was we distributed 2,200 of those healthy dining guides to all of the restaurants in Fort Dodge and in the community and we took it one step further and we implemented a community policy with our restaurants, requiring them to post that information for citizens so it's available when they go there. And we have, like I said, we've distributed 2,200 dining guides and we are out of them; we're in the process of ordering more. So we've had great, great response from the community.

Senator HARKIN. And the restaurants too?

Ms. RUBY. Yep. We had them sign the policy. Everybody that participated in the healthy dining guide, part of that program was that they had to have that dining guide posted for citizens to see. That was a piece of the program that they had to agree to participate in. And they all did.

Senator HARKIN. That's very good. Although I happened to read the paper this morning and I noticed that—I don't have it with me but—story in this morning's Register about McDonald's is now putting out an adult Happy Meal, and a kid's Happy Meal too, but it

has a salad in it and fruit and a pedometer. And this is all well and good. And I think, you know, the more we can continue to encourage the McDonald's and the other fast food chains to do this the better off we're all going to be. So I applaud them for doing that and I hope they continue to do that. I ask the question, however, are they going to put as much advertising into that as they've put into a Big Mac? I mean, they start equalizing the advertising then maybe we'll make some progress here.

Let's see. Was there any other thing that I wanted to cover here specifically? I think I got most of the—well, fruits and vegetables. You've been involved in that. And some others here also. You have been too, right?

Ms. RUBY. Yep.

Senator HARKIN. You've been involved in fruits and vegetables. Well, children walk and bike 40 percent less now than they did 20 years ago. They don't get the daily recommended fruit and vegetable allowance. You know, again, what can we do about this, what kind of results have you seen in children after beginning your day care outreach? And I'm talking to you about that. What's happened when you do that? What's happened to the kids?

Ms. RUBY. Well, another one of our wellness programs that we have is we went to the day cares each month and we talked to the children about eating fruits and vegetables and exercise. And what we did was we did monthly visits to educate them on the benefits of it and one of the things that we always look at when we do a program is sustainability. So after our program was completed we had all of the day cares, we signed another policy, community policy, where all of the day cares were required to continue to teach the children about fruits and vegetables and the importance of eating them. So we had buy-in from all of the day cares that we did, our education piece, but then they continued to do that.

Senator HARKIN. You may not be aware of this, in the 2002 Farm bill, I happened to be chairman for a brief moment there, and I wanted to test a theory of mine, and that is that if kids had available free, fresh fruits and vegetables, not canned but free fresh fruits and vegetables that they would eat those and they would not be eating junk food and putting money into vending machines. So we picked four States, Iowa, Michigan, Ohio, Indiana were the four States. And two Indian reservations. We picked 25 schools—well, I didn't pick them but the Iowa Department of Public Education took in applications—so we had 25 schools in each State, 25 in Iowa, Ohio, Michigan, Indiana, 100 schools, some urban, some rural, some high income, some low income; we wanted to get a broad spectrum. And I put in just $4 million to do this. It's been existing now, it's been going on for just over a year now and the results have been fantastic. I mean, you'd be amazed at how many kids, especially low income kids, never eat fresh fruits and vegetables. It's one of the most expensive things in the grocery store. I mean, to go to some of the schools and see kids that have never eaten a fresh pear, kiwi fruit, bananas, apples, all these things. But it's just been phenomenal. But now again, this is just a pilot program, we added one more State this year, Mississippi, we added a couple more million dollars this year, a million dollars more for Iowa. But again, all the preliminary results after 1 year seems to

be that—well, we had one principal from where? Muscatine. Muscatine actually said they had to take a vending machine out of the school because it wasn't being used any more because the kids—now, the idea was not that the kids had the fruits and vegetables just at lunch time but they had it when they came to school in the morning; if their stomach got the grumblies around ten in the morning they could get fresh fruit or vegetables. You got kids eating fresh broccoli, kids eating cauliflower.

I went to this one school. I asked these kids what they like and this one kid said, he liked spinach. I thought that was pretty interesting. But, you know, obviously, who likes canned spinach? Is there anyone in this room who likes canned spinach? But fresh spinach is very good and these kids had never had fresh spinach. And so it just opened up a whole new world for them. And anecdotally we found a lot of kids that their parents now were coming into school and seeing them, and when they go grocery shopping they may take their kids with them; the kids were always, you know, they go to the fruits, they want this fruit and they want this vegetable, now they're making their parents buy this stuff. So again, I talk about that as a way, Dr. Baranowski, now you've done some—in this area, about getting kids started on fresh fruits and vegetables and how important that would be for, again, later on, for people to continue that kind of a lifestyle.

Dr. BARANOWSKI. Terrific. I honestly believe that the fruit and vegetable pilot program that you developed and implemented and funded was a remarkable program from many perspectives. The fruit and vegetable consumption is the single most important dietary behavior that needs to be encouraged for several reasons. The micro nutrients in fruits and vegetables have profound effects in regulating physiological systems and thereby helping prevent most cancers, heart disease, diabetes and a variety of other chronic illnesses. The high water and high fiber content tends to enhance a sense of fullness and thereby reduces caloric intake and fat and sugar intake, leading to weight loss. The evaluation that was done of the fruit and vegetable pilot was very promising but anecdotal, relying on participant testimonials. I believe you could have broader effect if you had a more thorough, systematic evaluation of the program. As a behavioral scientist I'd like to see harder data. Did the program lead to more fruit and vegetable consumption by the children or did just some children compensate by reducing their fruit and vegetable consumption outside the school? Which children increased? Were the children who needed it most among the ones to benefit? At what point is the optimal benefit achieved by a program such as this? At one serving of fruit and vegetable a week? At one serving a day? Two per day? At breakfast and lunch? At snack? What were the costs borne by the schools from such a program. I strongly encourage you to insert a line item in the next legislation funding this program to implement a thorough evaluation. A colleague of mine at the Children's Nutrition Research Center has submitted a grant to the NIH to begin such research but the peer reviewers seem to believe that the USDA should be the funding—the source of funding for the evaluation. My colleague is ready to do such research and I'm sure many others would like to have the opportunity to do so too. So while the program was an impor-

tant first step it can have more pervasive effects on policy if it had a thorough evaluation.

In a more direct response to your question, the highlights of my research reveal that children who have more fruit and vegetables available at home tend to eat more fruits and vegetables. That's not rocket science but we think it's an important finding so we've initiated research on the determinence of home fruit and vegetable availability and we're currently doing surveys in Houston on that factor.

Also, we've designed electronic games based on behavior change principles and have shown that children who played our games twice a week for 5 weeks increased their fruit and vegetable consumption by a full serving a day. We have several funded studies pursuing this line of research, trying to find more effective ways within the game framework of helping children change their dietary behaviors.

Finally, we've developed a computerized method for measuring children's daily food consumption. This opens the door to more extensive dietary research because it makes dietary data collection much less expensive. We think these are important contributions.

Senator HARKIN. Your point is that we need better research and data collection.

Dr. BARANOWSKI. Yes sir.

Senator HARKIN. I agree with that.

I'm going to now open this up. I'm told we're going to start out walking in 10 minutes but I'd like to open up to the floor for anyone that has any questions, comments, suggestions. We're open for any observations that anyone might have. All I ask is that you just identify yourself for the record, is all. Yes, back here.

Ms. THOMAS. I'm Kathy Thomas from Iowa State University. And I think I have a couple of comments more than questions. With all due respect to Dr. Baranowski, I certainly agree that more money is necessary for research but one of the key points that I think, as we listen to Mr. Schupbach's program in Grundy Center, it's important to understand that his program is daily physical education. And if we look at the two most recent publications, one from NICHD and the Schifft Study that Burgeson and Paul Wexler published from CDC, both of those indicate that we are grossly behind the national recommendations in terms of daily P.E. In the elementary school, children are getting approximately 40 percent of daily physical education recommendations. In Iowa, it's about the same as it is nationwide, where children are getting 2.1 days of physical education per week when the recommendation is daily. They're getting approximately 62 minutes in the State of Iowa as opposed to 150 minutes. So——

Senator HARKIN. Let me ask a question. Sixty-two minutes per week?

Ms. THOMAS. Yes sir. Per week.

Senator HARKIN. In elementary school?

Ms. THOMAS. Yes sir.

Senator HARKIN. That's average?

Ms. THOMAS. That would be the national average, yes sir.

Senator HARKIN. The national average is 62 minutes per week?

Ms. THOMAS. It's 66 in third grade, in the NICHD study. If you look at the Schifft's data it's more like 62 minutes, which is about the Iowa average. Now, this is a systemic problem. And I think unfortunately a lot of the research that's done——

Senator HARKIN. Could you put the mike closer to your mouth?

Ms. THOMAS. This is a systemic problem that we look at research and we criticize instruction, curriculum, child behaviors, all sorts of things like that and we don't look at the systemic issue of how much physical education children are actually getting each day. One of the things, that if we look at the increase in obesity and overweight from the Enhans data from 1974 to 1999, it is almost parallel to the number of children since 1974 to 1999 who have no physical education. None.

Senator HARKIN. Now, I have to reconcile with what you just said with some data I saw recently that said 80 percent of elementary school kids in America don't even receive an hour of P.E. a week. Now, you say the average is an hour.

Ms. THOMAS. In elementary school. Now, it depends on how you read the data. If you look at high schools, for example, for students who are enrolled in physical education oftentimes they meet the 225 minutes per week requirement. But many children in high school are not enrolled in physical education; they meet their 1-year requirement for P.E. and then they're not enrolled the next 3 years. So if you look at 100 percent of the children in high school that are enrolled in physical education it looks more like 25 percent of the kids in high school are meeting that daily requirement. However, if you only report the students who are actually enrolled they become much closer. So it depends on how you want to interpret the data. But if you look at the data that CDC has presented for us and NICHD, they both are very consistent that the system is what's failing, not necessarily the teachers nor the curriculum. And I think that's a really important point because we see many wonderful teachers who are creative but who don't have the kind of support in their system that superintendents like the one in Grundy Center has offered. And I think that's an important problem.

The other thing I'd just like to mention, I'm sure Dr. Baranowski is well familiar with Steve Blair's work from the Aerobics Institute which shows that obesity is less of an impact on morbidity and mortality than being physically active. And that may be one of the ways of dealing with your concern about people with eating disorders, that we want to make sure that people are active first and then we'll worry about overweight and obesity.

Senator HARKIN. Very good. Thank you.

Yes.

Mr. LAYTON. Senator Harkin, thank you for holding this hearing. My name is Tim Layton with the Iowa Department of Public Health. I want to share, number one, a story and just one or two statistics to shore up some of the presentations today. Some of them are rather recent.

My personal background in this is that my father spent his life helping folks plan for their retirement, their financial well-being, their fiscal well-being at that stage of their life, and the greatest irony of my life was that when my father retired at the age of 65

a week later he died of a massive coronary. This impacted me and basically is my entire background and credentials that I've kind of based on my beliefs in. My father smoked, he was sedentary, his nutrition habits weren't good, that led to weight issues and he was a bit hypertensive. He's used to establish the animal standard for Iowa roads. Anybody that was driving slower than him was an old goat; anybody faster was a jackass. And if you weren't performing to my dad's standard when you were on the road it kind of would make him overly tense and again, those all contributed to his situation.

I feel his outlook on life and the ability to overlook the physical as well as the fiscal planning for retirement is kind of analogous to America today. So I applaud your efforts to help us start addressing some issues that I, when I look down the road intently the three issues of one, the age of our State and the Nation, the cost of medical care and then also our sedentary trends and see that in the year 2020 we're not going to have money for anything else, it's frightening to me.

I also wish to applaud you, you're kind of steering away from the term obesity, since we have a lot of individuals who are overweight and fit and a lot of individuals who are underweight and could be healthier. And also, perhaps framing it with those obesity terms is sometimes a little bit disturbing to me.

But the two facts that I wanted to share with us today is that the youth screen time is now up to 4.5 hours a day and youth fracture rates have increased 1 percent a year over the last 30 years. We no longer just have frail elderly, we have frail youth. And that fracture rate isn't just coming from an increase in the TV show The Jackass and other things, it is coming from the diet and the lack of quality P.E. And by the way, the term for my P.E. program as a youth was P.E. for Strife. So I applaud the Grundy Center program. And at—trying to keep it short seeing that I have some quality individuals behind me, I'll just sum that up.

Mr. HENSLEY. Thank you, Senator Harkin. My name is Larry Hensley. I'm a professor of health and physical education at the University of Northern Iowa and I serve as the director of our newly-established Youth Fitness and Obesity Institute. What I'd like to do is just comment and reinforce some of the statements that were made earlier.

Dr. Baranowski talked about the imbalance that occurs relative to medical funding and expenditures for health services or sick care compared to prevention. The $1.5 trillion that's the national health care cost according to my figures, about 95 percent of that is directed towards sick care and only 5 percent towards prevention. That needs to be changed. And along those areas we talked about obesity, it's important to recognize that both dietary behaviors and physical activity behaviors are important components and important factors in contributing to obesity. We also need to see balanced funding and balanced support for both areas. Dietary behaviors as well as physical activity.

In the presentation that Mr. Schupbach made, and I must comment that Rick is a former student of mine and so I'm very proud of his work in Grundy Center. He talked about the potential that physical education programs have in helping arrest the overweight

and obesity crisis. Unfortunately, and it's been mentioned previously, the current Federal education legislation, No Child Left Behind, does more to marginalize the physical education and as a result of this what we're seeing is, we're beginning to see dollars and funds shifted from physical education, I could talk about art education and music education as well, into other areas that are deemed to be more important. So this needs to be investigated and looked at very carefully.

Last, I would suggest to you that with all the different health promotion initiatives that are underway, some very innovative initiatives, we certainly need policy to support these health initiatives and individual change initiatives.

Thank you very much.

Senator HARKIN. Thank you very much.

Ms. KLINE. Susan Kline. I'm a nutrition and health field specialist for Iowa State University Extension. And I wanted to share something—I felt compelled to share something with you when you mentioned that vegetables and fruits are expensive, one of the most expensive things we can buy. At Extension, we go around trying to teach people about food selection and the importance of nutrition, and I want to share with you this little thought. If you bought a bag of taco chips, they often will cost $3. I'm not really sure how much they weigh but, for that same $3, if you bought bananas at 49 cents a pounds, which I guess is kind of expensive, if you ask me, and you figure there are about four bananas to a pound, you could buy, for that $3 of taco chips you could buy 24 bananas. So I don't really think, in comparing fresh fruits and vegetables and cost to other items that that's—we need to put away the myth that fresh fruits and vegetables or that fruits and vegetables are expensive. They aren't really expensive, they are just something that, when we buy them every week, maybe we have more spoilage is why we think it's expensive.

Senator HARKIN. Very good point. Thank you very much. That's good, that's good.

Ms. GARRETT-HOFFMAN. Hi. My name is Nida Garrett-Hoffman. I'm one of the diabetes nurses at Mercy Medical Center. And one of the things several of you mentioned about diabetes and the tremendous epidemic that we are having with diabetes, we have 18 million people already who have diabetes; we have about 40 million people who are at the stage of pre-diabetes or metabolic syndrome. At this particular time we don't have any diabetes education coverage for diabetes education for these people. We have found that if we don't get to these people they still have the risk of developing complications of diabetes that the people who have diabetes do. I'm asking that somehow we get some coverage, medical coverage for diabetes education, for pre-diabetes and metabolic syndrome. Thank you.

Senator HARKIN. Hmm. That's a good suggestion.

Mr. OLSEN. Just comment and I contrast that with the cost of dialysis, for one patient a year. And look at that versus diabetic treatment.

Senator HARKIN. Say it again?

Mr. OLSEN. I said contrast that with the cost of treating one dialysis patient for a year. Have your staff look that up.

Senator HARKIN. What?

Mr. OLSEN. Just how much it costs to treat one person on dialysis for 1 year. I can send it to you if you don't have it.

Senator HARKIN. Okay. All right.

Ms. HECKENLAIBLE. I'm Suzanne Heckenlaible. It's H-E-C-K-E-N-L-A-I-B-L-E. And the director of Field Services Public Affairs for the March of Dimes, which is to improve the health of babies and their mothers by preventing birth defects and infant mortality. And Senator Harkin, we'd like to thank you for your support of Federal funding for the birth defects registry prevention programs and research. And as you know, in the State of Iowa we have a Center for Excellence here that does research with the Department of Public Health and we appreciate your support of that program. As you know, we have had significant reduction in neural tube defects, which is, the reduction is due to folic acid consumption. And we encourage you to continue to support the research and prevention programs in regards to birth defects in Federal funding. So thank you.

Senator HARKIN. Thank you.

Ms. HUNTINGTON. I'm Jenny Huntington from Ames. I work for the Child Nutrition Programs at the Iowa Department of Education. I want to thank you for your support, your continued and long-term support, of the Child Nutrition Programs. These include programs for school children and also adults in day care and children in day care, both in homes and in child care centers. These are essential programs for our children and we really do appreciate your support, and the people of Iowa do.

We also appreciate your support for Teen Nutrition, which is a grant program and a special nutrition education effort from USDA. Iowa has been fortunate enough to receive a number of Teen Nutrition grants for both schools and child care. From the beginning grant we have linked improved nutrition with increasing physical activity in our grant process, and we have also focused, in some of the grants, on efforts to work with child nutrition in early childhood programs. One of the things that we developed through these grants is a tool for people in early childhood to increase physical activity and increase healthy snacks is a set of 60 cards that have a physical activity on one side of each card and a healthy snack on the other side of each card. And they're held together with a ring. These cards are kind of expensive to print but they are all available through Iowa Public Television, on the Ready to Learn site. Anyone in Iowa and anyone in the Nation can download these cards and use them in their child development programs. We also have developed policy cards where we are encouraging child care organizations to not only serve healthy foods but make sure they're not selling candy for fundraising. And so we're looking at policies in child care and we have lessons. These are all sets of cards that we have developed through Teen Nutrition. Thank you very much. We've had at least 11 States that have requested reprinting of these cards; we're hoping the National Food Service Management Institute will take it on and distribute them for us.

Senator HARKIN. Thank you. I just want to mention one other thing. I've forgotten the ingredient but it was mentioned that the

fractures in kids that have gone up 1 percent per year, the last several years; is that what you said?

Mr. LAYTON. One percent a year, Senator, over the last 30 years.

Senator HARKIN. I didn't know that exactly but I had heard about the increased fractures among kids; I sort of asked some questions about this at earlier hearings and different forums. And it was brought to my attention, Dr. Baranowski, that the increased consumption of sodas—soda contains phosphoric acid. Phosphoric acid leeches calcium out of your system. So the more phosphoric acid that you take in, the more calcium leeched out of your bones and that is one of the reasons why, some scientists believe that kids are having softer bones these days, because they're drinking so much soda pop.

(Inaudible response off-mike)

Senator HARKIN. If what?

(Inaudible response off-mike)

Senator HARKIN. No but——

Mr. LAYTON. We brought one for you.

Senator HARKIN. I have a lot of pedometers. I just keep misplacing them, that's all. But thank you, anyway.

Well listen. Thank you all very much. I want to thank all of you. Dr. Baranowski, thank you for coming all the way from Texas, and thank you for your continued work on a national basis on these issues. We appreciate it very much.

We're going to do a little walk here, around the track up here at AIB I want to thank, again, I want to thank Vernon Delapeace, thank you very much, the C.E.O. of the YMCA of Greater Des Moines. I want to thank the staff of the YMCA, who's arrived; they're all back there in their tee-shirts. Thank you for being here. And they're going to join us on the walk. You're all invited to join us if you would like. We're just going to do a little walk around up there and I'll see if their pace is like my pace. And I have a heart monitor on; I don't know what that's all about.

Dr. BARANOWSKI. I'll explain it to you.

Senator HARKIN. What?

Dr. BARANOWSKI. I'll explain it to you.

Senator HARKIN. Oh, you're going to explain it to me?

Dr. BARANOWSKI. Yes, I am.

Senator HARKIN. Here or later?

Dr. BARANOWSKI. As you start.

Senator HARKIN. Oh, as I start you're going to explain it. All right. But again, I'd just close by just saying that this is—I don't think there really is a more important issue facing us as Americans, health-wise, than this issue of healthy lifestyles and prevention. If we keep going the way we're going there's just no way that we're going to be able to fund the sick care system we have in America; it's going to bust us. When we know. I mean, the science is there, the data's there. This is not just speculation; we know that if people eat right, exercise right they're going to be healthier, they're going to prevent chronic illnesses and diseases more often, and it's going to save us money plus people are just going to have better lives. I think we got off the track, some years ago, I guess when schools changed and stuff but I was like some of you, when I was in school, I mean, we had two recesses and a lunchtime and

we could never stay inside. Well, maybe if it was 20 degrees below and it was a blizzard maybe we could stay inside; otherwise we were out. And that was just our exercise, every week, when I was in grade school here in the State of Iowa. I don't think you find that any longer like that. And so we grew up and of course, being in the military and that helped too, promote physical activity and physical exercise. But we've just gotten so sedentary with everything, televisions and, as I said, now we don't, we no longer bike, we don't have bike paths, we don't even have sidewalks, we don't have walking paths for people. Everything we've done has been to encourage a more sedentary lifestyle. And now you can buy a Sequeway; you don't even have to walk anymore, you got to go to two-wheelers and just ride it wherever you want to go. It may have some benefits someplace but at a time when we're trying to encourage people to get out and walk more, I don't know.

So I just don't think anything's more important than this in terms of both the health of our people and the health of our economy, and having a health care system that really is a health care system. We keep looking, I keep looking for suggestions, advice; I've gotten some good input here this morning on, you know, what needs to be done and steps to be taken. I think this may be another instance where the government, the government so to speak, those of us in government, are behind. I think we're seeing more of this coming from the grassroots up, people are demanding that they want a healthier lifestyle, they want to have physical activity, they want to have wellness programs and I think those in public office are going to have to start responding to that very, very soon and do what people want. And that is provide in workplaces, providing incentives for businesses to have wellness programs for all their employees; communities, on a community basis I mentioned schools, pre-school, but it has to be that kind of a comprehensive approach. And we can't put it off any longer. I think we've just got to have some real focus on this and we've got to bring this country together to move us as rapidly as possible in this direction.

So again, I thank you all for being here. And you're all invited to join us on the walk if you like.

With that, the subcommittee—unless I have anything else—I want to thank, first of all, Jenelle Krishnamoorthy right here behind me and Ellen Murray, my two staff people who do all this work and keep me advised and informed and get witnesses together and basically have been two of the great leaders in the U.S. Senate on health care. A lot of times we get the acclaim and we get the applause and stuff but they're really the ones that do the work and we want to publicly thank both of them for all their work.

CONCLUSION OF HEARING

Thank you all very much for being here. That concludes our hearing.

[Whereupon, at 11:40 a.m., Friday, April 16, the hearing was concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]

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