HEARING TO REVIEW THE STATE OF OBESITY IN THE UNITED STATES

HEARING

BEFORE THE

SUBCOMMITTEE ON DEPARTMENT OPERATIONS, OVERSIGHT, NUTRITION, AND FORESTRY

OF THE

COMMITTEE ON AGRICULTURE
HOUSE OF REPRESENTATIVES

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

MARCH 26, 2009

Serial No. 111–5

Printed for the use of the Committee on Agriculture
agriculture.house.gov

U.S. GOVERNMENT PRINTING OFFICE

51–897 PDF WASHINGTON : 2009

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

COMMITTEE ON AGRICULTURE

COLLIN C. PETERSON, Minnesota, *Chairman*

TIM HOLDEN, Pennsylvania, *Vice Chairman*
MIKE McINTYRE, North Carolina
LEONARD L. BOSWELL, Iowa
JOE BACA, California
DENNIS A. CARDOZA, California
DAVID SCOTT, Georgia
JIM MARSHALL, Georgia
STEPHANIE HERSETH SANDLIN, South Dakota
HENRY CUELLAR, Texas
JIM COSTA, California
BRAD ELLSWORTH, Indiana
TIMOTHY J. WALZ, Minnesota
STEVE KAGEN, Wisconsin
KURT SCHRADER, Oregon
DEBORAH L. HALVORSON, Illinois
KATHLEEN A. DAHLKEMPER, Pennsylvania
ERIC J.J. MASSA, New York
BOBBY BRIGHT, Alabama
BETSY MARKEY, Colorado
FRANK KRATOVIL, JR., Maryland
MARK H. SCHAUER, Michigan
LARRY KISSELL, North Carolina
JOHN A. BOCCIERI, Ohio
EARL POMEROY, North Dakota
TRAVIS W. CHILDERS, Mississippi
WALT MINNICK, Idaho

FRANK D. LUCAS, Oklahoma, *Ranking Minority Member*
BOB GOODLATTE, Virginia
JERRY MORAN, Kansas
TIMOTHY V. JOHNSON, Illinois
SAM GRAVES, Missouri
MIKE ROGERS, Alabama
STEVE KING, Iowa
RANDY NEUGEBAUER, Texas
K. MICHAEL CONAWAY, Texas
JEFF FORTENBERRY, Nebraska
JEAN SCHMIDT, Ohio
ADRIAN SMITH, Nebraska
ROBERT E. LATTA, Ohio
DAVID P. ROE, Tennessee
BLAINE LUETKEMEYER, Missouri
GLENN THOMPSON, Pennsylvania
BILL CASSIDY, Louisiana
CYNTHIA M. LUMMIS, Wyoming

PROFESSIONAL STAFF

ROBERT L. LAREW, *Chief of Staff*
ANDREW W. BAKER, *Chief Counsel*
APRIL SLAYTON, *Communications Director*
NICOLE SCOTT, *Minority Staff Director*

SUBCOMMITTEE ON DEPARTMENT OPERATIONS, OVERSIGHT, NUTRITION, AND FORESTRY

JOE BACA, California, *Chairman*

HENRY CUELLAR, Texas
STEVE KAGEN, Wisconsin
KURT SCHRADER, Oregon
KATHLEEN A. DAHLKEMPER, Pennsylvania
TRAVIS W. CHILDERS, Mississippi

JEFF FORTENBERRY, Nebraska, *Ranking Minority Member*
STEVE KING, Iowa
JEAN SCHMIDT, Ohio
CYNTHIA M. LUMMIS, Wyoming

LISA SHELTON, *Subcommittee Staff Director*

CONTENTS

HEARING TO REVIEW THE STATE OF OBESITY IN THE UNITED STATES

THURSDAY, MARCH 26, 2009

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON DEPARTMENT OPERATIONS,
OVERSIGHT, NUTRITION, AND FORESTRY
COMMITTEE ON AGRICULTURE,
Washington, D.C.

The Subcommittee met, pursuant to call, at 10:05 a.m., in Room 1300 of the Longworth House Office Building, Hon. Joe Baca [Chairman of the Subcommittee] presiding.

Members present: Representatives Baca, Cuellar, Kagen, Schrader, Dahlkemper, Childers, Fortenberry, Schmidt, and Lummis.

Staff present: Adam Durand, Tyler Jameson, John Konya, Robert L. Larew, Lisa Shelton, April Slayton, Rebekah Solem, Patricia Barr, Pam Miller, and Jamie Mitchell.

OPENING STATEMENT OF HON. JOE BACA, A REPRESENTATIVE IN CONGRESS FROM CALIFORNIA

The CHAIRMAN. This hearing to review the state of obesity in the United States will now come to order. Thank you very much to those of you for being here this morning. What we will do is begin with opening statements by myself, and then with the Minority Ranking Member, and other Members as they arrive, if they wish to give an opening statement.

Again, good morning. I want to thank all of you for being here before the Subcommittee to review the impact on obesity in the United States. I think it is an important topic that affects a lot of us. The issue is one of pressing concern to all Members of the Subcommittee. We are all anxious to hear the testimony of the outstanding witnesses to learn all that we can about the disease. And I say the disease of obesity, because that is what it is.

Also, I would like to acknowledge our new Ranking Member, Congressman Fortenberry, and thank him for his interest in this hearing. Thank you very much, Jeff. I look forward to working with you on this and other issues before this Subcommittee, because we want to work on a bipartisan manner on issues that impact us on all subject matters that we have the responsibility for.

I have purposely kept this hearing small in numbers to promote dialogue on this topic. We are here to listen, to learn, to see how we can make good policies. We will likely have other hearings to educate us on the problem of obesity. This isn't the only one we are going to have, but hopefully, we can explore the problems of access

to healthy food as we look at obesity and its effects, and look to explore ways to eliminate food deserts. Also, we hope to explore the impact of obesity on many of the underrepresented communities, particularly the effects on tribal and Native American communities, the impact it has there. Also, I encourage Members of the Subcommittee to share their thoughts in future hearings on this or any other topic that we should be addressing.

So with that in mind, I hope that we are—that our capable witnesses and Members will not hesitate to share their thoughts, and their expertise on obesity in America.

The problem of obesity plagues all Americans, and I state all Americans, either directly or indirectly. Statistics indicate that more than ⅓ of our population is considered obese. That is, in and of itself, a shocking number. It has an impact on us financially. It has an impact on us health-wise, and it also has an impact in terms of relationships with one another. However, the consequences of that number need to be examined and need to be understood.

Like any disease, obesity affects many more than just those who suffer from it. Today's hearing will give us a better insight as to the very real impact that obesity has on our whole society. How does obesity affect the family? How does it specifically affect American women? How does obesity affect children and their ability to learn? How does obesity affect businesses? How does obesity affect the cost of health care? How does obesity affect the American culture?

These are the questions that must be taken into account, and which we will begin to address today. We know that prevention—that prevention and nutrition education are key to success in combating obesity. We must find out what works, what does not work, and why. Hopefully, your insight will best inform us as to how to make realistic and substantive policy changes.

As a father, grandfather, and an American, I am depressed by the harmful effects of obesity on our health and on our society. But as a legislator, I am also troubled by the economic consequences our nation faces due to obesity. So today, we will listen and learn from excellent panels of witnesses about their work to determine the impact of obesity on America.

I hope this hearing will build on an important body of evidence, so that we can continue to work together to fight obesity and create a healthier nation.

[The prepared statement of Mr. Baca follows:]

PREPARED STATEMENT OF HON. JOE BACA, A REPRESENTATIVE IN CONGRESS FROM CALIFORNIA

Good morning, and thank you all for being here before this Subcommittee—to review the impact of obesity in the United States.

This issue is one of common concern to all Members of the Subcommittee—so we are anxious to hear the testimony of our outstanding witnesses and to learn all we can about this "disease".

Also, I would like to acknowledge our new Ranking Member, *Congressman Fortenberry,* and thank him for his interest in this hearing.

I look forward to working with you on this and other issues before our Subcommittee.

We are a small Subcommittee with a very *large* interest in the health and welfare of the people in this country.

I have purposely kept this hearing small in numbers to promote real dialogue on this topic.

We are here to listen and to learn so we can make good policy choices.

Also, we will likely have other hearings to educate us on the problem of obesity.

We plan to explore the problem of access to healthy food—and look to explore ways to eliminate "food deserts".

I also hope to explore the impact of obesity on many of our underrepresented communities—and particularly its effects on our tribal and Native American communities.

Once staff is in place at USDA's Food and Nutrition Service, I'm sure they could also add to the discussion.

And, as always, I encourage Members of the Subcommittee to share their thoughts on future hearings on this, or any, topic.

So, with that in mind, I hope our capable witnesses—and Members—will not hesitate to share their thoughts and expertise on obesity in America.

The problem of obesity plagues all Americans—either directly or indirectly.

Statistics indicate more than ⅓ of our population is considered obese.

That, in and of itself—is a shocking number.

However, it is the consequences of that number that we need to examine and understand.

Like any disease, obesity affects many more than just those who suffer from it.

Today's hearing will give us better insight into the very real impact that obesity has on our whole society.

- How does obesity affect a family? How does it specifically affect America's women?
- How does obesity affect children, and their ability to learn?
- How does obesity affect a business?
- How does obesity affect the cost of health care?
- How does obesity affect the American culture?

These are all questions that must be taken into account—and which we will begin to address today.

We know that prevention and nutrition education are keys to success in combating obesity—but we must find out what works; what does not work; and why.

Hopefully—your insight will best inform us on how to make realistic and substantive policy changes.

As a father, grandfather, and an American, I am distressed by the harmful effects of obesity on the health of our society.

But as a legislator, I am also troubled by the economic consequences our nation faces due to obesity.

So, today we will listen and learn from our excellent panel of witnesses about their work to determine the impact of obesity on America.

I hope this hearing will build on this important body of evidence, so we can continue to work together to fight obesity and create a healthier nation.

I now yield to our Ranking Member—Congressman Fortenberry, for his opening statement; and after that will open the hearing up to any other Subcommittee Members who wish to make a brief opening statement.

The CHAIRMAN. I now yield to the Ranking Member, Congressman Fortenberry, for his opening statements, and after that, I will have other Members give their comments as well.

OPENING STATEMENT OF HON. JEFF FORTENBERRY, A REPRESENTATIVE IN CONGRESS FROM NEBRASKA

Mr. FORTENBERRY. Thank you, Mr. Chairman, for your kind introduction and for holding this hearing today on the state of obesity in the United States. I appreciate all of you who are witnesses, your time and willingness to come before us as well on this important subject, and I look forward to our discussion today.

Like many of my colleagues, I am very concerned about the rising rate of obesity among Americans, and the costs are not only great in terms of economics, but also in terms of health and well-being of our people. As our witnesses will testify today, obesity is

contributing to rising health care costs, the loss of productivity in the workplace, and various life-threatening conditions such as diabetes, cardiovascular disease, as well as stroke. I am also very concerned about the rising trend of overweight and obesity statistics among America's children. I strongly believe that we need to link the nutrition our children receive to their wellness for the purpose of preventing the onset of debilitating chronic diseases. By doing so, we should also see improved health outcomes as well as lowered heath care costs. I am personally committed to exploring ways to encourage good nutrition and wellness, and ultimately, as we all know, for these statistics to change, persons must take more personal responsibility, choose a more informed and well-balanced diet, as well as increase their activity level. But to encourage people to get on the right track, I believe access to good nutrition, as well as nutritional education, is the key.

I would also like to note, Mr. Chairman, that Dr. Kagen, from Wisconsin, and I successfully amended the farm bill last year to empower local school systems, as well as other public institutions, to purchase locally raised, nutritious foods from local farmers as a way to strengthen local food programs while adding healthful options to school menus.

I am anxious to hear all of your testimony today, as we unpack these various aspects of the obesity problem in our country, as well as to hear your helpful suggestions about the most effective ways to provide information on combating this growing trend.

Mr. Chairman, again, I thank you for holding this hearing, and I look forward to our dialogue today.

The CHAIRMAN. Thank you very much. Next, I will call on Congressman Kagen.

OPENING STATEMENT OF HON. STEVE KAGEN, A REPRESENTATIVE IN CONGRESS FROM WISCONSIN

Mr. KAGEN. Thank you, Mr. Chairman, for holding this very important hearing. I expect this morning to hear from experts in the field to help document the state of this epidemic of being overweight. America is overweight, no question about it. I look forward to your suggestions at what we can do to begin to solve this difficult challenge that we face.

As the Ranking Member, Jeff Fortenberry, indicated, we have in the Farm Bill of 2009—we put in some good things, didn't we, Jeff? You can grow local food and put it into local school systems: Grow local, buy local.

I will just remind everybody, pollution begins at your lips. You are what you eat, and from the Kagen point of view, you ought to weigh today what you did as a senior in high school. I am working on it.

I will yield back my time.

The CHAIRMAN. I think we are all headed to the gym right now. Thank you. Congresswoman Lummis.

OPENING STATEMENT OF HON. CYNTHIA M. LUMMIS, A REPRESENTATIVE IN CONGRESS FROM WYOMING

Mrs. LUMMIS. Thank you very much, Mr. Chairman. Although I haven't any prepared remarks for opening, I would like to thank you, is it Dr. Dietz, for being here, and our other witnesses.

Every time that a TV ad runs on our cable television station at home that says don't just do something, sit there, I go springing out of my seat because I realize all Americans watch too much TV, and we are all insufficiently exercised. And of course, our children learn those behaviors from us. Growing up and having been in 4–H where we worked on food pyramids, we worked on making sure we had a balanced meal in front of us, and that we had different colors of food to make it a pleasing-looking meal, it seems that those things, to me, come as second nature. However, I realize that in this day and age, not all kids are in 4–H. Not all kids learn about the food groups, about nutrition, and we need to return to that. And that is why I have been so encouraged to see, for example, ads by the National Football League encouraging kids to get off the couch and go out and exercise. There are a lot of groups that are pitching in to this effort, and it is important that we who are lawmakers, policy makers, acknowledge the public-private partnerships that are so positive that could further nutrition in this country.

Additionally, I would like to echo Mr. Fortenberry's remarks. It seems to me there is such a natural alliance between slow food, as we are calling it now, and home-grown food in areas that can help young people learn about agriculture, learn about selecting appropriate foods, and the connection where their food comes from and their community, their health, their body, their lives. This seems like a very good time to be pursuing this subject. I commend you on your willingness to inform us today and to inform the debate today.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. Congressman Schrader.

OPENING STATEMENT OF HON. KURT SCHRADER, A REPRESENTATIVE IN CONGRESS FROM OREGON

Mr. SCHRADER. Thank you, Mr. Chairman. I was going to take a point of personal privilege with Mr. Kagen's remarks about pollution starting at the lips. I thought he was talking about us, but he was actually talking about food in general. I appreciate his clarification there.

I just hope that the panel would focus on how we can encourage these behaviors. There has been a lot of talk about health care, health care reform, and a lot of talk about prevention being the real key to developing these healthier lifestyles. So if any of the panelists could really direct us to some solutions or things they may want to include, as we move forward in health care discussion, to encourage healthy lifestyles in a most productive way. We like to mandate things, and that doesn't usually get the job done, so I would be very interested in the panel's remarks along those lines.

Thank you.

The CHAIRMAN. Congresswoman Schmidt.

OPENING STATEMENT OF HON. JEAN SCHMIDT, A REPRESENTATIVE IN CONGRESS FROM OHIO

Mrs. SCHMIDT. Thank you, Mr. Chairman. First off, I would just want to say to Dr. Kagen, I actually do weigh the same as I did in high school, but it was a lifestyle change that occurred with me 30 years ago.

What I hope this panel will present is ways that we can encourage our young children to not only get off the couch and get outside and do some physical activity, but make smart choices on the food that they eat, because it is a lifestyle process, as you and I know, but we are speaking inside the room. We are on a dangerous course in the United States where our children will no longer outlive our lifetime on Earth, but we may outlive theirs. With the obesity rates that continue to climb, with the health concerns, especially with high blood pressure, heart disease, and diabetes, which are now growing at alarming rates with our youth, it is not just up to us in Congress to mandate a better way to have a lifestyle, but for all of us in the United States to promote a better lifestyle.

While I will have to leave in a few minutes for another meeting, I am very encouraged by this panel and this action. I look forward to this great deliberation.

The CHAIRMAN. Thank you very much. Congresswoman Dahlkemper.

OPENING STATEMENT OF HON. KATHLEEN A. DAHLKEMPER, A REPRESENTATIVE IN CONGRESS FROM PENNSYLVANIA

Mrs. DAHLKEMPER. Thank you, Mr. Chairman. As a new Member of Congress and someone who was a registered dietician for over 25 years, I just want to thank the Chairman for bringing this topic up as actually the first Committee hearing of this Congress.

I think one of the aspects of this whole issue that sometimes gets buried is the whole emotional and psychological aspect of eating. Having worked in Early Intervention with the birth to 3 years of age population for many years, and knowing that connection and that parental/child connection, that is an aspect to this whole problem that also needs to be addressed. I hope today that that is, along with so many other great parts—not great, but so many important parts of this discussion.

So I am just grateful to the Chairman for holding this, and I really look forward to the testimony in front of us today.

The CHAIRMAN. Thank you very much. The Chairman requests that other Members submit their opening statements for the record.

[The prepared statement of Mr. Peterson follows:]

PREPARED STATEMENT OF HON. COLLIN C. PETERSON, A REPRESENTATIVE IN CONGRESS FROM MINNESOTA

Thank you, Chairman Baca for calling today's hearing and for raising this timely and important issue, which is a serious public health concern.

This hearing will look at the obesity problem in the United States, particularly among low income Americans, many of whom participate or have participated in SNAP—the Supplemental Nutrition Assistance Program, which was previously known as the food stamp program.

In the 2008 Farm Bill, we created and expanded a number of programs that will address obesity by expanding access to healthy food choices and increasing nutrition

education efforts aimed at SNAP participants. The farm bill expanded the USDA Snack Program, which provides fresh fruit and vegetable snacks for school children and includes curricula to promote healthy eating. It also included a pilot project to encourage SNAP participants to purchase more fruits and vegetables and a demonstration project to evaluate strategies to address obesity in low income communities.

When looking at the problem of obesity in America, there are often more questions than answers. But one thing is clear—the number of obese Americans is growing, and the cost of this problem, to the individuals facing obesity, their families, and their communities must be addressed.

This is a serious, multifaceted problem with few simple answers, and I appreciate the Subcommittee's work on this issue and look forward to the testimony of the witnesses here today.

The CHAIRMAN. We would like to welcome our first panel to the table. Dr. William Dietz, who is Director of the Division of Nutrition and Physical Activity and Obesity in the Center for Chronic Disease Control and Prevention right here in Washington, D.C. Dr. Dietz, could you please begin when you are ready, and you have 5 minutes. Then afterwards, we will have questions and answers from each of the Members here, based on when they arrive.

STATEMENT OF WILLIAM H. DIETZ, M.D., PH.D., DIRECTOR, DIVISION OF NUTRITION, PHYSICAL ACTIVITY, AND OBESITY, NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION, CENTERS FOR DISEASE CONTROL AND PREVENTION, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, ATLANTA, GA

Dr. DIETZ. Thank you, Mr. Chairman, Mr. Fortenberry, Members of the Subcommittee. Thank you for the opportunity to address the epidemic of childhood obesity. I will limit my comments to childhood obesity, because the entire scope of the epidemic is well beyond 5 minutes.

I am Bill Dietz. I am the Director of the Division of Nutrition, Physical Activity, and Obesity located in CDC's National Center for Chronic Disease Prevention and Health Promotion in Atlanta. I would like to provide you with the latest data on the breadth of the epidemic, the health implications of the epidemic, and the progress that is occurring, as well as what remains to be accomplished.

I have given you six slides.

The first of these slides shows the changes in prevalence over the last 30 years. If you look at 1976 to 1980 and compare that with 1999 to 2000, you will see that there has been a two-fold increase in the prevalence of obesity among 6 to 11 year-olds, and a three-fold increase among adolescents, 12 to 19 years old. The latest data suggests that among 2 to 19 year-olds, 16 percent are obese, 15 percent are overweight. So there is a total of 31 percent of children and adolescents in the United States at risk for the complications of obesity. Those consequences include an increase in cardiovascular disease risk factors. Seventy percent of obese youth have at least one additional cardiovascular disease risk factor, like elevated insulin levels, elevated blood pressure, or elevated lipid levels. Thirty-nine percent of those children and adolescents have two or more of those complications. Type 2 diabetes mellitus, a disease previously limited to adults, is now occurring in children and adolescents. In some cities, it accounts for 50 percent of all new cases of type 2 diabetes.

We know from the natural history of obesity that children who are overweight go on to become obese adults. As obese adults, they are much more severely obese than adults who become obese in adulthood, and therefore, have an increased risk of the diseases associated with obesity. There has been a recent paper that suggests that the deaths from obesity in adolescence are approximately equivalent to those deaths attributable to smoking, so this is not a trivial disease in any means.

Now, although the costs of obesity in children and adolescents rate in the millions, those costs are in the billions for adults. In adults, those cardiovascular disease risks factors in children become hypertension, become atherosclerosis, become cardiovascular disease, and become cancer. The prevalence of these diseases in adults portends a further increase in the future costs of obesity and medical costs in the United States. Obesity-related diseases accounted for 25 percent of the increase in medical costs between 1987 and 2001. We have a choice here. We can pay for the care of these diseases, or we can choose to prevent these diseases. But if we are to control these medical costs, prevention is essential. There is no way that these diseases, obesity and its associated diseases can be treated in medical settings. Sixty percent of adults are overweight or obese, 31 percent of children and adolescents are overweight or obese. That far exceeds the capacity of the medical system. We really need to look beyond that.

Now, there is some modest cause for optimism. If you look at the second slide, this shows the changes in obesity prevalence by race ethnicity for boys 2 to 19 years old. There are a couple of observations here. The first is that among all three major ethnic groups studied in the National Health and Nutrition Examination Survey, the prevalence of obesity has flattened. We are at a plateau. Notice also on this figure that among boys, Mexican American boys are disproportionately affected.

If you look at the next slide, the same thing is true for girls. But among girls, African American girls are disproportionately affected. That alone emphasizes the important cultural basis and linkages of obesity in children and adolescents.

Coming back to this plateau, this is true for children and adolescents between the 85th and 95th percentile, that is overweight children and adolescents, obese children and adolescents, and also severely obese children and adolescents. However, this is not a cause for complacency. Thirty-one percent of the pediatric population is overweight or obese. Thirty-one percent are destined—some proportion of that 31 percent are destined to become obese adults, and therefore suffer the medical consequences.

Now, the next slide indicates the states that we are funding. Many of those are your states. Our challenge has been to figure out what we should recommend that our state programs do. Obesity didn't result from active decisions on the part of the population to eat more or exercise less. Recent calculations suggest that the imbalance necessary to account for obesity in adolescents amounts to about 150 calories per day. That is an easy remediable and accomplishable imbalance to address. But as I said before, behavior changes in large proportions of the pediatric and adult populations are highly unlikely, unless they are supported by changes in the

environment that provide access to healthy eating and active living. People must make good choices, but they must have good choices to make.

Place matters: Children can't walk to school in our suburbs because of the lack of sidewalks and centrally located schools. Inner city populations are surrounded by fast food restaurants and lack access to grocery stores. If our population is to make good choices, there must be good choices to make.

Like tobacco, our focus is on policy and environmental changes which will change diet and physical activity, many of which will change practices or behaviors, but not necessarily be driven by increased costs. I would like to point to a few of those policy initiatives.

New York City regulates group day care: About 18 months ago, they passed a new regulation which called for limits on television veiwing over the age of 2, no television veiwing for children under the age of 2, which is consistent with the recommendations the American Academy of Pediatrics. They banned sugar-sweetened beverages, they called for the provision of low-fat and no-fat milk, and they called for 60 minutes of physical activity a day. In a group day care, that regulation is likely to have a substantial impact on the prevalence of obesity.

In Mississippi, the Department of Education worked with CDC, the Bower Foundation, and the Alliance for a Healthier Generation, the alliance between the Clinton Foundation and the American Heart Association, to develop new standards for snacks, they banned sugar-sweetened beverages, and replaced deep fryers with steamers. The school-based fresh fruit and vegetable snack program that was part of the farm bill makes a major contribution to the improved nutrition of children and adolescents. Among communities, the CDC funded an intervention in Somerville, Massachusetts, which included multiple changes in schools in the community, such as increasing low energy density foods, discouraging high fat and high sugar foods, enhancing the school food service, expanding pedestrian safety policy, and promoting a walk to school campaign. This program resulted in a lower rate of increase in BMI among children in the targeted schools than among control schools.

One additional problem which is worth mentioning is the food insecurity in underserved populations may contribute to obesity. Hunger seems clearly associated with restricted growth in children and adolescents, but food insecurity may contribute to obesity. That is, families may make decisions to eat more when food is available to account for the deficits of food when it is not. In an era of financial instability, this becomes an important potential contributing problem.

Now, the plateau is encouraging in the prevalence of obesity in children, but it is not enough. Thirty-one percent of our youth population are overweight or obese, and the estimates are, as you are aware, that if we don't in some way control medical costs and the medical costs that are increasingly driven by obesity, the costs of our medical system is going to account for 20 percent of our gross domestic product. We already know that insurance companies are struggling and employers are struggling to support these costs. Those are only going to increase as these children and adolescents

go on to become obese adults. We need an integrated approach across multiple sectors, collaboration across agencies and departments, and coordinated efforts among national, state, and local authorities.

In closing, I would like to thank the Committee for its leadership and commitment to the health of our nation's youth. We know that the young can achieve long-term health benefits from better nutrition, increased physical activity, and other preventive efforts. Environmental changes to make good nutrition and regular activity a routine part of their lives will take a committed, coordinated effort that must endure for decades to come.

Thank you again for the opportunity to share these views with you.

[The prepared statement of Dr. Dietz follows:]

PREPARED STATEMENT OF WILLIAM H. DIETZ, M.D., PH.D., DIRECTOR, DIVISION OF NUTRITION, PHYSICAL ACTIVITY, AND OBESITY, NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION, CENTERS FOR DISEASE CONTROL AND PREVENTION, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, ATLANTA, GA

Current Status and Activities to Decrease the Prevalence of Obesity Among U.S. Children and Adolescents

Introduction

Chairman Baca and Members of the Subcommittee, thank you for the opportunity to provide this statement for the record for today's hearing on the nation's childhood obesity epidemic. I am Dr. Bill Dietz, Director, Division of Nutrition, Physical Activity, and Obesity, located in CDC's National Center for Chronic Disease Prevention and Health Promotion. My statement provides you with an overview of the childhood obesity epidemic including updated surveillance data on youth overweight and obesity; the financial cost that treating overweight and obesity places on our healthcare system; and a description of integrated activities illustrating the implementation of policy approaches supported by the CDC to combat the childhood obesity epidemic.

Background

In order to improve the health and quality of life of Americans, now and for the next generation, while keeping our healthcare budget under control, we need to invest in prevention. At every stage of life, eating a nutritious, balanced diet and staying physically active are essential for health and well-being. This is especially true for children and adolescents who are developing the habits they will likely maintain throughout their lifetime. Thus, developing effective population-level interventions that create supportive healthful environments for young people and their families is an opportunity to affect positive health outcomes throughout the life span.

Childhood obesity is an epidemic in the United States, one that is negatively impacting the physical and emotional health of our children, their families and society as a whole. The multiple, complex causes of childhood obesity present a compelling case for integrating multiple disciplines in a coordinated, comprehensive effort to halt and reverse the epidemic. Obesity in children is defined using the Body Mass Index (BMI), a calculation of a child's height and weight as adjusted for gender and age based on CDC's Growth Charts for the United States. A child is considered overweight if his or her BMI is between the 85th and 95th percentiles, and obese if his or her BMI is greater than or equal to the 95th percentile.

The prevalence of obesity among American youth increased radically between the 1980's and the present decade. Between 1976 and 1980, approximately five percent of youth 2 to 19 years of age were obese.[1] In 2006, the rate had increased to 16.3 percent. In fact, obesity among children aged 2 to 5 years doubled, increasing from five percent to 12.4 percent; among children 6 to 11 had doubled, increasing from 6.5 percent in 1980 to 17.0 percent in 2006; and tripled among adolescents aged 12 to 19, increasing from five percent in 1980 to 17.6 percent in 2006.[2] Furthermore, 11.3 percent of children and adolescents aged 2 through 19 years were found to be severely obese, that is, their BMI was above the 97th percentile.[3]

There are disparities by race, ethnicity and socioeconomic status in the prevalence of obesity among youth. In 2004, 14.8 percent of children 5 and under from low-in-

come families were obese compared to 10.4 percent of those from moderate to high income families.[4] Among males aged 12 to 19, more than 25 percent of Mexican American were obese, compared with 15.5 percent of non-Hispanic whites. Among females aged 12 to 19 years, the obesity prevalence was higher among non-Hispanic Blacks (27.7 percent) and Mexican Americans (19.9 percent) compared to non-Hispanic whites (14.5 percent).[5]

As noted previously, recent trends reveal that among all youth, the rate of obesity appears to have leveled; there has been no statistically significant increase or decrease for either boys or girls 2–19 years of age between survey years 1999–2000 and 2005–2006. Recent data also show a plateau of obesity rates among U.S. children and adolescents that participate in the Women, Infants and Children (WIC) Supplemental Nutrition Program.[6] We cannot, however, become complacent about this plateau. Sixteen percent of our youth remain obese, and we have not achieved a reduction in obesity among this population group.

Obesity in adults is associated with serious health concerns that we are now beginning to see in children. A 2007 study reported that 70 percent of obese young people already had at least one additional risk factor for cardiovascular disease, while 39 percent had at least two additional risk factors.[7] And consider Type 2 Diabetes Mellitus (T2DM), historically referred to as 'adult-onset' diabetes. Type 2 Diabetes Mellitus was virtually unknown in children and adolescents 10 years ago; now children and adolescents account for almost 50 percent of new cases of T2DM in some communities.[8]

Childhood obesity can become a chronic condition affecting the individual and their families throughout their lifetime. Children and adolescents, who are overweight, are more likely to be overweight or obese as adults. One study found that after age 6, obese children have a greater than 50 percent chance of becoming obese adults, regardless of parental obesity status.[9] In another study, obese adults who experienced childhood obesity before the age of 8 were more severely obese (had higher adult BMI) than were individuals who became obese as teenagers or adults.[10] Adults who were obese as children may have earlier onset of co-morbidities (*e.g.,* diabetes, cardiovascular disease, some cancers) and prolonged health effects from these co-morbidities and other conditions (*e.g.,* arthritis, reproductive health complications, memory loss).[11]

The care and treatment of obesity and its co-morbidities over the life span can be costly. Economic data show that in 2001 dollars, obesity-associated annual hospital costs among youth were estimated to have more than tripled from $35 million in 1979–1981 to $127 million in 1997–1999.[12] More than 25 percent of the rise in medical costs between 1987 and 2001 has been attributed to obesity.[13] Between 1987 and 2002, the cost of obesity to private insurers increased tenfold, from $3.6 billion to $36.5 billion.[14] In 2003, approximately half the cost of treating obesity was paid through Medicare or Medicaid.[15] One reason for the higher medical costs is the prevalence of obesity-associated co-morbidities, such as diabetes and cardiovascular disease, which also require treatment and management.[16] Another contributing factor may be inconsistent use of and lack of uniformity in applying billing codes to obesity-related treatments such that bill coding attributes the cost of care to a co-morbidity (*e.g.,* diabetes) rather than to obesity as an underlying condition).

Some youth-targeted obesity interventions have been shown to have a positive return on investment. For example, Planet Health, a school-based obesity prevention program, cost $33,677 for 1200 middle school students over 2 years, or $14 per student per year. An economic evaluation of the program found that it would prevent an estimated 1.9% of the female students from becoming overweight or obese adults. As a result, for every dollar spent on the program, $1.20 would be saved in future medical costs and loss of productivity costs.[17]

Monitoring Physical Activity and Nutrition

Several sources of CDC-funded surveillance or monitoring data allow us to track obesity related behaviors and other risk factors among the nation's youth.[18] Behaviors and risk factors monitored by CDC tracking systems include rates of physical activity and critical indicators of nutrition (*e.g.,* fruit and vegetable consumption, maternal breast-feeding practices). We use these data to assess the health of our youth and develop relevant interventions designed to integrate multiple settings (*i.e.,* communities, medical care and schools) in efforts to support healthier behaviors for children and their families.

Recent tracking data indicate that for too many children and their families, proper nutrition and physical activity are not part of their daily lives. For example, the recently released *Physical Activity Guidelines for Americans* from the Department of Health and Human Services recommends that all young people ages 6 to 19 engage in moderate to vigorous activity that add up to 60 minutes of physical activity

daily.[19] Unfortunately, more than 60 percent of our young people do not meet this recommendation. On most days of the week, only 34.7 percent of young people in grades nine through 12 report that they regularly engage in vigorous physical activity.[20] Further, the 2005 Dietary Guidelines for Americans encourages all Americans to daily consume fruits and vegetables in amounts sufficient to meet their caloric needs based on age, height, weight, gender, and level of physical activity. However, between 1999 and 2007, the percentage of U.S. youth in grades nine through 12 who reported eating fruits and vegetables five or more times per day declined from 23.9 to 21.4 percent.[21] These factors may have had a direct impact on the nation's childhood obesity rate. That students cannot meet these physical activity and nutrition recommendations illustrates the need to develop public policies that create and support environments that allow for regular and routine physical activity and access to healthful foods for our youth.

What has Contributed to the Leveling of Obesity Rates?

The recent data showing a plateau of obesity rates among U.S. children and adolescents are encouraging. The cause of this plateau has not been scientifically determined. However, CDC notes that greater public awareness resulting from press and media attention to the problem likely contributed to the present leveling of obesity rates. Yet, we strive not simply to stop the increase in obesity rates, but to reverse the epidemic. Implementing policy and environmental change initiatives at the national, state and community level that have the potential to decrease the prevalence of youth obesity may help reverse the epidemic among youth and adults. Such initiatives can include:

- seeking to eliminate so-called "food deserts" in urban and underserved areas where there is little or no access to healthy foods;
- expanding public transportation services and improve road conditions to allow for non-vehicle transit;
- expanding physical activity opportunities for youth; and
- improving and increasing access to healthy foods in schools and communities.

CDC Activities to Prevent and Control Obesity Through Population-Level Interventions

Currently, CDC's efforts to address the obesity epidemic are focused on policy and environmental strategies that can improve the health of all U.S. children and adults by making the places in which we live, learn, work, play, and pray, more supportive of healthy eating and physical activity. Through innovative partnerships and funded state programs, we are identifying, implementing and evaluating a variety of policy and environmental strategies in order to prioritize best and promising practices at the community, state and national level. Our efforts revolve around six target areas, prioritized because they address a significant disease burden, are supported by reasonable or logical evidence, and can prevent and control obesity at the population-level. These six strategies include:

1. increasing physical activity;
2. increasing fruit and vegetable consumption;
3. increasing breast-feeding initiation, duration, and exclusivity;
4. decreasing television viewing;
5. decreasing consumption of sugar-sweetened beverages; and
6. decreasing consumption of foods high in calories and low in nutritional value.

Because some barriers to nutrition and physical activity are specific to particular settings (*e.g.,* workplaces, communities, medical care, and schools and childcare centers), CDC seeks to develop strategies, tools and resources that can assist practitioners in providing integrated health messages and coordinated interventions to prevent and control childhood obesity. CDC's major program areas to address childhood obesity include grants for state-based Nutrition and Physical Activity, Coordinated School Health, as well as for Healthy Communities.

Nutrition, Physical Activity and Obesity State Plans: CDC provides funding to twenty-three states to coordinate statewide efforts to address obesity through policy and environmental changes focused on CDC's six strategies mentioned above. The program also addresses health disparities and requires a comprehensive state plan. A good example of one of these initiatives is from Washington State. A series of initiatives, now known as *Healthy Communities Moses Lake,* have encouraged good nutrition and physical activity behaviors through environmental and policy change. Accomplishments include widening of sidewalks, creating an interconnected system of paths for pedestrians and bicyclists, and fostering an environment conducive to out-

door physical activity. The project also developed a community garden which provides residents and participants with greater access to fresh, nutritious produce as well as opportunities to engage in physical activity through gardening. In addition, to encourage good nutrition from birth, *Healthy Communities* informs residents about proper breast-feeding practices and creates supportive environments for nursing mothers throughout the community.

Coordinated School Health: CDC also funds twenty-two state-based education and health agencies and one tribal government to implement coordinated school health programs. These programs bring together school administrators, teachers, other staff, students, families, and community members to assess health needs; set priorities; and plan, implement, and evaluate school health activities, including those focused on physical activity and healthy eating among school-aged youth. This program fosters collaboration between state and local authorities, as well as between state departments of health and education. In Mississippi, for example, the Department of Education worked with CDC, the Bower Foundation, the Alliance for a Healthier Generation, and other partners to set new nutritional standards for school snacks and meal programs, and impose a ban on sugar-sweetened beverages. Forty-one school districts purchased 104 combination oven steamers, replacing the traditional deep-fat fryers and thereby substantially decreasing the amount of high-calorie, fatty foods eaten by almost 65,000 of the state's school children. Additionally, Wisconsin's "Movin' and Munchin' Schools" campaign to promote physical activity and healthy eating as lifetime habits resulted in 101,641 students, 39,143 parents, and 9,265 staff reporting increases in physical activity and fruit and vegetable consumption.

Healthy Communities: Since 2003, Healthy Communities (formerly referred to as Steps to a HealthierUS) has supported local communities in implementing evidence-based interventions in community-based settings including schools, workplaces, community organizations, health care settings, and municipal planning, and in achieving local changes necessary to prevent obesity and related risk factors. Special focus has been directed toward populations with disproportionate burden of disease. Communities receive funds to spark local-level action, change community conditions to reduce risk factors for obesity, establish and sustain state-of-the-art programs, test new models of intervention, create models for replication, and help train and mentor additional communities.

Examples of Integrated Approaches to Address Childhood Obesity

We know that any effort to combat childhood obesity will take a multi-pronged approach aimed at improving population-level indicators of health and include not just CDC and the Federal Government, but states, localities and our national and local partner organizations. Coordinating our efforts across sectors, including education, agriculture, and transportation, and leveraging our resources to affect policy and environmental changes is necessary if we want to see obesity trends decrease. One such partnership is between CDC, the United States Department of Agriculture, and the United States Department of Education in a joint project called Making It Happen! School Nutrition Success Stories. This report tells the stories of 32 schools and school districts from across the United States (grades K–12) that have implemented innovative strategies to improve the nutritional quality of foods and beverages sold outside of Federal meal programs. Another partner in our efforts is the Alliance for a Healthier Generation, a joint partnership between the Clinton Foundation and the American Heart Association. The Alliance has worked with industry and school districts to develop guidelines on the provision of competitive foods and beverages in schools, and most recently began a new campaign working with national medical associations, insurers and employers to provide comprehensive health benefits to obese children and their families.[22]

In addition to our partners, many cities and localities have started their own childhood obesity initiatives including New York City's Department of Health and Mental Hygiene. The city developed and implemented a regulation that specifically improves the nutritional and physical activity habits of children in the city childcare programs. The regulation prohibits the availability of sugar-sweetened beverages; permits only 6 oz. of 100% juice for children 8 months or older; permits children 12 months to under 2 years to have whole milk and then limits milk to 1% or less for children 2 years of age or older; requires water to be available and accessible to children throughout the day; requires children 12 months and older to participate in 60 minutes of physical activity per day and for children 3 years or older to participate in 30 to 60 minutes of structured physical activity per day; and restricts television viewing for children under 2 years of age, and limits television viewing to no more than 60 minutes per day of educational programming or programs that actively engage children in movement to children 2 years of age or older.

Another example can be found in Florida, where the Pinellas County Childcare Licensing Board requires a minimum of 30 minutes of physical activity, 5 days per week, for all children as a condition of childcare licensure. And in 2008, the state of Florida passed a law requiring each school district to provide 150 minutes per week of physical education for students in grades K to 5, and for students in the 6th grade when the school has one or more elementary grades. Beginning in 2009, school districts will have to expand the physical education requirement so students in grades six to eight receive one physical education class per day each semester. The effect of these policies is a coordinated effort across jurisdictions and sectors to increase daily physical activity for all children from pre-school through the 6th grade. As a result, many children in Pinellas County now meet the national recommendation of 60 minutes of physical activity daily.

And in California, to create healthy environments where people can thrive, the California Convergence has convened leaders from 26 communities to collaboratively develop a common policy agenda, build a statewide communication infrastructure, influence funding strategies, and generate public revenue to support their work. As a result, officials have identified the need to improve nutrition standards in those places where children spend most of their time, (including schools, after school and childcare environments), and a broad range of strategies that focus on local, state and national level health impact.

Given the challenges ahead, CDC will continue to develop and evaluate policy and environmental strategies to determine effective population-level interventions that will provide a positive impact on the health of our nation's youth. We applaud recent changes in Federal policy to support healthier eating; updating WIC program requirements to be more in line with the Dietary Guidelines for Americans, and the inclusion in the 2008 Farm Bill (Food, Conservation and Energy Act of 2008, Public Law 110–246) of the *Healthy Urban Food Enterprise Development Center* and the school-based *Fresh Fruit and Vegetables Program* provisions. These provisions, like others implemented through the 2008 Farm Bill, will help incentivize the consumption of fruits and vegetables. Agricultural policies like these support American families in making healthy food choices, thereby ensuring healthier diets among some of our most at-risk children.

Further, we cannot forget the impact of physical activity and proper nutrition on student academic achievement and classroom participation. A 2008 elementary school study found that physical activity may be associated with improved academic performance for girls and had no negative effect on academic achievement for elementary school children.[23] And, among children living in the urban areas of Baltimore, Maryland and Philadelphia, Pennsylvania, those who participated in the School Breakfast Program increased their nutrient intake and were more likely to improve their academic and psychosocial functioning than those who did not participate in the program.[24]

Last, we are compelled to acknowledge the causal relationship between food insecurity and obesity.[25] Though it may appear paradoxical, families faced with food insecurity are more likely to augment their diet with high energy density, low nutritional value foods and, therefore, have high rates of obesity. Obesity is not a symptom of eating well but an indicator of poor diet. Persons living in low income communities often do not have access to fresh produce making foods of low nutritional value an affordable option to satiate their hunger. With increasing unemployment and concurrent demand on public and privately funded food service facilities, it is imperative that we pursue policies that ensure proper nutrition among persons experiencing the greatest obesity- related health disparities.

Conclusion

In closing, I would like to thank the Committee for its leadership and commitment to the health of our nation's youth. Making balanced nutrition and regular activity a routine part of life will take a committed, coordinated effort that will need to endure for decades to come.

Positively impacting the health of our youth offers promising prevention opportunities. We know that the young can benefit from better nutrition, and increased physical activity, as well as from other preventive efforts. While medical treatment for disease management is essential, our nation needs a better balance between treating diseases and preventing them.

There is much we can do to prevent disease and conditions related to obesity that contribute so heavily to disability and death, the need for long-term care, and escalating health care costs. Our youth have an urgent need for more and better prevention policies and environmental change initiatives. I look forward to working with my colleagues in the United States Department of Agriculture to further discuss agriculture policies and their impact on the public's health.

Thank you.

Endnotes

[1] Obesity Prevalence, Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity and Obesity, (children 2–5 years, 5%, children 6–11 years, 6.5%, children 12–19 years, 5%). *http://www.cdc.gov/nccdphp/dnpa/obesity/childhood/prevalence.htm,* last visited March 20, 2009.

[2] Ogden C.L., Carroll M.D., Flegal K.M. *High Body Mass Index for Age Among U.S. Children and Adolescents,* 2003–2006. JAMA. 2008;299(20):2401–2405.

[3] C.L. Ogden, M.D. Carroll, K.M. Flegal. *High Body Mass Index for Age Among U.S. Children and Adolescents,* 2003–2006. JAMA. 2008;299(20):2401–2405.

[4] Polhamus B., Thompson D., Dalenius K., Borland E., Smith B., Grummer-Strawn L. *Pediatric Nutrition Surveillance 2004 Report.* Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2006.

[5] Ogden C.L., Flegal K.M., Carroll M.D., Johnson C.L. *Prevalence and trends in overweight among U.S. children and adolescents,* 1999–2000. JAMA 2002;288:1728–1732.

[6] Polhamus B., Dalenius K., Borland E., Mackintosh H., Smith B., Grummer-Strawn L. *Pediatric Nutrition Surveillance 2007 Report.* Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2009.

[7] Freedman D.S., Mei Z., Srinivasan S.R., Berenson G.S., Dietz W.H. *Cardiovascular risk factors and excess adiposity among overweight children and adolescents: The Bogalusa Heart Study.* J. PEDIATR. 2007 Jan; 150:12–17.e2.

[8] American Diabetes Association (ADA). 2000. *Type 2 Diabetes in Children and Adolescents.* PEDIATRICS 105:671–80.

[9] Whitaker R.C., Wright J.A., Pepe M.S., Seidel K.D., Dietz W.H. *Predicting Obesity in young adulthood from childhood and parental obesity.* N. ENGL. J. MED. 1997;337(13): 869–73.

[10] *Relationship of Childhood Obesity to Coronary Heart Disease Risk Factors in Adulthood: The Bogaluse Heart Study.* PEDIATRICS, 2001;108(3): 712–718.

[11] Ferraro, K.S., R.J. Thorpe, Jr., and J.A. Wilkinson. 2003. *The Life Course of Severe Obesity: Does Childhood Overweight Matter?* JOURNALS OF GERONTOLOGY, SERIES B, PSYCHOLOGICAL SCIENCES AND SOCIAL SCIENCES 58(2):S110–19.

[12] Wang G. and Dietz W.H. *Economic Burden of Obesity in Youths Aged 6 to 17 years: 1979–1999.* PEDIATRICS. 2002;109;e81.

[13] Thorpe, K.E., C.S. Florence, D.H. Howard, and P. Joski. 2004. *The Impact of Obesity on the Rise in Medical Spending.* HEALTH AFFAIRS, July–December (suppl. web excl.):W4–480–86.

[14] Thorpe, K.E., C.S. Florence, D.H. Howard, and P. Joski. 2005. *The Rising Prevalence of Treated Disease: Effects on Private Health Insurance Spending.* HEALTH AFFAIRS, January–June (suppl. web excl.):W5–317–25.

[15] Finkelstein, E., *et al. State-Level Estimates of Annual Medical Expenditures Attributable to Obesity.* OBESITY RESEARCH, January 2004: V12. No 1: 18–24.

[16] Thorpe, K.E. 2006. *Factors Accounting for the Rise in Health-Care Spending in the United States: The Role of Rising Disease Prevalence and Treatment Intensity*. JOURNAL OF THE ROYAL INSTITUTE OF PUBLIC HEALTH 120:1002–7.

[17] Wang, L.Y., Yang, Q., Lowry, R, Wechsler, H. *Economic analysis of a school-based obesity prevention program.* OBESITY RESEARCH 2003; 11:1313–1324.

[18] Pediatric and Pregnancy Nutrition Surveillance System (PedNSS); Youth Risk Behavior Surveillance System (YRBSS); National Health and Nutrition Examination Survey (NHANES).

[19] 2008 *Physical Activity Guidelines for Americans,* at *http://www.health.gov/PAGuidelines/,* last visited March 20, 2009.

[20] CDC. *Youth Risk Behavior Surveillance—United States* (*http://www.cdc.gov/HealthyYouth/yrbs/pdf/yrbss07_mmwr.pdf*), 2007 [pdf 1M] MORBIDITY & MORTALITY WEEKLY REPORT 2008;57(No.SS–4).

[21] CDC. *Youth Risk Behavior Surveillance—United States* (*http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5704a1.htm*), 2007. MORBIDITY & MORTALITY WEEKLY REPORT 2008;57(SS–05):1–131.

[22] *http://www.healthiergeneration.org.*

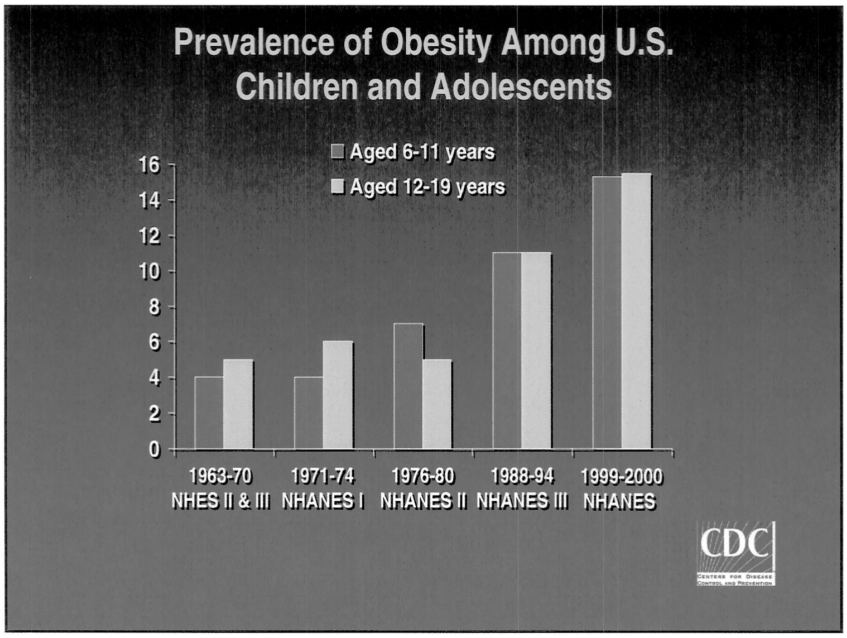
[23] Carlson S.A., Fulton J.E., Lee S.M., Maynard L.M., Brown D.R., Kohl H.W., Dietz W.H. *Physical Education and Academic Achievement in Elementary Schools: Data From the Early Childhood Longitudinal Study*. AM. J. PUBLIC HEALTH, 2008;98(4):721–727.

[24] Murphy J.M., Pagano M.E., Nachmani J., Sperling P., Kane S., Kleinman R.E. *The Relationship of school breakfast to psychosocial and academic functioning: Cross-sectional and longitudinal observations in an inner-city school sample.* ARCHIVES OF PEDIATRICS AND ADOLESCENT MEDICINE 1998; 152(9); 899–907.

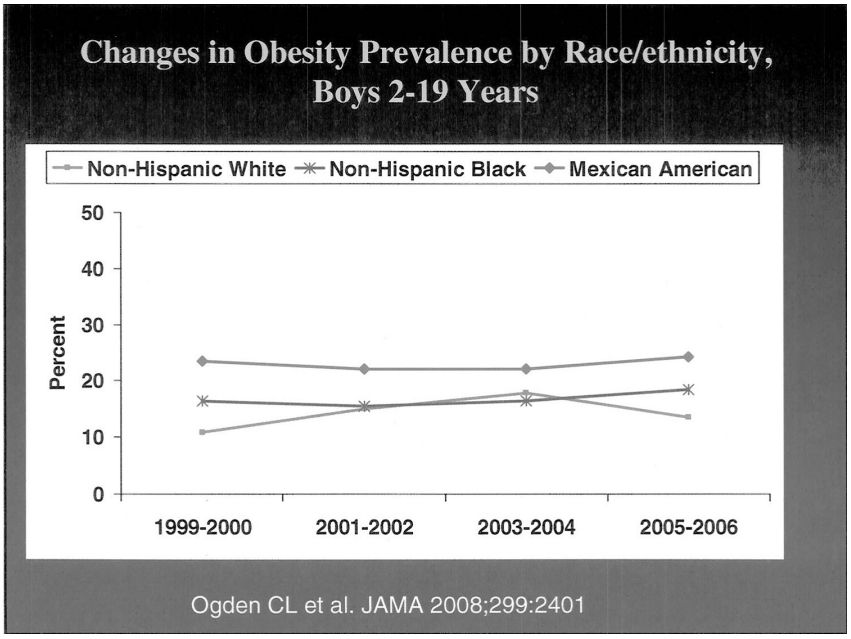
[25] Tufts University School of Medicine, Case Report, *Does Hunger Cause Obesity*. PEDIATRICS 1995;95:766–7; Freedman D.S., Ogden C.L., Flegal K.M., Kettel-Khan L., Serdula M.K., Dietz W.H. *Childhood Overweight and Family Income*. MEDSCAPE GENERAL MEDICINE, 2007;9(2):26.

ATTACHMENT

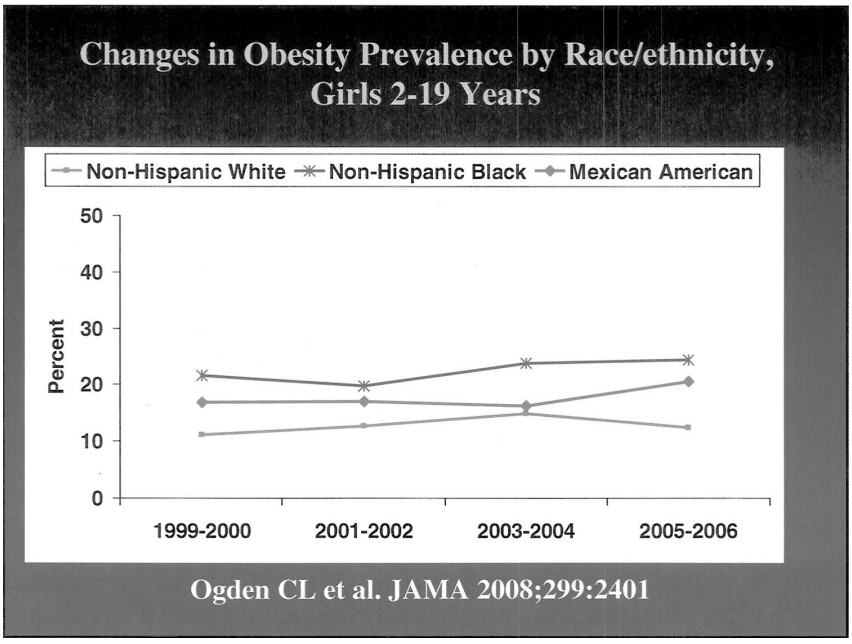
SLIDE 1



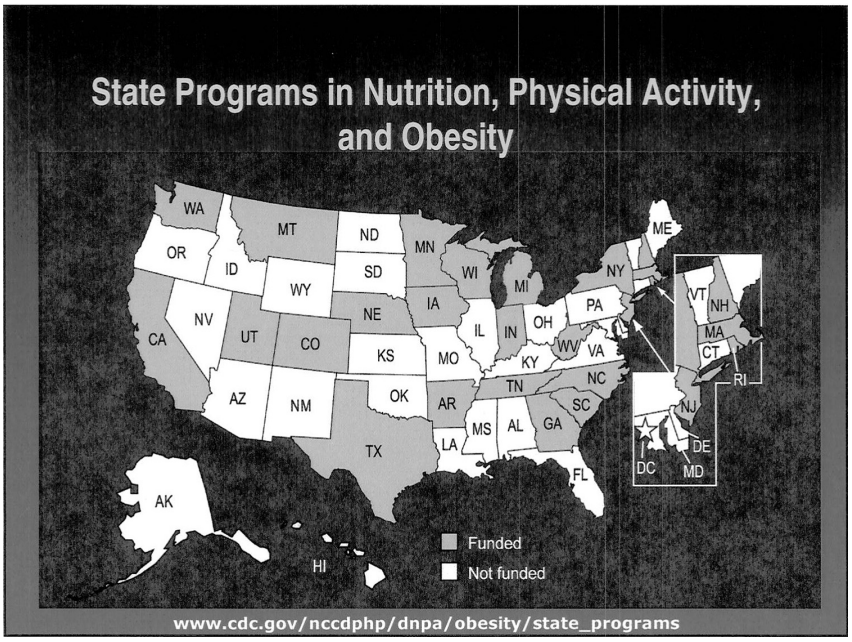
SLIDE 2



SLIDE 3



SLIDE 4



SLIDE 5

SLIDE 6

The CHAIRMAN. Thank you very much, Dr. Dietz, for your testimony and for the work you are doing to quantify the crisis of obesity. So on behalf of all of us, we would like to thank you.

At this time we will begin with questions. Each of the Members will have 5 minutes if they wish to, and if not, they can yield back the balance of the time. I will begin, first of all, by asking a couple of questions myself, then turn it over to the Ranking Member.

In your expert opinion, Dr. Dietz, of all the methods of obesity prevention you have seen, what type of nutrition education methods are most effective and why?

Dr. DIETZ. I am not very optimistic that additional nutrition education is going to make a big difference. It may prompt people to make better choices, but only if those choices are available. Many of the patients that I saw, when I was treating childhood obesity in Boston, knew the choices they should make. Those choices weren't often available.

The CHAIRMAN. Okay. In part of your comment you mentioned food insecurity as part of it, that is why the question is there. Sometimes people have a tendency, not just because of having more finances, but in the sense when they have more finances buying a lot of the bad food or food that they shouldn't be buying *versus* because of a lack of security, not buying, therefore, the effects it has on them.

Dr. DIETZ. If I could interrupt, let me tell you the story of what prompted my interest in food insecurity. When I was in Boston, I had a patient, a 13 year-old girl, who lived with a single mother who was on welfare. Their first check of the month went for housing. By mid-month, they were hungry and this mother was so concerned that her daughter not go to bed hungry that she was feeding her pasta with added oil or butter. That was instrumental in causing that girl's obesity. When we restructured that family's diet and gave them some additional options, that problem began to resolve.

So in that case, it wasn't a question of education, it was a question of food availability, and a uniform distribution of that food availability throughout the month.

The CHAIRMAN. Thank you. As you know, this Committee has jurisdiction over the SNAP, which is a food stamp program.

I am curious to know if in your research you have any data that might show positive effects of state nutrition educational programs through SNAP?

Dr. DIETZ. I am not aware of such research, but we can certainly let you know if we are able to identify some of that.

The CHAIRMAN. Okay, thank you. In statistics you cite showing the racial increase of obesity rates from 1980 to the present day, which are, of course, very troubling, but it does seem like there is some positive news. The rate of obesity among children seemed to level off from the year 2000 to the present. Can we point to positive steps we started to take in education prevention that have led to this leveling of obesity rates? And then, can you also elaborate on programs that we used to have that also dealt with obesity, such as with physical education, physical exercise?

Dr. DIETZ. Sure. The principle factor influencing the plateau, in my opinion, is the awareness of the epidemic, in part driven by the

maps the CDC published showing the rapid increase in adult obesity. But there were other positive changes that paralleled this. One is an increased awareness on the part of pediatric providers and changes in the way care is delivered. Some notable examples of that include Kaiser Permanente in northern California and the American Academy of Pediatrics initiative in the State of Maine.

A second change was that a number of schools began to make changes in the period between 2000 and 2006, according to the CDC study that is called "School Health Policy and Programs Survey," and schools began to reduce the availability of soft drinks and increase the availability of lower fat foods. That was certainly a contributing factor. Furthermore, we know that a number of communities have initiated efforts around childhood obesity. By our last count, it is in the neighborhood of 100 communities around the country, spontaneously, often supported by philanthropic organizations, have begun to intervene at the community level on this problem.

The decline of physical activity and physical education in schools is certainly an important contributor, because schools may be one of the last safe places for children to be physically active, and we know that part of that is driven by the No Child Left Behind program. We recently published a paper showing that in girls, not boys, physical education programs in young children increased test performance, improved test performance. It is widely believed by teachers, whose judgment I trust, that physical activity improves classroom behavior. I think we need more data on that, but my belief is that physical activity improves the capacity for learning and will improve test performance, just as the school breakfast program does. We know that in order to improve test scores, many schools provide school breakfast on the days of testing to assure that children would perform better.

The CHAIRMAN. Okay, thank you. I know that my time has expired, but one final question that I have is in reference to obesity and diabetes. What effect does obesity have on diabetes, and what can be done for prevention?

Dr. DIETZ. Obesity is a major driver of the diabetes epidemic. That is one of the major consequences, and if I could show you maps of the change in the prevalence of diabetes, they would exactly parallel changes in the prevalence of obesity.

One important strategy for the prevention of type 2 diabetes in children and adolescents is healthier pregnancies. About 50 percent of type 2 diabetes that occurs in adolescence, which is where the peak of type 2 diabetes occurs, 50 percent of those children were exposed *in utero* to either obesity or gestational diabetes or diabetes in the mother during pregnancy. So a huge chunk of that diabetes could be prevented by more attention to pregnancy related weight gain or control of diabetes during pregnancy.

That is only half of the problem. The other half comes from the occurrence of diabetes, particularly among minority populations. It is much more prevalent among Hispanic youth and African American youth.

The CHAIRMAN. Thank you. Next, I will call on Congressman Fortenberry.

Mr. FORTENBERRY. Thank you, Mr. Chairman, and thank you, Dr. Dietz, for your helpful testimony. It is packed with information, so I want to go back to a few statistics that should be highlighted.

You had mentioned that approximately 25 percent of our medical costs either now, or in the future, will be related to this problem?

Dr. DIETZ. Twenty-five percent of the rise in medical costs between 1987 and 2001 was attributable to obesity. These are data from Ken Thorpe at Emory University. The implications are that that is going to increase further, if you think abut what the prevalence was in 1987 and what it is now, and the impact that the wave of childhood onset obesity is going to have on adult disease.

Mr. FORTENBERRY. Do you have—let us say we could cut that increase or the total prevalence of that statistic in half by the variety of things that will be suggested today, or a national awareness that this is serious, and an implementation of both old and new ideas about nutrition education access as you are suggesting. What would the potential health care cost savings be to our overall system? A number that is actually attainable in the short run.

Dr. DIETZ. We know that from a paper that we published several years ago that the adult—annual adult costs of obesity are about $117 billion per year. If we were to halt the rise in prevalence, I think we would begin to see a decline in those costs. If we could cut obesity in half, I am not sure that we could reduce those costs by half, but we could certainly have a big impact in that reduction.

Mr. FORTENBERRY. I think as we move forward, particularly in a legislative year, this is going to be a very important number to try to quantify. What is the potential improvement of health outcomes as related to health care costs reductions, particularly in public programs, that we could see if there were broader investments like we are all going to talk about today in nutritional outcome.

So if you could continue to parse your data to come down to some number that—of course, it will depend on a lot of factors, I understand that—that will be helpful to quantify to get our mind around what the potential here is, not only just in terms of well-being of our population, but health care cost outcome.

Another statistic you had mentioned, and you actually addressed it a bit with Chairman Baca's question, you said 60 percent of adults are either overweight or obese, 31 percent of children. Now, type 2 diabetes or the rise in it—if I understood you correctly, was basically unheard of in this particular category of children just a few short years ago—related directly to the obesity problem, or are there other factors there?

Dr. DIETZ. The main driver is obesity. In the adolescents that I saw clinically when I was still in Boston, there was generally a family history which predisposes those individuals to type 2 diabetes——

Mr. FORTENBERRY. But something must trigger that.

Dr. DIETZ. Yes, if they hadn't been obese, that would not have happened.

Coming back to your question about costs, it occurs to me that we can provide you with some data from the Diabetes Prevention Program, which showed that clinical interventions for preventing diabetes were quite effective, that they lowered the rate of new

onset diabetes by about 60 percent, which was more effective than medication. And I believe that a cost calculation was done on the cost benefits of that intervention, but I don't know those data off the top of my head.

Mr. FORTENBERRY. That would be helpful for us as a Committee. I think, if I can be presumptuous and suggest that, Mr. Chairman, that we drive towards some number like that that gives Congress a quantifiable goal as a measure to potentially reduce costs in the name of health and well-being.

I want to end—one more question and I will make some editorial comments. Could you address the benefits of local food markets as related to a trend toward—or a growing paradigm as we—a new paradigm as we look to combat obesity and the problem of being overweight? How helpful will this be?

Dr. DIETZ. Well, two slides that I didn't address that are in your handout include the six target behaviors that we think are going to change the prevalence of obesity. Chief among those is fruit and vegetable consumption. We know that people who eat fruits and vegetables tend to have an earlier satiety, because satiety—fullness—is regulated by the volume of food, not by the calories in the food, and fruits and vegetables, because they have a high water content, are more filling.

One of our interests is in how do we increase fruit and vegetable consumption, and one key strategy is increasing access. A great example of that occurred with Kaiser Permanente in northern California, which instituted fruit and vegetable farmers' markets in all of its major clinics, and these were located between the parking lot and the clinic. So employees who passed by could buy fruits and vegetables, patients who passed by could buy fruits and vegetables, and those fruits and vegetables were produced by small farms in the Sacramento area. So it was a "three-for." It benefited employees, it benefited patients, and it benefits those small farmers.

We believe that farm-to-market programs are an important strategy for increasing fruit and vegetable intake, and your initiatives in this regard are to be applauded.

Mr. FORTENBERRY. Well again, thank you very much for your testimony. Mr. Chairman, if I could add just right quick, I want to point out that the gentlelady from Wyoming made some very important observations. When I was growing up, my mother was an extension educator, 4–H club leader, and some of these processes that we are trying to turn the clock back to are so normalized and with lack of continuity in family life, disconnection from roots in any particular community, the stresses in modern life, and the sociological factors as well that are underlying this problem.

Thank you very much for your testimony.

Dr. DIETZ. You are welcome.

The CHAIRMAN. Thank you. Next, I will call on Dr. Kagen.

Mr. KAGEN. Thank you. Thank you for your testimony. I am certain we shouldn't interpret your testimony to mean that we should blame our mothers if we are overweight. My mother and father used to tell me that if it tastes good, it is probably not good for you. I have learned a great deal on the Agriculture Committee. There are no more hayseeds on the farm. The farmers will only grow what people are willing and able to eat. You can't blame someone

for trying to make a living producing food that is good for our economy and good for their businesses, because if it is not good for business, it will not happen.

A couple of questions for you have to do with your opinion or perhaps the CDC's opinion about obesity and child abuse. Is it a form of child abuse to continue to feed children things that are not good for them?

Dr. DIETZ. Yes. Where one draws the line is the challenge, and I am thinking now about several patients I had when I was in Boston who had a very significant adverse consequence of their obesity, and those families, the failure of the family to implement strategies around weight loss, in my opinion, constituted abuse, and I filed on those patients.

It is an odd form of abuse because it comes from giving too much rather than giving too little, and the impact of impaired parenting. These were parents who generally couldn't set limits on their children. But the abuse side was that they were overfeeding them, or failing to regulate their feeding. So yes, at some point, it does become abuse.

There is another interesting relationship in adult obesity related to your question, and that is that among severely obese adults, there is a very high prevalence of early abusive behavior, such as physical, verbal, or sexual abuse. And that suggests that for some core of severely overweight patients, the kinds of policy initiatives or even the routine medical therapies are not going to work, that these people need much more intensive——

Mr. KAGEN. Well, this legislative body cannot legislate morality. It hasn't worked with regard to AIG or the financial markets, so we have a hard time when it comes to legislating things about good behavior. We can't legislate how food should taste. We can make suggestions about what might be good for people, but we also have the capability and the power to reward people financially for doing the right thing, and punish people financially for not doing the right thing.

In that regard, we have taxed cigarettes because they are harmful to human health, and very costly to our society; we have banned cigarette advertisements from television. Do you think that same sort of approach should be taken with regard to the "fat foods" or foods that are not good for our society?

Dr. DIETZ. There are a number of states that already are taxing snacks and sugar-sweetened beverages. Those taxes go into the general revenue fund. They are not taxes that are designed to discourage consumption, but there have been proposals to allocate those funds to improve nutrition and physical activity.

The issue of one of the relationships that is causal, in my opinion, for childhood obesity is television time. It appears that the effects of television on childhood obesity are mediated through the effects of television on childhood food consumption. The more television a child watches, the more likely they are to consume foods while watching television, and the more likely those foods are foods advertised on television. There is an initiative by the—a voluntary initiative on the part of businesses conducted through the Council for Better Business Bureaus to limit advertising directed to children and to establish standards for the products that are adver-

tised to children. At the moment—and that is to be applauded, and that is worthwhile, beginning to look at what impact that has.

Mr. KAGEN. The other thing we could consider doing, and I would like to hear your suggestions either now or in writing later, is to reward families or people who purchase health insurance products or insurance companies that offer products to reward people financially for joining the YMCA for exercising. They have been very successful. We have a Medicare Advantage plan in the Appleton, Wisconsin region that actually provides for $65 a month savings if you join and attend the YMCA and actually get some exercise. So I am looking at your point of view in terms of rewarding people financially for their purchase, or maybe rewarding people the opposite way for their cigarette smoking and for their weight.

So I would appreciate your opinion on that.

Dr. DIETZ. Sure. We would be happy to give you some feedback on that. There are two recent papers that were published in the *Journal of the American Medical Association* which looked at financial incentives for weight loss and financial incentives for smoking cessation, both of which were associated with very positive outcomes. I am not aware that that has been as carefully studied in the kind of programs that you are discussing. It has been studied in a more controlled fashion.

Mr. KAGEN. Thank you very much.

The CHAIRMAN. Thank you very much. The gentlewoman from Wyoming, Congresswoman Lummis.

Mrs. LUMMIS. Thank you, Mr. Chairman, and again, Dr. Dietz, thank you for being here. I want to start by asking you some questions about the CDC's studies.

Do your CDC studies differentiate between urban and rural areas? Do you have good data to show the level of activity in rural areas *versus* urban areas, and how that may affect obesity, or other factors that differentiate young people especially in rural and urban areas that might affect obesity?

Dr. DIETZ. Yes. I must confess, we have not done as many of those analyses as we should, but we do have those data and we can provide you with data from the adult population on physical activity and fruit and vegetable consumption.

Our ability to study that is quite limited. There are studies that demonstrate that people in urban areas do tend to walk more, they are more physically active, when you think about New York *versus* rural Wyoming. And the dietary history, I used to think that while people in rural areas were more likely to have gardens, more likely to consume fruits and vegetables, I don't think that is the case, but we can provide you with more up-to-date statistics on that problem.

Mrs. LUMMIS. Okay. Thank you, I would appreciate that. That would be helpful.

What about best practices? Do you have examples around the country of public-private partnerships that are working, or states or local communities that have initiated a best practice that you can share with us?

Dr. DIETZ. Sure. That is a critical area, and if you look at our target behaviors, that is exactly the direction we are following. Those target behaviors are increased physical activity, breast-feeding, fruit and vegetable consumption, reductions in sugar-sweet-

ened beverages, reduction in high energy density foods, and reductions in television time. The process that we are engaged in, which we hope to complete in the next couple of months, is to identify policy or environmental strategy that address those behaviors, and many of those would fall into your promising practices or best practices category. Some of them, like the New York City group daycare policy, we are in the process of evaluating, so we will have some really hard data.

The *Guide for Community Preventive Services,* which is a CDC publication, has identified recommended practices in the area of physical activity. We have very sound data on best practices within—to promote breast-feeding, like baby-friendly hospitals, lactation consultants, strategies like that. Our strategies in the other areas are less well-developed, but that is what we are trying to accomplish.

To your public-private partnership question, one of the most notable is that my division at CDC is the Federal authority on the new Fruits and Veggies, More Matters campaign, and that is a public-private partnership with the Produce for Better Health Foundation representing the industry side. There are also a number of non-governmental organizations like the American Cancer Society and American Heart Association that are members of that, and it is a natural partnership because we are all interested in promoting increased fruit and vegetable intake.

Mrs. LUMMIS. Thank you. Mr. Chairman, a couple more questions.

In Wyoming, we had a terrible methamphetamine problem, terrible, and some substance abuse problems, unrelated to meth, that were rising, alcohol being the largest. And so Wyoming went on this incredible message campaign to just bombard people where they get their messages about the hazards of, particularly, drunk driving and of meth, and the hazards of trying meth once. And they really have had a dramatic impact on meth use, meth arrests, and they are beginning to have an effect on drunk driving because we saw such a positive response with regard to this intensive meth campaign. But now we are seeing it with regard to drunk driving as well.

I wonder if that might work for food, where every time you turn on the TV or a radio or a billboard or you drive by a building that has a wall, you are bombarded with that message. Any response to that idea?

Dr. DIETZ. Sure. One of the best public health campaigns ever was the VERB campaign conducted by the CDC. This was a paid advertising campaign to promote physical activity in 'tweens, that is, 9 to 13 year-olds. That program was successful in increasing the physical activity levels of the target population, but it was a very expensive campaign. And as with any behavior change information campaign, it has to be continuous, because the population is constantly cycling. Although the VERB campaign was a fabulous piece of work, our focus on policy and environment, we think, will be just as effective because once a policy is in place, you don't have to continually put money into the implementation of that policy. It changes behavior long-term. I would love to have the capacity to do a campaign around food, particularly fruits and vegetables.

Mrs. LUMMIS. Thank you.

The CHAIRMAN. Thank you very much for the question. Next, the gentleman from Oregon, Congressman Schrader.

Mr. SCHRADER. Thank you, Mr. Chairman.

I guess just mostly following up on some of my colleagues, I see a trend, at least it seems, in some of the questions about best practices and trying to identify where the biggest bang for the buck is. You have alluded to it yourself, and to the extent you can provide this panel over the course of this session and sessions to come, it would be very helpful. I know in the State of Oregon, we have a tremendous obesity problem, despite our outdoor mantra, and that has been a great concern. And as a state legislator, it was always difficult to choose among all these different strategies, which ones were to be most cost effective, and certainly right now, we face some budgetary issues. So, the more direction CDC and others can provide us, that would be very helpful.

A question I have for you, and perhaps some of the other panelists to come, would be about some of the programs that we do have in terms of nutrition and trying to provide the nutrition, such as our SNAP program, such as WIC. Are there some suggestions you would have for us in terms of the types of food and access to beverages, and what have you, that we should put into these programs where you can get some things, can't get others? You said you can't even control that, frankly, but I would be curious about your thoughts.

Dr. DIETZ. There was an important report issued by the Institute of Medicine 2 years ago called "Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth," which had a number of recommendations about how school nutrition programs should be changed. One of the most important recommendations was to make the competitive foods consistent with the dietary guidelines for Americans. This would encourage fruits and vegetables, 100 percent fruit and vegetable juices, whole grain products, and non-fat or low-fat dairy products, and limit foods sold after school to those that meet certain standards consistent with the dietary guidelines, like those with less than 200 calories per serving, less than 35 percent of calories from fat, free of trans fat, less than 35 percent of total sugars, and sodium of less than 200 milligrams per portion. If those were implemented, they would go a long way towards improving the nutrition in schools.

The revision of the WIC food package is also an important step forward to make that package much more consistent with the dietary guidelines as well.

Mr. SCHRADER. Very good. I yield back the rest of my time, Mr. Chairman.

The CHAIRMAN. Thank you very much. Next, I have the gentlewoman from Pennsylvania, Mrs. Dahlkemper.

Mrs. DAHLKEMPER. Thank you, Mr. Chairman.

Mr. Dietz, I wanted to ask you about the correlation between obese children and their parents, and what you see in terms of the genetic *versus* the environmental aspects of that.

Dr. DIETZ. Well, there certainly is an association. Part of it is genetic, part of it is the shared environment. We did a study of patients and families that were in group health a number of years

ago, and showed that the highest risk for adult obesity—there was a higher risk for adult obesity among children who were born to two obese parents. There was about a five-fold increased risk. There was also, on the individual side, a rising risk as those children grew that eventually exceeded the risk of parental obesity. So both are in play. Some estimates suggest that as much as 60 percent of the family association of obesity is genetically mediated. That doesn't mean that the solution is changed. The number of genes that affect obesity seems to increase almost daily, and I am not sure that an investment in the medications that address those gene products is going to be any cheaper. In fact, it is likely to be much more expensive than a focus on the environment that promotes increased food intake and reduced physical activity.

Mrs. DAHLKEMPER. I guess part of my question is as we have seen the level of obesity rise in our adult population, how has that correlated with our rise in childhood obesity? Did it take some time for it to catch up where you see that correlation?

Dr. DIETZ. The rise among certain groups of adults has paralleled that in the pediatric population. It is not—only about 25 percent of adult obesity, according to one of our studies, is accounted for by childhood obesity. The disproportionate contribution of childhood obesity is to the severity of adult disease, so even though it is a minority of adult disease, it accounts for a much greater proportion of severe adult obesity. Five percent of the adult population have a BMI over 40, which is 100 pounds or more overweight, and about ½ of that population is attributable to childhood onset obesity.

Mrs. DAHLKEMPER. Okay. One of your recommendations—in fact, the first one here was to increase breast-feeding initiation and duration and exclusivity with early intervention, that was the birth to 3 years of age population. But by the time I would see that parent and that child, this issue was off the table. They had either decided to breast-feed or they had not. So, what do you see as some initiatives we could take in that area? What have you seen successfully done here in terms of——

Dr. DIETZ. Well, baby-friendly hospitals, those which don't routinely make formula available to mothers immediately following the birth of their infants have a higher rate of ongoing breast-feeding, both initiation and duration. A major falloff in breast-feeding occurs about the time that women go back to work, so equipping worksites with lactation rooms and fostering opportunities for new mothers to pump their breasts to store the milk are essential.

As you undoubtedly know, in many places women use the ladies' room as a place to pump their breasts and to store breast milk. I can't think of any other food that is prepared in a restroom. To me, that is criminal.

So those types of strategies, peer support, lactation consultants, because although breast-feeding is the natural way to feed infants, it is often unnatural for mothers to initiate breast-feeding, particularly with their first infant. So additional support and counseling, both within delivery rooms and the delivery wards, and as well as following discharge is essential.

Those are all policy initiatives that would promote breast-feeding.

Mrs. DAHLKEMPER. I think it is a very important piece here, and as a mother of five, I can tell you it often was not convenient and it often was not well-accepted or encouraged, and that is very central to the issue of so many new mothers. If they don't have that support there, either in the hospital or shortly thereafter, then they only breast-feed for a very short time. And having some kind of support system available to them shortly after, because that becomes the toughest time, and then as you say, once they return to work—and I am one of those mothers who went back to work and continued to breast-feed for a year, so I am a very big proponent of this, but I wanted to have you address that, so I appreciate that.

I have just a few seconds left here in my time, and I have a lot of other questions. I guess one of the things I want to make a comment on, I heard a report of a mother who let her child walk 9/10 of a mile to a sporting event and was met by the police at that field when she showed up 20 minutes later, because she had let her 10 year-old walk and supposedly endangered her child. I think this is a huge issue as we go forward. I am in a community where most people drive everywhere, whether it is three blocks to the convenience store, and when you are in a city like Washington or New York City people walk more. So I go back to Ms. Lummis's point on that, that we really need to look at that.

Anyway, my time is up. Thank you.

The CHAIRMAN. Thank you very much. Next, I will recognize the gentleman, for 5 minutes, from Mississippi, Mr. Childers.

Mr. CHILDERS. Thank you, Mr. Chairman, and Dr. Dietz, thank you for being here. Before I begin what I wanted to ask you, you made a comment earlier and I wanted you to repeat that. I missed part of it. You mentioned something about people's BMI index over 40—would you repeat what you said? I missed it.

Dr. DIETZ. Yes. About five percent of the adult population have a body mass index over 40; that is about 100 pounds overweight, and about ½ of that group were obese as young children. So early childhood obesity or childhood obesity, even though it accounts for only about 25 percent of adult disease, is associated with an increase in the severity of adult disease.

Mr. CHILDERS. What portion of that five percent—is that only of adults or children today—how many children, I guess, are we seeing as a society with that high of a BMI?

Dr. DIETZ. Very few, because the cut point for obesity in children and adolescents is based on percentiles rather than an absolute number, because children are growing and their BMI increases with age. But one of the useful cut points is the 99th percentile for BMI, maybe a more robust cut point is the 97th percentile. There about eight percent of the pediatric population somewhere in that neighborhood, and I can assure you that we are actually working on the precise number, are in that category which would correspond to the severe adult obesity. So that bodes ill for the future. Those are the kids that are going to be—that already have multiple complications, because we know that even in childhood the more severe obesity, the more likely you are to have those cardiovascular disease risk factors that I mentioned, and those are only going to increase and become diseases as those children grow and as their obesity becomes more severe.

Mr. CHILDERS. Thank you. I want to just state this, for the third year in a row, my state, Mississippi, has the highest rate of obesity in the nation. That is not something I am proud of, but it is a fact nevertheless. And almost 70 percent of our state's adult population is overweight. One quarter of the state's school age children are overweight.

Over the past several years, our state, recognizing that, has implemented several programs in schools and communities, quite frankly, to try to combat childhood obesity, and they have had varying degrees of success. I guess the question I wanted to ask you was which types of programs are you finding to be the most successful in reducing childhood obesity, especially in rural communities, because we are a rural state and my district is rural.

Dr. DIETZ. I can't answer that question for rural communities. In fact, Mississippi is a place where we hope to learn some of those answers. As you know, CDC is funded to develop a project in the Delta. I mentioned earlier the work that the Bowers Foundation is doing in northern Mississippi. What those programs need is a careful evaluation to determine what works.

We know from other community studies that multi-disciplinary and multi-sectoral approach with more than just one strategy is most likely to be effective, and I mentioned Somerville, Massachusetts, as one good example of that. But if you target any single one of the behaviors that we think are relevant, we don't believe that that alone is going to turn the tide of obesity. It is not going to make a difference. You have to have a comprehensive, multi-sectoral program if we are going to succeed at this. And the experience from communities which are successfully beginning to control obesity worked. Another good example is El Paso, Texas, which was supported by the Paso del Norte Health Foundation, and they coupled a catch program, an intervention within schools with a walking program in the community and cooking lessons for moms. In this predominantly Hispanic population, they showed a successful reduction in the prevalence of obesity, particularly among younger children who were exposed to that program for a longer period of time.

Mr. CHILDERS. On a lighter note, it has been within only my adult lifetime in Mississippi that we learned you can cook chicken in a manner that is not frying it. We have learned that.

The CHAIRMAN. Thank you very much. I noted the time and I would like to thank Dr. Dietz for your testimony here today. I think it was very informative for a lot of us, especially as we address the area of obesity. One of the areas that we would love to follow up on, because as we look at the bill that we are going to have on health issues, and looking at the cost factors and looking at how we may be able to reduce that. Ultimately we, the taxpayers, end up having to pay for someone else. And if we can do more of the prevention and education that needs to be done, especially, at different ages, and diversity and the impact they have, it tells us that we still need to do a lot more in these areas.

Again, Dr. Dietz, thank you very much for coming here.

What we will do now is call on the next panel to come up, because they will be calling votes shortly. What we will do is we will have the panelists go through and give their testimony, and each

one of you will have 5 minutes, and then after that, we will proceed with any kinds of questions if a vote is not called.

So if the other panelists can come forward? And in the interest of time, we will start with Anne Wolf, and introduce yourself and who you represent, and then we will do the same with each one when we get to you, in the interest of time.

STATEMENT OF ANNE M. WOLF, M.S., R.D., INSTRUCTOR OF RESEARCH AND ICAN INTERVENTION TEAM LEADER, UNIVERSITY OF VIRGINIA SCHOOL OF MEDICINE, CHARLOTTESVILLE, VA

Ms. WOLF. My name is Anne Wolf. I am from the University of Virginia School of Medicine. Thank you for inviting me to speak today, Congressman Baca and Members of the Subcommittee. Testifying before this Subcommittee is particularly important for me, because as one of three children, raised by a single mother, we relied on food stamps during a couple times. I am particularly grateful to the government for really helping our family out during tough times, because it really did make a difference. While we didn't have much, I never went hungry and I was really able to focus on my schoolwork, and that eventually led me into Cornell University and the Harvard School of Public Health, and into the career of fighting obesity. And so I am honored today to testify in front of you about the economic costs of obesity.

There are now well over 120 published studies on the cost of obesity and the cost effectiveness of treatment of obesity. Studies consistently demonstrate five important things.

The first is that the cost of obesity is significant to our health care bill in the United States.

Second, the cost is driven by obesity severity, its prevalence, as well as its relationship to chronic disease.

Third, the government is paying a huge percentage of this health care bill.

Fourth, employers are hit particularly hard, because not only does obesity increase health care costs, but it impacts productivity and disability.

And fifth, there is treatment that is effective and cost effective.

The direct cost of obesity inflated to 2008 dollars is approximately $77 to $118 billion a year. This is approximately 1.7 times the cost of stroke and 1.4 times the cost of hypertension in the United States. Obesity outranks both smoking and problem drinking in its deleterious effects on health and on health care costs. In addition, 39 million workdays are lost, 239 million restricted activity days, and 89 million bed days are lost or attributable to obesity in 1994.

Higher medical expenses are associated with the severity of excess weight. As body weight increases from overweight to obese, severe obesity, health care costs rise. Per capita medical spending for people who are overweight are 14 percent higher, for people who are obese, it was 47 percent higher, and for those who are severely obese, their health care expenses were doubled compared to people with a healthy body weight.

The rise in health care expenditures is found across every single type of service, from inpatient utilization to outpatient services, to

procedures, to increased pharmaceutical use. Among children, the proportion of hospital discharges with obesity-related diseases increased dramatically from 1979 to 1999. A recent report identified that the growing prevalence of obesity as a primary factor responsible for the growth of private health care spending between 1987 and 2002 were the primary factors.

The cost of obesity is not due to treatment costs. Obesity is not systematically treated in our medical care setting. One of the reasons for that is that it is not systematically reimbursed by CMS or any major health insurance companies. Most people who seek treatment have to pay for the majority of their expenses out-of-pocket right now.

If we want to look at the costs by the type of payer, Medicare and Medicaid are paying the largest percentage, 48 percent of the cost of obesity that the government is paying. These costs are particularly high among the older population, because obesity is so highly associated with chronic diseases. For instance, in basic terms, obesity plus age is equal to chronic illness.

If you look at excess medical care expenditures for a mildly obese person from age 65 to the time that they die, that person will incur an additional $20,000 to $50,000 of excess medical expenditures, compared to someone who had a healthy body weight. Again, it is Medicare that is picking this up.

Now, employers are hit particularly hard. Employers as diverse as General Motors, Bank One, and Shell Oil have all demonstrated within their populations that excess weight has increased their direct medical care costs as well as impacted productivity and disability. The combined direct and indirect per capita costs of obesity to the employer range from approximately $175 to $2,000 among men, and approximately $600 to $2,200 in women; that is per person costs. Worksite injuries are also significantly increased. For instance, low back injuries were 1.4 times higher, and musculoskeletal injuries were 1.5 times higher among obese employees compared to healthy weight employees.

As Members of this Subcommittee, you really want to know what type of legislation would help address the obesity epidemic in a cost effective manner. Legislation to encourage positive food choices by targeting food stamp benefits towards healthy but under-consumed foods like fruits and vegetables——

The CHAIRMAN. Ann, if you can sort of wrap it up. Each one has 5 minutes, and we are about ready to get out and vote.

Ms. WOLF. Yes, this is it—would encourage consumption of more fruits and vegetables.

Last, there is evidence of intervention and medical nutrition therapy is not only effective, but cost effective in high risk populations.

In summary, the cost of obesity is—in terms of both financial and human costs. The financial costs are born disproportionately by the Federal Government, but are felt keenly by employers. Most important are the personal costs incurred by the obese patient. There is a desperate need to disseminate programs with proven effectiveness to combat the financial, medical, and personal costs of obesity.

[The prepared statement of Ms. Wolf follows:]

PREPARED STATEMENT OF ANNE M. WOLF, M.S., R.D., INSTRUCTOR OF RESEARCH AND ICAN INTERVENTION TEAM LEADER, UNIVERSITY OF VIRGINIA SCHOOL OF MEDICINE, CHARLOTTESVILLE, VA

The Economic Impact of Obesity

Congressman Baca and Congressional Members of the Subcommittee on Department Operations, Oversight, Nutrition, and Forestry,

Thank you for inviting me to testify today on the economic impact of obesity in the United States. Testifying before this Subcommittee is particularly important to me. As one of three children raised by a single mother, I and my family relied on both food stamps as well as the free school lunch program. I am deeply grateful to the government for helping our family during those tough times, and it *did* make a difference. While we didn't have much, I never went hungry and was able to focus on my school work, which eventually gained me entrance into Cornell University and the Harvard School of Public Health, and from there into the fight against obesity. So, I am honored today to testify in front of you about the economic impact of obesity.

Government, health care, and business leaders are concerned by the marked increase of overweight and obesity in the United States and the resulting impact on our nation's health, health care costs, and productivity. Most concerning is that excess weight carries major health risks. These conditions are associated with high costs, including both the direct costs of medical care and the indirect costs of lost productivity and disability. A recent report identified the growing prevalence of obesity as one of the primary factors responsible for the growth of private health care spending between 1987 and 2002.

There are over 120 articles published in peer-reviewed, scientific journals related to the cost of obesity and cost effectiveness of treatment. These studies consistently demonstrate five important findings: first, the direct cost of obesity is dramatic and contributes significantly to our rising health care costs; second, the cost is driven by obesity's high prevalence and its relationship to chronic disease; third, the government is paying the largest percentage of the health care bill related to obesity; fourth, employers are hit particularly hard because obesity impacts both health care costs and productivity; and fifth, some treatments are both effective and cost-effective.

The most recent direct cost, inflated to 2008 dollars, estimates that at a national level, obesity (including overweight) costs the United States $77.3 to $117.8 [1] billion a year, accounting for 9.1% of the national health care expenditure (in 1998, the year the analysis was undertaken). This is approximately 1.7 times the cost of stroke and 1.4 times the cost of hypertension in America. Obesity outranks both smoking and problem drinking in it deleterious effects on health and health care costs. In addition, 39.2 million work days, 239 million restricted activity days and 89.5 million bed days were attributable to obesity in 1994, the last time this analysis was undertaken.

Higher medical expenses are associated with the severity of excess weight—as body weight increases from overweight to obese to severe obesity, health care expenses rise. Per capita medical spending increases among the overweight by 14.5%, among the obese by 37.4% and by 100%—or doubled—among the severely obese, compared to people with a healthy body weight. The rise in health care expenditures with higher weight occurs across all of the major categories of health care services. Obesity has been associated with higher inpatient utilization as well as more outpatient services, procedures and prescription medication use. Among children (age 6–17 years), the proportion of hospital discharges with obesity-related diseases increased dramatically from 1979 to 1999. The cost of obesity is not due to direct treatment costs—obesity is not systematically treated in the medical setting because it is not systemically reimbursed by CMS or health insurance companies. Most people who seek treatment have to pay out of pocket for the majority of their expenses.

If one looks at cost by type of payer (private, out-of-pocket, and government-sponsored), Medicaid and Medicare combined pay the largest percentage—48%—of the cost of obesity. The costs of obesity are particularly high among the older population because chronic medical conditions such as diabetes and heart disease are so highly associated with excess weight and advancing age. In basic terms, obesity + age = chronic illness. If you look at excess Medicare expenditures for a mildly obese person [among a person with a body mass index (BMI) between 30–35 kg/m^2,] from age 65 to death, that person will incur approximately $20,000–$50,000 additional dollars compared to someone with a healthy body weight.

[1] Includes nursing home costs.

The costs of obesity to the employer are even more substantial since obesity is associated not only with higher health care costs but also with greater rates of lost productivity, disability and earlier mortality. Employers as diverse as General Motors, Bank One and Shell Oil have all demonstrated that excess weight is associated with lost productivity and greater medical and disability costs. Aggregating the direct and indirect costs of obesity to the employer the additional per capita costs to the employer due to excess weight ranged from $175 [(overweight)] to $2,027 [(class III obesity)] in men and $588 [(overweight)] to $2,164 [(class III obesity)] in women, depending on the degree of overweight and obesity. Obesity also imposes limitations while at work. Data from the 2002 National Health Interview Survey (NHIS) show that 6.9% of obese workers have work limitations, compared with 3.0% of workers with a healthy body weight. Worksite injuries are also significantly higher among overweight employees; low back injuries were 1.42 times higher and non-back musculoskeletal injuries were 1.53 times higher among overweight and obese employees compared with employees with a healthy body weight. Last, overweight and obesity is a significant predictor of transition from short-term to chronic back pain. Overweight employees have a 56% greater chance for developing chronic back pain and obese employees have an 85% greater risk compared with healthy-weight employees.

As Members of this Subcommittee, you may want to know what type of legislation would help address the obesity epidemic in a cost effective manner, given your charge with food stamps and oversight of agriculture. There is evidence that lifestyle intervention—education and behavior change programs to improve diet quality and increase physical activity with resultant weight loss—is cost effective in high medical risk populations. There is also evidence that the addition of medical nutrition therapy to usual medical care can reduce health care costs, improve absenteeism and disability, and have a positive return on investment. For example, from the work we have done at the University of Virginia, for every dollar spent on lifestyle intervention with a registered dietitian among people with obesity and diabetes, there is a $14.58 return on investment.

In summary, the cost of the obesity epidemic is enormous, in terms of both the financial costs and human costs. The financial costs are borne disproportionately by the Federal Government, but are felt keenly by employers as well. Most important are the personal costs to the individual suffering from obesity. There is a desperate need to promulgate programs with proven effectiveness to combat the financial, medical, and personal costs of obesity.

Relevant Published Papers

1. Daviglus M.L., Liu K.L., Yan L.L., Pirzada A., Manheim L., Manning W., Garside D.B., Wang R., Dyer A.R., Greenland P., Stamler J. *Relation of body mass index in young adulthood and middle age to Medicare expenditures in older age.* JAMA. 2004;292(22):2743–2749.

2. Finkelstein E.A., Fiebelkorn I.C., Wang G. *National medical spending attributable to overweight and obesity: How much, and who's paying?* HEALTH AFF. 2003;W3:219–226.

3. Finkelstein E.A., Fiebelkorn I.C., Wang G. *State-level estimates of annual medical expenditures attributable to obesity.* OBES. RES. 2004;12(1):18–24.

4. Sturm R. *The Effects of Obesity, Smoking and drinking on medical problems and costs. Obesity outranks both smoking and drinking in its deleterious effects on health and health costs.* HEALTH AFF. 2002;21:245–253.

5. Thorpe K.E., Florence C.S., Howard D.H., Joski P. *The impact of obesity on rising medical spending.* HEALTH AFF. 2004;W4:480–486.

6. Wee C.C., Phillips R.S., Legedza A.T.R., Davis R.B.; Soukup J.R., Colditz G.A., Hamel M.B. *Health care expenditures associated with overweight and obesity among U.S. adults: importance of age and race.* AM. J. PUBLIC HEALTH. 2005;95(1):159–165.

7. Wolf A.M., Colditz G.A. *Current estimates of the economic cost of obesity in the United States.* OBES. RES. 1998;6:97–106.

8. Wang G., Dietz W.H. *Economic burden of obesity in youths aged 6 to 17 years: 1979–1999.* PEDIATRICS. 2002;109(5):E81–1.

9. Wang G., Dietz W.H. *Economic Burden of Obesity in Youth age 6–17 years: 1979–1999.* PEDIATRICS 2002;109:81–87.

Indirect Cost Related To Obesity

1. Burton W.N., Chen C.Y., Schultz A.B., Edington D.W. *The Economic Costs Associated With Body Mass Index in a Workplace.* J. OCCUP. ENVIRON. MED. 1998;40(9):786–792.

2. Tucker L.A., Friedman G.M. *Obesity and absenteeism: An epidemiologic study of 10,825 employed adults.* AM. J. HEALTH PROMOT. 1998;12:202–207.

3. Finnkelstein E.A., Fiebelkorn I.C., Wang G. *The Costs of Obesity among Full-time Employees.* AM. J. HEALTH PROMOT. 2005;20:45–51.

Obesity Intervention: Lifestyle Intervention Cost Analyses

1. Herman W.H., Hoerger T.J., Brandle M., *et al;* Diabetes Prevention Program Research Group. *The cost-effectiveness of lifestyle modification or metformin in preventing type 2 diabetes in adults with impaired glucose tolerance.* ANN. INTERN. MED. 2005;142:323–332.

2. Wolf, A.M., Siadity, M., Yaeger, B., Conaway, M.R., Crowther J.Q., Nadler, J.L., Bovbjerg, V.E. *Effects of Lifestyle Intervention on Health Care Costs: The ICAN Project.* J. AM. DIET. ASSOC. 2007;107(8):1365–73.

3. Wolf, A.M., Siadity, M., Crowther J.Q., Nadler, J.L., Wagner D.L., Cavalieri S., Elward K., Bovbjerg, V.E.: *Impact of Lifestyle Intervention on Lost Productivity and Disability: Improving Control with Activity and Nutrition (ICAN)* JOEM 2009;51:139–145.

4. Wolf A.M., Crowther J.Q., Nadler J.L., Bovbjerg V.E. *The Return on Investment of a Lifestyle Intervention: The ICAN Program.* Accepted for presentation at the American Diabetes Association 69th Scientific Sessions (169–OR), 7 June, 2009, New Orleans, Louisiana.

Food Stamps and Obesity

1. *Food Stamps and Obesity: What We Know and What It Means* at *http://www.ers.usda.gov/AmberWaves/June08/Features/FoodStampsObesity.htm.*

2. *Improving Food Choices—Can Food Stamps Do More?* at *http://www.ers.usda.gov/AmberWaves/May07SpecialIssue/Features/Improving.htm.*

3. Gleason, Philip M., Allison Hedley Dodd. *School Breakfast Program but not School Lunch Program participation is associated with lower body mass index.* JOURNAL OF THE AMERICAN DIETETIC ASSOCIATION, 2009. Vol. 109 (2,S1):S118–128.

4. Ver Ploeg, M., L. Mancino, B-H. Lin and J.F. Guthrie. *U.S. Food Assistance Programs and Trends in Children's Weight.* INTERNATIONAL JOURNAL OF PEDIATRIC OBESITY, 3(1):22–30, 2008.

The CHAIRMAN. Thank you very much. Next, we will have Richard Hamburg, Director of Governmental Relations, Trust for America's Health, in Washington, DC.

STATEMENT OF RICHARD S. HAMBURG, DIRECTOR OF GOVERNMENT RELATIONS, TRUST FOR AMERICA'S HEALTH, WASHINGTON, D.C.

Mr. HAMBURG. Good morning, everyone. I would like to thank the Chairman, Ranking Member, and Members of the Subcommittee for the opportunity to testify on a very serious issue, our nation's obesity epidemic. Glad to see it was the first hearing of the year for this panel.

To examine obesity rates and policies each year, Trust for America's Health publishes a report on obesity entitled "F as in Fat, How Obesity Policies Are Failing in America." Our 2008 report found that adult obesity rates increased in 37 states in the past year. No state saw a decrease. In addition to the serious health impacts associated with this disease, for example, type 2 diabetes rates, rose in 26 states. According to the Department of Health and Human Services, obese and overweight adults cost the U.S. anywhere between $70 and $117 billion each year.

The current rise in food prices, coupled with the economic recession, raises serious concerns about obesity as the high cost of many healthful foods can be prohibitive for some Americans. In fact, nutritionists are now worried that Americans will put on so-called

"recession pounds," pointing to studies linking obesity and unhealthy eating habits to low income.

The problem is so far reaching it is becoming a problem for our overstretched military. Just this week, the Department of Defense reported that one in five military-aged Americans are too overweight to qualify for the Armed Services. That is 48,000 overweight recruits that have been turned away, just since 2005.

Unfortunately, as in many other health problems for our nation, obesity often disproportionately affects minorities and the poor, partly due to the fact that calorie-dense foods tend to be less expensive. In addition, access is a serious problem, as many families live in communities as we have heard referred to as food deserts, because they do not have access to healthy foods and mainstream grocery outlets.

To address this problem, innovative organizations, such as the Food Trust, have been working to increase access to nutritious foods in underserved communities. The Food Trust provided policy recommendations that led to the creation of the Pennsylvania Fresh Food Financing Initiative, a grant and loan program to encourage supermarket development in underserved neighborhoods throughout the state. The initiative has committed more than $67 million for 69 supermarket projects in 27 Pennsylvania counties, also creating and preserving 3,900 jobs.

We must continue to build upon this progress and build upon the work of this Committee by providing financial incentives for supermarkets in low-income neighborhoods with little access to healthy foods, encouraging farmer's markets to accept SNAP electronic benefits cards, WIC vouchers and senior farmers market nutrition program vouchers, and work with schools to improve healthy options.

Obesity is a multi-faceted problem with diverse causes and impacts across all sectors of society that has taken decades to become a full-fledged epidemic. To begin to mitigate and ultimately reverse this epidemic, we will need a sustained commitment over time to invest in population-based prevention strategies and coordinate our efforts. We need a cultural shift, one in which healthy environments, physical activity and healthy eating become the norm.

This past July, Trust for America's Health released a report entitled "Prevention for Healthy America," which examined how much the country could save by strategically investing in community disease prevention programs. The report concludes that an investment of $10 per person each year, improving community-based programs to increase physical activity, prevent smoking and other tobacco use, sound nutrition could save the country more than $16 billion annually within 5 years. We must invest in effective evidence-based community-based prevention programs, promote increased physical activity, and sound nutrition.

Now, while states and localities have been hard at work, and currently, 40 states have plans and strategies to lower the prevalence of overweight and obesity-related chronic diseases, no such national strategy currently exists at the Federal level. We strongly support the development of a national strategy to combat obesity. This needs to be a comprehensive, realistic plan that involves every department and agency of the Federal Government, state and local governments, businesses, communities, schools, families, and indi-

viduals. In fact, Representatives Towns and Granger will be reintroducing a bill that encompasses this recommendation in the coming weeks, and I encourage support for this approach.

In conclusion, our country needs to focus on developing policies that help Americans make healthier choices about nutrition and physical activity. We know that even small changes can make a difference in people's health, and that individuals don't make decisions in a vacuum. If we want Americans to lead healthy, productive lives, we need a strong partnership with government, private, and non-profit sectors as well as parents and teachers to emphasize wellness and enhanced physical activity. We need to remove barriers to healthful living by making healthy choices easy choices by creating opportunities for exercise and healthy living. The challenge is a big one, but we can make a difference together.

Thank you again for the opportunity to testify here today.

[The prepared statement of Mr. Hamburg follows:]

PREPARED STATEMENT OF RICHARD S. HAMBURG, DIRECTOR OF GOVERNMENT RELATIONS, TRUST FOR AMERICA'S HEALTH, WASHINGTON, D.C.

Good afternoon. My name is Richard Hamburg, and I am the Director of Government Relations for Trust for America's Health (TFAH), a nonpartisan, nonprofit organization dedicated to saving lives by protecting the health of every community and working to make disease prevention a national priority. I would like to thank the Chairman, the Ranking Member and the Members of the Subcommittee for the opportunity to testify on a very serious issue—our nation's obesity epidemic. Today I would like to discuss the scope of obesity in America, the potential factors that may be contributing to it, the health and economic impacts of obesity, and the importance of developing a national strategy to coordinate our response to obesity.

Scope of the Problem

Adult Obesity

Approximately ⅔ of American adults are obese or overweight. To examine obesity trends each year, TFAH publishes a report on obesity entitled "*F as in Fat: How Obesity Policies Are Failing in America.*" The 2008 report, based on the Centers for Disease Control and Prevention's (CDC's) Behavioral Risk Factor Surveillance Survey (BRFSS) 2005–2007 data, found that adult obesity rates increased in 37 states in the past year. No state saw a decrease. More than 25 percent of adults are obese in 28 states, and more than 20 percent of adults are obese in every state except Colorado. A study published in the July edition of Obesity estimates that 86 percent of Americans will be overweight or obese by 2030.

Childhood Obesity

Overall, approximately 23 million children are obese or overweight, and rates of obesity have nearly tripled since 1980, from 6.5 percent to 16.3 percent.[1] Eight of the ten states with the highest rates of obese children are in the South.[2] According to a recent analysis from the National Health and Nutrition Examination Survey (NHANES), the number of U.S. children who are overweight or obese may have peaked, after years of steady increases. According to researchers from the CDC, there was no statistically significant change in the number of children and adolescents (aged 2 to 19) with high BMI for age between 2003–2004 and 2005–2006.[3] This is the first time the rates have not increased in over 25 years. Scientists and public health officials, however, are unsure if the data reflect the effectiveness of

[1] Ogden, C.L., M.D. Carroll, and K.M. Flegal. "High Body Mass Index for Age among U.S. Children and Adolescents, 2003–2006." *Journal of the American Medical Association* 299, no. 20 (2008): 2401–2405.

[2] U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. National Survey of Children's Health 2003. Rockville, MD: U.S. Department of Health and Human Services, 2005, *http://www.mchb.hrsa.gov/overweight/techapp.htm* (accessed April 22, 2008).

[3] Ogden, C.L., M.D. Carroll, and K.M. Flegal. "High Body Mass Index for Age among U.S. Children and Adolescents, 2003–2006." *Journal of the American Medical Association* 299, no. 20 (2008): 2401–2405.

recent public health campaigns to raise awareness about obesity and increased physical activity and healthy eating among children and adolescents, or if this is a statistical abnormality. Scientists expect to know more when the 2007–2008 NHANES data are analyzed. Even if childhood obesity rates have peaked, the number of children with unhealthy BMIs remains unacceptably high, and the public health toll of childhood obesity will continue to grow as the problems related to overweight and obesity in children show up later in life.[4]

Impacts of Obesity

Health Impacts

Obesity and overweight are associated with a number of serious chronic conditions. More than 80 percent of people with type 2 diabetes are overweight. People who are overweight are more likely to suffer from high blood pressure, high levels of blood fats, and high LDL ("bad") cholesterol—all risk factors for heart disease and stroke. Obesity is a known risk factor for the development and progression of knee osteoarthritis and possibly osteoarthritis of other joints. Obesity may increase adults' risk for dementia and may increase the risk of developing several types of cancer.

The health impacts of obesity can start at a young age. Physical inactivity is tied to heart disease and stroke risk factors in children and adolescents. A number of studies have documented how obesity increases a child's risk for a number of health problems, including the emerging onset of type 2 diabetes, increased cholesterol and hypertension among children, and the danger of eating disorders among obese adolescents.[5] Some studies have shown that obesity and overweight in children also negatively affect children's mental health and school performance.

Economic Impact

These health impacts come at a great cost to our nation. According to the Department of Health and Human Services, obese and overweight adults cost the U.S. anywhere from $69 billion to $117 billion per year.[6] One study found that obese Medicare patients' annual expenditures were 15 percent higher than those of normal or overweight patients. The cost of childhood obesity is also growing. Between 1979 and 1999, obesity-associated hospital costs for children (ages 6 to 17 years) more than tripled, from $35 million to $127 million.[7]

The poor health of Americans of all ages is putting the nation's economic security in jeopardy. More than a quarter of U.S. health care costs are related to physical inactivity, overweight and obesity. Health care costs of obese workers are up to 21 percent higher than non-obese workers. Obese and physically inactive workers also suffer from lower worker productivity, increased absenteeism, and higher workers' compensation claims.

National Security Impact

The problem of obesity and overweight has reduced the number of volunteers for military service who must meet height and weight requirements. At a time when military recruiters are struggling to meet the needs of our armed forces, we are finding more and more volunteers who are overweight and obese. In 1993, 25.6 percent of 18 year-old volunteers were overweight or obese; in 2006 that percentage rose to almost 34 percent.[8] This problem continues during active duty. Each year between 3,000 and 5,000 service members are forced to leave the military because they are overweight.[9]

---

[4] U.S. Department of Health and Human Services, National Center for Health Statistics. *Prevalence of Overweight Among Children and Adolescents: United States, 1999*. Hyattsville, MD: National Center for Health Statistics; 2001. *http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm*. (accessed July 14, 2008).

[5] U.S. Department of Health and Human Services (USDHHS). *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*. Washington, D.C.: USDHHS, 2001.

[6] U.S. Centers for Disease Control and Prevention. "Preventing Obesity and Chronic Diseases Through Good Nutrition and Physical Activity." U.S. Department of Health and Human Services, *http://www.cdc.gov/nccdphp/publications/factsheets/Prevention/obesity.htm.* (accessed July 14, 2008).

[7] *Ibid.*

[8] Hsu, L.L., R.L. Nevin, S.K. Tobler, and M.V. Rubertone. "Trends in Overweight and Obesity among 18-Year-Old Applicants to the United States Military, 1993–2006." *The Journal of Adolescent Health* 41, no. 6 (2007): 610–612.

[9] Cable News Network. "Discharged Servicemen Dispute Military Weight Rules." *CNN.com,* September 6, 2000. *http://www.cnn.com/2000/HEALTH/09/06/military.obesity/index.html* (accessed May 2, 2008).

Factors Contributing to Obesity Rates

How did this problem arise? In the simplest of terms, one could argue this is just a matter of physics—Americans today are eating more and moving less, which inevitably leads to increases in weight. That is true, but is only a part of the story.

- We have placed kids in a less nutritious environment—it is not just too much food, but too much unhealthy food that kids are eating, and we have not harnessed the opportunities of the school to compensate for this.
- We have placed a particular burden on our poor and minority Americans, who are disproportionately overweight and obese, primarily because our poverty programs have not kept up with the rising cost of nutritious food; access to healthy foods is often limited in poor neighborhoods, and physical activity may be limited because of safety concerns or inadequate recreational facilities.
- We have also created a physical environment that reinforces a less active lifestyle, and we have not compensated for this in the level of physical activity we promote in the schools and in the workplace.

The following is a sketch of the scope of the problem and some possible solutions. Our annual report on obesity, *F as in Fat: How Obesity Policies Are Failing in America,* is available at our website, *www.healthyamericans.org,* and provides a more comprehensive look at these issues. The 2009 edition will be released in a few months.

Nutrition

Many American children are consuming more calories, eating less healthful foods, engaging in less physical activity and instead spending their time engaging in sedentary activities. Overall, "added sugar" consumption for Americans is nearly three times the U.S. Department of Agriculture's (USDA) recommended level,[10] and adolescent females ages 12–15 consumed approximately four percent more calories in 1999–2000 than they did in 1971–1974.[11] In 2003, a USDA report characterized America's per capita fruit consumption as "woefully low" and noted that vegetable consumption "tells the same story."[12] Moreover, since the 1970's, fast food consumption in children has increased five-fold. In the late 1970s, children received approximately two percent of their daily meals from fast food; by the mid-1990s, that increased to ten percent. Children who consume fast food, as compared with those who do not, have higher caloric intake, more fat and saturated fat, and more added sugar.[13]

Everything from the foods sold in schools to the presence or absence of grocery stores and markets selling fresh fruits and vegetables in communities to the foods that parents serve to their children can influence obesity. What occurs in schools can be critical—given the number of children who depend on school breakfast and lunch for their meals and the patterns that school food access can create for all children. In 2004, the Child Nutrition and WIC Reauthorization Act of 2004 (P.L. 108–265) required the U.S. Secretary of Agriculture to issue school nutrition guidelines that would ensure that American schoolchildren consume foods recommended in the most recent Dietary Guidelines for Americans (DGAs).[14] USDA contracted with the Institute of Medicine (IOM) to convene a panel of experts on child nutrition. The IOM Committee on Nutrition Standards for School Lunch and Breakfast Programs will provide USDA with recommendations for updating the school meal programs' nutrition requirements. Once USDA receives the IOM recommendations, agency officials will then seek to incorporate them into formal USDA guidance. A final rule will take even longer to be issued. This delay is of considerable public health concern. As this process develops, TFAH urges schools to begin to work towards implementation of the most recent DGAs.

---

[10] Putnam, J., J. Allshouse, and L.S. Kantor. "U.S. per Capita Food Supply Trends: More Calories, Refined Carbohydrates, and Fats." *Food Review* 25, no. 3 (2002): 1–14.

[11] Briefel, R.R. and C.L. Johnson. "Secular Trends in Dietary Intake in the United States." *Annual Review of Nutrition* 24, (2004): 401–431.

[12] Putnam, J., J. Allshouse, and L.S. Kantor. "U.S. per Capita Food Supply Trends: More Calories, Refined Carbohydrates, and Fats." *Food Review* 25, no. 3 (2002): 1–14.

[13] Asche, K. "Fast Foods May Increase Childhood Obesity Rates." University of Minnesota Extension. (2005). *http://www.extension.umn.edu/extensionnews/2005/fastfood.html* (accessed July 14, 2008).

[14] U.S. Department of Agriculture (USDA). *Incorporating the 2005 Dietary Guidelines for Americans into School Meals.* SP 04–2008. Washington, D.C.: USDA, 2007.

Disparities

Unfortunately, as with too many other health problems facing our nation, obesity often disproportionately affects minorities and the poor. African American children are almost twice as likely to be obese.[15] Black and Hispanic adolescents have higher rates of physical inactivity (by 5–6 percentage points).[16]

Equally disturbing, is the apparent relationship between being overweight and poverty. The National Survey on Children's Health (2003) shows that rates of overweight decline as income rises (22.4 percent of kids below 100% of poverty were overweight; only 9.1 percent of kids at 400 percent or more of poverty were overweight). Similarly, rates of physical inactivity are greater for poor children (17% who were under 100 percent of poverty engaged in no vigorous physical activity each week; only 7.8% of those at 400% of poverty fell into that category).

Lack of access to nutritious foods is one obstacle to healthy eating in some low-income communities. Supermarkets are less likely to be accessible in poor neighborhoods, and many families live in communities referred to as "food deserts" because they do not have access to healthy foods and mainstream grocery outlets. To address this problem, innovative organizations such as the Food Trust have been working to increase access to nutritious foods in underserved communities. The Food Trust provided policy recommendations to the Pennsylvania legislature regarding access to supermarkets in low-income communities. As a result, the legislature created the Pennsylvania Fresh Food Financing Initiative, a grant and loan program to encourage supermarket development in underserved neighborhoods throughout the state. The Fresh Food Financing Initiative has committed more that $67 million in funding for 69 supermarket projects in 27 Pennsylvania counties, creating or preserving 3,900 jobs.[17] We must continue to build on this progress by providing financial incentives for supermarkets in low-income neighborhoods with little access to healthy foods; encouraging farmers' markets to accept SNAP Electronic Benefits cards, WIC vouchers and Senior Farmers' Market Nutrition Program vouchers; and working with schools to improve healthy options through Federal meal programs.

Even when healthy foods are readily available, eating healthier can be very expensive, whereas calorie dense foods tend to be less expensive. The current rise in food prices, coupled with the economic recession, raises serious concerns about obesity. For example, a recent study in the UK by Which?, a consumer group, found that 24 percent of UK adults feel healthier eating is now less important, with 56% saying price has overtaken as a priority when choosing food.[18] Similarly, in the U.S. nutritionists are worried that Americans will put on "recession pounds," pointing to studies linking obesity and unhealthy eating habits to low incomes.[19]

To help address this problem, it is important that we provide incentives for Americans to purchase healthy foods. TFAH was pleased with the inclusion of the provision in the Food, Conservation, and Energy Act of 2008 (P.L. 110–246), which provides funding to carry out a point-of-purchase pilot program to encourage households participating in the Supplemental Nutrition Assistance Program (SNAP) to purchase fruits, vegetables or other healthy foods. Further, the American Recovery and Reinvestment Act of 2009 included a 13.6 percent increase in the value of benefits provided through the SNAP. During these difficult economic times, we hope Congress will continue to support the nutrition needs of all Americans, particularly those who are economically disadvantaged.

In particular, as Congress considers Child Nutrition and WIC reauthorization, we hope that Congress will increase reimbursement rates for school meals. As schools are faced with increasing food and energy costs, we must ensure that they are serving healthy meals to America's children and recognize that this requires a higher level of investment in school meal programs. Moreover, TFAH hopes that Congress will consider updating the national nutritional standards for school foods sold outside of the school meal program so that strong nutritional standards based on current science will apply across a school campus. TFAH also hopes that Congress will strengthen requirements for local school wellness policies, strengthen nutrition education, and support the implementation of the new WIC food packages, as well as

---

[15] U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *National Survey of Children's Health 2003*. Rockville, MD: U.S. Department of Health and Human Services, 2005.

[16] U.S. Centers for Disease Control and Prevention. "Youth Risk Behavior Surveillance—United States, 2007." *Morbidity and Mortality Weekly Report* 57, no. SS–4 (2008): 1–136.

[17] The Food Trust. "Supermarket Campaign." *http://www.thefoodtrust.org/php/programs/super.market.campaign.php.*

[18] BBC News. "Recession Thwarts Healthy Efforts." (March 11, 2009). *http://news.bbc.co.uk/1/hi/health/7934242.stm.*

[19] Reuters. "Will Americans Put on Recession Pounds?" (January 9, 2009). *http://www.reuters.com/article/newsOne/idUSTRE50805W20090109.*

the technology needs of the WIC program. These actions would help promote access to nutritious foods and increase understanding of the importance of nutrition, which are all necessary to mitigate the obesity epidemic.

An Environment That Discourages Physical Activity

In addition to developing poor dietary habits, many children are becoming less physically active, which is also contributing to obesity and overweight. For example, 30 years ago, nearly half of American children walked or biked to school; today, less than one in five either walk or bike to school.[20] The built environment and community design can have a great impact on nutrition and physical activity levels. For children, the placement of schools and access to safe venues for physical activity are particularly important. One study found that the primary reason that children do not walk or bike to school is because their school is too far away. Other concerns included too much traffic, no safe route, fear of abduction, crime in the neighborhood, and lack of convenience.[21] TFAH hopes that Congress considers making improvements to the built environment and promoting non-motorized transit option in upcoming transportation reauthorization legislation.

Furthermore, according to the CDC's latest School Health Policies and Programs Study, only 3.8 percent of elementary schools, 7.9 percent of middle schools and 2.1 percent of high schools provided daily physical education or its equivalent. Some attribute at least part of this decline in physical activity programs to the academic requirements of No Child Left Behind. That is unfortunate as there is growing evidence that fitter more active students perform better academically. When Congress considers reauthorization of No Child Left Behind, TFAH urges Congress to include provisions that promote physical education and physical activity throughout the school day.

Recommendations

It is clear that obesity is a multi-faceted issue with diverse causes and impacts across all sectors of society. Progress can be made by adopting some of the provisions referenced above in various reauthorization bills. However, to truly begin to mitigate and ultimately reverse this epidemic, we will need a sustained commitment over time to investing in population-based prevention strategies and coordinating our efforts to combat obesity.

Strengthening Our Investment in Community Prevention

Real prevention requires changing the communities in which we live and approaching this as a community-wide, not just an individual challenge. It will also be the most cost effective way to mitigate this epidemic. To truly tackle the obesity epidemic, we must make healthy choices easy choices for all Americans, regardless of where they live or what school they attend. We need a cultural shift, one in which healthy environments, physical activity and healthy eating become the norm.

Last July TFAH released *Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities,* which examines how much the country could save by strategically investing in community disease prevention programs. The report concludes that an investment of $10 per person per year in proven community-based programs to increase physical activity, improve nutrition, and prevent smoking and other tobacco use could save the country more than $16 billion annually within 5 years. This is a return of $5.60 for every $1. The economic findings are based on a model developed by researchers at the Urban Institute and a review of evidence-based studies conducted by the New York Academy of Medicine. The researchers found that many effective prevention programs cost less than $10 per person, and that these programs have delivered results in lowering rates of diseases that are related to physical activity, nutrition, and smoking. The evidence shows that implementing these programs in communities reduces rates of type 2 diabetes and high blood pressure by five percent within 2 years; reduces heart disease, kidney disease, and stroke by five percent within 5 years; and reduces some forms of cancer, arthritis, and chronic obstructive pulmonary disease by 2.5 percent within 10 to 20 years, which, in turn, can save money through reduced health care costs to Medicare, Medicaid and private payers.

---

[20] McDonald, N.C. "Active Transportation to School: Trends among U.S. Schoolchildren, 1969–2001." *American Journal of Preventive Medicine* 32, no. 6 (2007): 509–516.

[21] U.S. Centers for Disease Control and Prevention (CDC). "Barriers to Children Walking and Biking to School—United States, 1999." *Morbidity and Mortality Weekly Report* 51, no. 32 (2002): 701–704.

Examples of Successful Interventions

Community and school-based approaches aimed at using reducing obesity in the United States have already shown to be successful. The Child and Adolescent Trial for Cardiovascular Health (CATCH) elementary school program provides education for students, modifications for improvements in school lunches and physical education, and increased education for staff and teachers. Results have shown that students in the program consumed healthier diets and engaged in more physical activity.

The town of Somerville, Massachusetts developed a comprehensive program called "Shape Up Somerville" to curtail childhood obesity rates. The project included partners across the community. Various restaurants started serving low-fat milk and smaller portion sizes; the school district nearly doubled the amount of fresh fruit at lunch and started using whole grain breads; the town expanded a local bike path and repainted crosswalks; and the town targeted crossing guards to areas where children are most likely to walk to school. Researchers evaluated the program after 1 year and found that children in Somerville gained less weight than children in surrounding communities. (Growing children are expected to gain some weight.)

Another example of a coordinated approach to obesity reduction at the community level is the YMCA's Pioneering Healthier Communities. This project supports local communities in promoting healthy lifestyles. Examples of interventions have included offering fruits and vegetables and encouraging physical activity during after school programs; influencing policymakers to "put physical education back in schools and include physical activity in after school programs"; building or enhancing bicycle and pedestrian trails; and increasing access to fresh produce in communities through community gardens, farmers markets and other activities.

TFAH urges Congress to build upon these successes and to make a sustained investment in population-based disease prevention. If we are serious about combating this epidemic, we must invest in our future by strengthening communities and promoting prevention.

Implementing a National Strategy to Combat Obesity

Clearly, it has taken years for the childhood obesity epidemic to develop, and it will take a coordinated effort over time to begin to mitigate it. At this time, we have no national, coordinated effort to combat obesity. TFAH supports the development of a ***National Strategy to Combat Obesity.*** This needs to be a comprehensive, realistic plan that involves every department and agency of the Federal Government, state and local governments, businesses, communities, schools, families, and individuals. It must outline clear roles and responsibilities. Our leaders should challenge the entire nation to share in the responsibility and do their part to help improve our nation's health. All levels of government should develop and implement policies to make healthy choices easy choices—by giving Americans the tools they need to make it easier to engage in the recommended levels of physical activity and choose healthy foods, ranging from improving food served and increasing opportunities for physical activity in schools to securing more safe, affordable recreation places for all Americans.

The "National Strategy for Pandemic Influenza Planning" provides a strong example for how this type of effort can be undertaken. With leadership and goals identified by health agencies and experts, every cabinet agency has taken charge of developing and implementing policies and programs in their jurisdiction that all contribute to our nation's preparedness for a pandemic flu outbreak. Similarly, the United Kingdom has announced an anti-obesity strategy to "transform the environment" in which people in England live, including launching a campaign to promote healthy living and healthy towns with bicycle and pedestrian routes.

Conclusion

Our country needs to focus on developing policies that help Americans make healthier choices about nutrition and physical activity. We know that even small changes can make a big difference in people's health—and that individuals don't make decisions in a vacuum. If we want Americans to lead healthy, productive lives, we need a strong partnership from the government, private and nonprofit sectors, as well as parents and teachers, to emphasize wellness and enhance nutrition and physical activity. The challenge is a big one, but we can make a difference together. Thank you again for the opportunity to testify.

The CHAIRMAN. Thank you very much. Next we will have Martin Yadrick, President of American Dietetic Association, Washington, DC.

STATEMENT OF MARTIN M. YADRICK, M.S., M.B.A., R.D., F.A.D.A., PRESIDENT, AMERICAN DIETETIC ASSOCIATION, WASHINGTON, D.C.

Mr. YADRICK. Good morning, Mr. Chairman, and thank you. My name is Marty Yadrick. I am registered dietician and President of the American Dietetic Association. I am honored to be here, and I am acutely aware that we are sitting below the portrait of former Chairman Kika de la Garza. Chairman de la Garza proudly and frequently would tell the story of getting to take a short trip on a U.S. nuclear submarine, part of the vanguard of the nation's defense. It was a long story the way the Chairman would tell it, so I am told, and the tale would always conclude with him asking his listeners what was the single greatest limitation on the submarine's voyages? The thing that brought a nuclear submarine back was running low on its supply of food. I can tell you that the person who decided what foods went on that submarine was a registered dietician. The registered dietician is the chosen nutrition professional of the U.S. military. The RD's selections would be premised on meeting the food's safety and nutritional requirements, and the pleasure of the crew. That Chairman's story seems to be a good starting point for my testimony today to the Committee.

Food availability has traditionally been the concern of nations and of families; however, in the last 20 or so years, we have a new concern: overweight and obesity. They have become epidemic in the United States and the world. Millions of people are getting sick with diseases and conditions associated with over consumption of food. Dire related deaths are soaring. It is time to get serious about obesity. It is time to become alarmed when nearly ½ of the people in the United States suffer from preventable chronic conditions, and when we see the life expectancy of our children declining from our own, largely due to overweight and obesity.

Obesity is a problem that defies an easy cure. We know that it is a better strategy to prevent overweight and obesity, rather than simply attempting to treat them. That means we should pay particular attention to the issue of childhood obesity.

ADA's own research illuminates the challenge ahead. There are barriers due to nutrition literacy, lack of access to nutrition services, and other causes. This Subcommittee is in a position to address barriers to better public nutrition and nutrition care. We recommend the Committee focus on research, nutrition labeling and education, and child nutrition.

First, research. This Committee can make an enormous contribution by focusing on and investing in food and agricultural research. After all, research was a key reason that President Lincoln established the United States Department of Agriculture. Unfortunately, what once was the gold standard for government research has atrophied. We all have a role in bringing our food and agricultural research programs back so that they can lead the U.S. food and agricultural sector successfully in the 21st century.

Government funded research is especially imperative. It is the basis for nearly everything we know about food, nutrition, and human health. The private sector does little of this kind of research, and the public is skeptical of much of it. Only the Federal Government has a public mandate to carry out research on human

nutrition needs and motivators. The Federal Government has a unique responsibility to evaluate nutrition policies and programs.

The second issue is nutrition education and labeling. Some have observed that there is a reason why we call this the information age, not the knowledge age or wisdom age. Consumers are drowning in nutrition information, yet the consumer cannot easily evaluate the quality of this information. As often as not, on their own, consumers are likely to end up misinformed.

The United States has a statute on the books called "The Nutrition Labeling and Education Act," a fine law that has never lived up to its promise. Labels are everywhere, but if consumers don't know how to use them and what they mean, then we must ask how to bridge the gap.

The good news is that nutrition education is a worthwhile investment. Research documents that nutrition education has helped people chose and prepare healthier food options, but the education component of the NLEA has been chronically under-funded by Congress and virtually ignored. Nutrition education has been integrated into some of the food assistance programs, such as SNAP and WIC, but support for nutrition education lags behind that for school meals and childcare settings.

The third is child nutrition. Children need to learn, early in life, about choices and behaviors that will keep them healthy for life. They need to be taught nutrition, how to choose and enjoy food, and they need to be taught how and encouraged to engage in physical activity. They need reinforcement of healthy eating and activity in order to make healthy living a habit.

Speaking for the American Dietetic Association, I am asking our elected leaders to make a paradigm shift in which prevention plays a more balanced role in our health system. Nutrition is the cornerstone of prevention.

Thank you for holding this important hearing, and I honored that we have been invited to speak.

[The prepared statement of Mr. Yadrick follows:]

PREPARED STATEMENT OF MARTIN M. YADRICK, M.S., M.B.A., R.D., F.A.D.A., PRESIDENT, AMERICAN DIETETIC ASSOCIATION, WASHINGTON, D.C.

Good morning. My name is Marty Yadrick. I am a Registered Dietitian from Los Angeles and the President of the American Dietetic Association.

ADA is the world's largest organization of food and nutrition professionals, with more than 69,000 registered dietitians, dietetic technicians, registered and advanced-degree nutritionists. Every day, the members of our professional association work with Americans in all walks of life—from before birth through old age—providing care, services and knowledge to help people optimize their health through food and nutrition.

Others at this hearing are clearly identifying the national imperative to address obesity and the overall health of our population. I will not repeat statistics or the conclusions. I do ask that you add my name and that of the American Dietetic Association to the list of Americans who are committed to improving the health of our citizens.

Let me urge that we begin by focusing on prevention.

Nutrition and diet are known to be associated with seven of the top ten leading causes of death in the United States today, including the Big Three: heart disease, cancer and stroke.

Diet and nutrition are also factors in other chronic conditions such as pulmonary disease, diabetes, liver disease, arteriosclerosis and kidney disease. Seven of every ten Americans who die each year—more than 1.7 million people—die of chronic disease.

Furthermore, diet and nutrition affect the mortality rates associated with pneumonia and influenza, septicemia, prenatal complications and other conditions that are leading causes of death in our country.

How best to reduce the incidence of these diseases and conditions that take so many lives? A big step would be to re-frame our understanding of the role of nutrition and health in the United States and the world.

Traditionally, we have tended to view nutrition in terms of the adequacy of the diet. And hunger remains an issue for millions of Americans.

But now, the primary manifestation of malnutrition in the United States has become excess weight and obesity. These conditions coexist with and at times overshadow hunger as the most significant nutrition problem facing the nation.

For those of you wondering about "dietetics," there are a few specifics you should know. Dietetics is the science that directly connects food to nutrition and health. Registered dietitians study multiple hard and social sciences, including those that quantify nutrients that people need and nutrients' effects on health. But RDs become experts in dietetics in order to help people optimize their health by choosing foods in a healthful pattern of eating. Of course, to stay healthy, food choices need to be matched with physical activity and a series of personal decisions—like choosing not to smoke and refraining from high-risk behaviors.

ADA is guided by a philosophy of sound science. Our association analyzes, publishes and disseminates scientific breakthroughs and information that is applied in dietetics practice every day throughout the nation. ADA was one of the first professional groups to embrace evidence-based practice, creating the world's first evidence-analysis nutrition library and producing guides for condition-specific nutrition care. ADA strongly believes that, as the public becomes knowledgeable and informed about food, nutrition and health, our profession can contribute more significantly to make Americans healthier. It is time that we as a nation take action to address food, nutrition and health.

It is time to become alarmed when nearly half the people in the United States suffer from preventable chronic conditions and when we see the life expectancy of our children declining from our own—largely due to overweight and obesity.

Obesity is a problem that defies an easy cure. We know that it is a better strategy to prevent overweight and obesity, rather than simply attempt to treat them. And that means that we should pay particular attention to the issue of childhood obesity.

ADA's own research illuminates the challenge ahead. American parents have erroneous perceptions of their children's nutritional condition and frequently, they are disengaged from their kids' eating habits. Parents are reluctant to help their children because they don't know how to help. It has been only the luckiest of families who are able to see a Registered Dietitian for nutrition assessment and intervention where families' insurance plans will provide coverage.

ADA's research also documents that most Americans have no idea of their own nutritional status, weight or eating patterns. Even when a diet-linked condition as serious as pre-diabetes is identified, a patient is likely to encounter very real barriers to professional nutrition care and services. To explain: Medicare is the template for most insurance plans. Medicare currently covers screening for pre-diabetes. A beneficiary can be tested as frequently as every 6 months to check his or her status. However, there is no referral—no covered care by Medicare or most private insurance—until pre-diabetes deteriorates to full blown diabetes. Only once the diagnosis has reached a dire situation will Medicare meet beneficiaries' needs through covered diabetes services. If the patient is very lucky his or her physician may send them to a Registered Dietitian for Medical Nutrition Therapy or an accredited Diabetes Self Management Training program.

So why would I call patients "lucky" to be referred? Fewer than five percent of Medicare beneficiaries eligible for MNT are referred, as doctors' offices frequently pass out literature rather than encourage the patient to get proven-effective, intensive nutrition assessment, personalized intervention and ongoing counseling. DSMT reflects similarly dismal referral statistics.

Fortunately we have just seen the development of a pilot program to help overweight children see their physicians and then Registered Dietitians to learn better nutrition and activity habits. Several health insurance organizations are part of this ground-breaking effort which will reach nearly one million children during the first year. The long-term goal of the initiative is that within the first 3 years, 25 percent of all overweight children (approximately 6.2 million) will have access to the benefit. This is thanks to the work of the Alliance for a Healthier Generation.

This Subcommittee also is in a position to address barriers to better public nutrition and nutrition care. We recommend the Committee focus on research, nutrition labeling and education, and child nutrition.

Research

The first is research. This Committee can make an enormous contribution by focusing on and investing in food and agricultural research across the board. ADA is a member of National C–FAR which educates how Federal research contributes to improved standards of living. After all, research was a key reason that President Lincoln established the U.S. Department of Agriculture. Unfortunately, what was once the gold standard for government research has atrophied. We all have a role in bringing our food and agriculture research programs back so that they can lead the U.S. food and agricultural sector successfully in the 21st century.

Government-funded nutrition research is especially imperative. It is the basis for nearly everything we know about food, nutrition and human health. The private sector does little of this kind of research—and the public is skeptical of much of it. Only the Federal Government has the public mandate to carry out research on human nutrition needs and motivators, as well as biological, epidemiological, social and environmental factors. The Federal Government has a unique responsibility to evaluate nutrition policies and programs. It's time to invest much needed resources into our Human Nutrition Research Centers. I can only imagine how much healthier we might be today if we had invested as much in human nutrition as we have spent for bovine, swine, poultry, aquaculture and other animal nutrition research over the years!

Nutrition Education and Labeling

The second is nutrition education and labeling. Some have observed that there is a reason why we call this the "information age" and not the "knowledge age" or "wisdom age." Consumers are drowning in nutrition "information." Related to that is that the consumer cannot easily evaluate the quality of the information. As often as not, on their own, consumers are likely to end up misinformed.

The United States has a statute on the books called the Nutrition Labeling and Education Act—a fine law that has never lived up to its promise. Labels are everywhere, but if consumers don't know how to use them and what they mean—then we must ask how to bridge the gap.

Nutrition information does not translate into knowledge or knowledge necessarily into appropriate action. If labels and pamphlets do not lead to behavior change, then people have to be taught.

The good news is that nutrition education is a worthwhile investment. Research documents that nutrition education can help people choose and prepare healthier food options, but the education components of NLEA are chronically under-funded by Congress and virtually ignored. Nutrition education has been integrated into some of the food assistance programs such as SNAP and WIC, but support for nutrition education lags behind for school meals and child care settings.

Child Nutrition

Children need to learn early in life about choices and behaviors that will keep them healthy for life. They need to be taught nutrition, how to choose and enjoy food and they need to be taught how and encouraged to engage in physical activity. They need reinforcement of healthy eating and activity in order to make healthy living a habit. We need to teach nutrition in a way that is meaningful, culturally aware, individualized and personal. PSAs and motivational messages have short-lived impact, if any.

School environments may not be teaching healthful nutrition or even offering healthful choices beyond the reimbursable school meal. Rushed meal times, pressure to increase revenues, calorically dense vending and elimination of physical education all send the message that health is not really a priority.

ADA recommends amendments be made to the Child Nutrition Act to:

1. Ensure the Dietary Guidelines are the foundation of Federal food assistance and nutrition programs. The Secretary of Agriculture should have the authority to extend nutrition standards to all foods and beverages sold on school campuses throughout the day for schools that are participating in the school breakfast, lunch and after school programs. You can help that happen by supporting H.R. 1324, The Child Nutrition Promotion and School Lunch Protection Act.

2. Provide adequate funding for program implementation. School reimbursements have fallen far behind the costs of production and are inadequate to maintain the high nutrition standards established in law. And adequate funding is needed to ensure implementation of the new WIC food packages.

3. Strengthen nutrition education and promotion. In the last Child Nutrition Reauthorization, Congress approved the Team Nutrition Network, a state-level infrastructure and networking component to coordinate nutrition education ac-

tivities across child nutrition programs, conduct evaluations and enhance program operations. Funding is now needed for the benefits of that infrastructure to be realized. Nutrition education must continue to be a key component of the WIC program services.

4. Increase funding for Child Nutrition Program research. Funding would allow USDA to conduct and fund research on and evaluation of their programs and allow USDA's Food and Nutrition Service to collaborate with research agencies in USDA and extramurally to develop and implement a comprehensive research agenda.

5. Place trained professionals in roles where they make policies. Directors of the School Nutrition Program at the district level should be certified as Registered Dietitians, Dietetic Technicians, Registered or School Nutrition Association School Nutrition Specialists. It is not simple to balance student satisfaction with nutritional needs and to do so cost-effectively. The extension of nutrition standards to all foods and beverages sold in schools, in conjunction with the local wellness policy requirement, will only increase the need for trained professionals in schools. Planning for nutritious intakes for children with special food and nutrition needs requires the biochemical and food science knowledge that only registered dietitians possess in school settings. Registered dietitians have the expertise needed to provide education to high-risk WIC recipients.

Speaking for the American Dietetic Association, I am asking our elected leaders to make the paradigm shift in which prevention plays a more balanced role in our health system. Nutrition is the cornerstone of prevention.

As a Registered Dietitian, I can tell you that many of the most-costly disabling conditions can be prevented through nutrition strategies. And with proper nutrition support, many complications can be averted or delayed. Federal attention to public nutrition and investment in nutrition care, education and research is essential. From these small, practical steps, great benefits may accrue to people, their families and the nation.

Thank you for holding this important hearing. I am honored that I have been invited to speak and to learn from you and my fellow panelists.

The CHAIRMAN. Thank you very much. Next we have Donna Mazyck, President of the Board, National Association of Nurses in Silver Spring, Maryland. Donna?

STATEMENT OF DONNA J. MAZYCK, R.N., M.S., N.C.S.N., BOARD PRESIDENT, NATIONAL ASSOCIATION OF SCHOOL NURSES; SCHOOL HEALTH SERVICES SPECIALIST, MARYLAND STATE DEPARTMENT OF EDUCATION, SILVER SPRING, MD

Ms. MAZYCK. Mr. Chairman, Mr. Fortenberry, and Members of the Subcommittee, I am privileged to be here today representing the National Association of School Nurses to speak about the state of obesity in our country. Through my testimony, I hope to relay to the Subcommittee Members how school nurses have daily experiences with children with severe nutrition issues, and other health conditions related to obesity.

School nurses are fully aware that the fastest rising public health problem in our nation is obesity. Let me give you an example of what school nurses are addressing, drawing from my days as a high school nurse. One of my students went to the back of the health room one day to weigh herself. Before I could get back there to assist her, she exclaimed, this scale doesn't work. I had to help her understand that her weight was beyond the 250 pound capacity of the scale. Her weight was clearly a source of embarrassment to her as she endured teasing by classmates for her large size. I continued to work with her because not only was she experiencing dangerous physical consequences, but she was also suffering with adolescent emotional distress.

Knowing that obese adolescents have up to an 80 percent chance of becoming obese adults, a major investment in prevention must take place from multiple sectors of society to become a healthier America. Prevention is the positive, logical, and most cost beneficial approach to achieve education goals and to prevent chronic diseases.

I want to share with you a true story from one of our members that accentuates the gravity of the generational issues involved with obesity. It is about a current Kindergarten student whom I will call Connie B. It was discovered during a health assessment that she has a BMI in the 99.5 percentile. Connie is always out of breath. She has four very deep cavities in her teeth, and she had dark-pigmented skin folds at the back of her neck, a condition called *Acanthosis nigricans,* a reliable predictor of an over-production of insulin that is a known precursor to type 2 diabetes. This little girl is only 5 years old. The school nurse spoke with her mother and found that that mother had difficulty with Medicaid coverage for her family of four children. There were three children younger than Connie, including a severely autistic child. As a single mother, she was overwhelmed with life, did not have access to medical care, and said she wished that Connie was not so fat. When the school nurse met Ms. B in person, she observed that the mother was also obese. The school nurse helped this parent to obtain Medicaid coverage for her child with the partnership of a local hospital. The school nurse helped that mother complete a meals assistance application, and encouraged the mother to allow Connie to eat her meals in school, where they were carefully planned and nutritionally balanced meals.

This type of preventive approach is the best way to ensure that Connie won't become part of the up to 80 percent of adolescents who will take obesity into an adulthood filled with chronic, life-altering diseases.

Schools can also contribute significantly to the other major factor which leads to obesity, the lack of physical activity. Therefore, NASN recommends a stronger emphasis on school wellness policies that include necessary physical activity for all students. Many school nurses throughout the country take a leadership role in the development and implementation of school wellness policies. NASN recommends that school nurses serve on every school and district wellness policy committee.

I want to assure the Subcommittee that our association has taken on the responsibility of educating school nurses about childhood obesity. In fact, with seed money from the CDC and a cooperative agreement addressing type 2 diabetes, NASN developed a program known as S.C.O.P.E. It stands for School Nurse Childhood Obesity Prevention Education. The goal is to provide strategies for every school nurse to assist not only the students, but also the families and school community in addressing the challenges related to obesity. With a very limited budget, NASN has been able to educate about 1,200 school nurses since 2006. We are hoping public and private partners will recognize the importance of school nurse involvement in obesity prevention, and help us increase the number of school nurses completing that training. We believe that school nurses are in a unique position to be liaisons with schools,

parents, community members, health care professionals, and Federal, state, and local governments to help stop the rise in childhood obesity. Part of the solution is to employ school nurses to effectively work on a daily basis with students to increase their understanding of how to achieve healthy lifestyles.

Thank you for this opportunity.

[The prepared statement of Ms. Mazyck follows:]

PREPARED STATEMENT OF DONNA J. MAZYCK, R.N., M.S., N.C.S.N., BOARD PRESIDENT, NATIONAL ASSOCIATION OF SCHOOL NURSES; SCHOOL HEALTH SERVICES SPECIALIST, MARYLAND STATE DEPARTMENT OF EDUCATION, SILVER SPRING, MD

Mr. Chairman, Mr. Fortenberry, and Members of the Subcommittee, my name is Donna Mazyck, and I am President of the National Association of School Nurses (NASN) and I serve the Maryland State Department of Education as a school health services specialist. I am privileged to be here today representing NASN to speak about the critical importance of the rise in obesity throughout the United States. I commend the Committee for reviewing this issue at a time when there are so many pressing issues. Unfortunately, obesity is an issue which can no longer be ignored. It is a factor related to multiple issues, including the economy, health care, chronic disease, nutrition, hunger, and national security.

Through my testimony, I hope to relay to the Subcommittee Members how school nurses have daily experiences with children who have severe nutrition issues and other health conditions related to obesity. I will share stories from when I practiced as a school nurse in two Maryland high schools and from my current policy role as President of an association with nearly 14,000 members.

School nurses are serving students in 75 percent of the U.S. public schools. We know first-hand that school nurses are performing duties today that go well beyond what school nursing was like 30–40 years ago when health care costs were affordable, and school children with complex health needs did not come to school. School nurses do not simply wait in their offices for a sick child to appear; rather they provide health services for all the students, but especially for the uninsured. They also provide health education, with special attention to nutrition and obesity. They serve children with chronic conditions which previously were extremely rare in children, such as type 2 diabetes, heart disease, high blood pressure, and food allergy.

School nurses have knowledge and expertise in the areas of nutrition, weight maintenance and exercise. This knowledge can be applied to intervention and prevention programs that help students live healthy and active lifestyles. The school nurse collaborates with students, parents, school personnel, health care providers and members of the community to identify students who are overweight and obese. In addition, the school nurse is involved with support programs, counseling services, referrals, and follow-up activities.

For clarification of terminology, body mass index (BMI) is a practical measure used to determine overweight and obesity. BMI is a measure of weight in relation to height that is used to determine weight status. While BMI is an accepted screening tool for the initial assessment of body fatness in children and adolescents, it is not a diagnostic measure because BMI is not a direct measure of body fatness. The Centers for Disease Control and Prevention (CDC) defines overweight as a BMI at or above the 85th percentile and lower than the 95th percentile. Obesity is defined as a BMI at or above the 95th percentile for children of the same age and sex.

NASN's membership is fully aware that the fastest rising public health problem in our nation is obesity because their eyes and their work with today's students tell them so. Over the past 3 decades, obesity rates have soared among all age groups, increasing more than four times among children ages 6 to 11. According to the Robert Wood Johnson Foundation (RWJF), today, more than 23 million children and teenagers are overweight or obese. That's nearly one in three young people. In fact, 16.3 percent of children and adolescents from ages 2 to 19 are obese; with 11 percent considered extremely obese—above the 97th percentile. Given these statistical realities, the complex medical issues facing school nurses are imaginable. School nurses are now addressing the typical adult ailments of high blood pressure, type 2 diabetes, sleep apnea, and gallstones in their elementary and adolescent students.

Let me give you an example of what school nurses are addressing—drawing from my days as a high school nurse. One day a student entered the health room and asked if she could weigh herself on the scale in the back of the room. I directed her to the scale, but before I could get back there to assist her, she exclaimed. "This

scale doesn't work!" When I walked over to her, I realized that her weight was over 250 pounds, which was the highest measure registered on the scale. Her weight was a source of embarrassment for this student as she endured teasing by classmates for her large size. Not only was she experiencing dangerous physical consequences, such as shortness of breath when walking through the school hallways, but she also was suffering with adolescent psychological distress.

Even our national security is threatened as we learned from the United States Military this week that since 2005, 48,000 overweight recruits had to be turned away from serving our country. The obesity epidemic is a major contributor to the national crisis of filling the military's ranks. These young people are products of an environment who have been driven to school for 18 years, and when in school, they had little or no daily physical education. When out of school, they spent on average four or more hours per day using electronic media; and the foods they've grown accustomed to eating have been unhealthy and in larger sizes. Even in schools, due to antiquated guidelines for foods sold outside of the meals, students have been consuming on a daily basis high-calorie, low-nutrient foods, snacks, and beverages.

According to RWJF, it's estimated that the obesity epidemic costs our nation $117 billion annually in direct medical expenses and indirect costs, including lost productivity. Childhood obesity alone has a tremendous and unnecessary cost of up to $14 billion annually in direct medical expenses. There are many societal explanations for these alarming statistics which translate into health care expenses and lower life expectancies of the present and future generations. The questions facing us all, are what can be done to turn this epidemic around and who is going to be a major contributor to the solution?

Knowing that obese adolescents have up to an 80 percent chance of becoming obese adults, a major investment in prevention must take place from multiple sectors of society to become a healthier America. Prevention is the positive, logical, and cost beneficial approach to achieve education goals and to prevent chronic diseases.

School nurses have an individual and public health perspective and know well that prevention of chronic illnesses such as cardiovascular disease and diabetes must begin in childhood to be efficacious. School nurses identify at-risk students through periodic assessments, and then intervene through referrals to connect students to health services and to educate students and parents about nutrition and the availability of school meals assistance.

I want to share with you a true story from one of our members that accentuates the gravity of the generational issues involved with obesity. It is about a current kindergarten student whom I will call Connie B. It was discovered during a health assessment that she has a BMI of 99.5 percent—the top of the obese range. Just walking up a short flight of stairs causes her to be out of breath. She has four very deep cavities in her teeth, and she has dark pigmented skin folds at the back of her neck, a condition called *Acanthosis nigricans. Acanthosis nigricans* is a reliable predictor of hyperinsulinemia, an over production of insulin and a known precursor to type 2 diabetes, previously only known to occur in adults. This little girl is **only 5 years old.** She will have a very short and poor quality of life if something is not done now.

The nurse spoke with her mother and found that she has not been to the doctor for awhile because her Medicaid "ran out." In other words, the mother did not complete the annual renewal process. Mrs. B, a single mother, said she has three children younger than Connie, including a 4 year old who is severely autistic and who takes up most of her time. She said she cannot easily take the children for health visits and has a very hard time doing most household duties, including cooking regular meals. She said she wishes that Connie was not "so fat."

When the school nurse met Ms. B in person, she observed that **she is also obese.** The services available through the school were explained and using a partnership with a local hospital, Medicaid coverage was re-established. The nurse helped her complete the meals assistance application and encouraged Ms. B to allow Connie to eat breakfast at school where meals are carefully planned and nutritionally balanced. Our dedicated nurse is hoping Connie will stay at the school for 6 years so that she can work with her and her family. Connie's progress toward improved health status will be monitored as she eats a more nutritious diet and grows into her weight. This type of preventive approach is the best way to ensure that Connie won't become part of the 80 percent of adolescents who take their obesity into an adulthood filled with chronic, life altering diseases.

Critical to helping students break the cycle and develop good decision-making skills related to nutrition, is the modeling which occurs in the school meals program. Currently, the National School Lunch Program is serving nutritious meals to more than 28 million children and the School Breakfast Program is reaching more than eight million children daily. The meals eaten at school are meals that they can

count on. In contrast to the students who pay full price for lunches, students on assistance are generally so hungry that their plates are clean when they finish. We have to ask ourselves, what would our schools be like if these children did not receive these vitally important meals? In addition, if the Department of Agriculture nutrition standards for school foods sold outside of meals would be updated, our nation's schools (not just the meals program) could become a place where children's nutritional health is taken seriously.

Schools can also contribute significantly to the other major factor which leads to obesity—the lack of physical activity. Therefore, NASN recommends a stronger emphasis on school wellness policies that include necessary physical activity for all students. Throughout Maryland schools, the school nurses are joining with the physical education teachers in urging parents to "**Take 15 for the Health of It!**" Parents and guardians are encouraged to devote 15 minutes every day with their children in some form of physical activity.

Since the Child Nutrition and WIC Reauthorization Act of 2004, all school districts are required to have local school wellness policies. School nurses have a critical role in teaching about and providing healthy food choices and teaching skills and knowledge to motivate participation in lifelong physical activity. Many school nurses throughout the country are the lead person in the school for development and implementation of the wellness policy. NASN recommends that school nurses serve on **every** school and district wellness policy committee. With the help of the Congress, this could become a reality.

The child nutrition and learning link must be considered, if wellness is the goal. Longstanding and ongoing research in the area of nutrition and learning informs 21st century policymakers that the link between nutrition and academic achievement is evident and strong. Schools should be responsive to the evidence and provide all students with highly nutritious meals at school regardless of their ability to pay. Ninety-seven percent of school-age students attend school, and clearly, there is no better way to insure that children in poverty get fed foods they need to thrive and grow than to provide meals assistance and well-planned, nutritious meals at school. In addition, a recent study found that obese children have more absences than normal weight students. The school nurse role is to support children in any way that will insure that they are in school everyday and ready, even eager, to learn. Teachers and school nurses know from experience that **healthy children learn better!**

Conclusion

Speaking on behalf of NASN, I appreciate the opportunity to share experiences from my practice and what school nurses know about obesity and how to prevent it amongst school children. Our Association is happy to assist the Subcommittee further as it addresses the issues in the context of nutrition, health care and education reforms.

I also want to ensure the Subcommittee that as a national association, NASN is doing what it can to take on the responsibility of training school nurses about childhood obesity. In working on a demonstration project related to type 2 diabetes funded by CDC and the National Institutes of Health, it was recognized that school nurses are in key positions to impact this problem and to serve as catalysts for better care. Therefore, with seed money from the cooperative agreement, NASN developed a program known as S.C.O.P.E. It stands for School Nurse Childhood Obesity Prevention Education. The program has been designated a "program to watch" by the Partnership to Fight Chronic Disease because it covers the assessment, treatment, and prevention of childhood obesity and the case assessment and management for children with type 2 diabetes. The goal is to provide strategies for **every** school nurse to assist not only the students, but also the families and the school community in addressing the challenges related to obesity. Within a very limited budget, NASN has been able to train about 1,200 school nurses since the program's inception in 2006. Having public and private partners recognize the importance of school nurse involvement in obesity prevention, hopefully will allow for increased numbers of school nurses completing the training.

The childhood obesity epidemic in the United States continues to seriously threaten the health and future of our nation's youth. Working towards a solution will involve the collaboration of schools, parents, community members, health care professionals and Federal, state, and local governments. All are responsible for addressing the epidemic and serving as advocates to protect children. However, school nurses are in the unique position to serve as liaisons with the various groups to help stop the rise in childhood obesity while working on a daily basis with students to increase their understanding of how to achieve healthy lifestyles.

The CHAIRMAN. Thank you, and I want to thank all of the witnesses for being here this morning, and for your testimony.

What we will do, then, is take a recess break and convene back in an hour from now, which makes it around 12:40, and then we will proceed with the answering of questions. So at this time, we will be in recess until then, for voting. We have about 2 minutes left. We are in recess.

[Recess.]

The CHAIRMAN. The meeting will come to order. I want to begin, first of all, thank you very much for your testimony.

I have used food stamps to feed my family during difficult times, and I also appreciate you for sharing your story with us, those of us who have used food stamps or SNAP to provide for our families.

You have given us some very interesting statistics. It is truly amazing—you said that 48 percent of those with obesity utilize Medicare and Medicaid——

Ms. WOLF. No, can I clarify that?

The CHAIRMAN. Sure.

Ms. WOLF. Forty-eight percent of the costs of obesity are paid for by Medicaid and Medicare.

The CHAIRMAN. Thank you very much for clarifying that. It is still pretty high, the amount that is on the taxpayers.

Just to clarify what you said in your testimony that the benefit of education is the best way to prevent obesity. Every dollar that is spent on lifestyle intervention for people with obesity and diabetes, there is a $14.58 return on investment. In your opinion, how prevalent should lifestyle intervention for obesity be in our attempt to focus more on prevention healthcare?

Ms. WOLF. Congressman Baca, I believe that preventive effort is what we really need to put into the medical care system, and of course, we have to look at the environment and we need to do public health messaging. But right now if you look at the state of medical care, it is focused on treatment and not on the preventive part of medical care, such as lifestyle care.

In the study that was quoted right there, there was a very high return on investment. It was a smaller study, 150 people that were at high risk for diabetes and obesity, but on every major qualifier, just giving them a moderate lifestyle intervention decreased patient admissions. There was 18 admissions during a 1 year period, 16 of those were the people who had regular, usual, medical care. Only two of those admissions were people who actually got the lifestyle. You see a decrease in pharmaceutical use, you saw a decrease in absenteeism. That was significant and robust and saves dollars at every single level, and that is why you saw that positive return on investment.

Typically when we do intervene in this—in lifestyle interventions with a high-risk population, you see that it is cost effective. You may not see that high of a return on an investment, that is only one study, but you will see that it is cost effective.

The CHAIRMAN. Okay, thank you. The next question, and any one of the three can respond to this. One would go back, of course, to Ms. Wolf, and then the other one would be for Mr. Yadrick and then Ms. Mazyck as well.

What are the developmental effects of obesity in children?

Ms. MAZYCK. The developmental effects of obesity in children?

The CHAIRMAN. Yes.

Ms. MAZYCK. So you are addressing——

The CHAIRMAN. Anyone or all three of you, if you could address that, ma'am.

Ms. WOLF. Mr. Chairman, when children are developing, and they have issues with obesity, they begin to develop some of those risk factors that we heard from Dr. Dietz that generally will lead to issues with hypertension. Some of them are developing type 2 diabetes, we have heard. One of the untold—and I don't have a percentage—were the number of children who deal with bullying and the emotional effects of being overweight. That is a factor, indeed, that impacts children when they are overweight. They are unable to physically move like they would want to, and they have to suffer the teasing and the bullying from friends and schoolmates.

Mr. YADRICK. And the other thing, Mr. Chairman, is they are just setting the stage for chronic problems throughout the rest of their life. As my colleague mentioned, the inactivity that obesity often leads to is going to prevent them from having a healthy lifestyle, and starts that out early on in life, the pattern towards all the chronic diseases that are going to be a consequence of that.

The CHAIRMAN. Part of the follow-up, and Ms. Wolf, you can probably add to that, what kind of data is there on the long-term cost of these developmental problems.

Ms. WOLF. There is evidence that children who are overweight and obese later on have lower wages, there is—let me see. Of course, they have higher chronic problems which means they have higher amounts of medical expenditures and things like that. Basically what Dr. Dietz was saying, and what we find, is that when you are overweight and obese as a child, it does track along. Remember that the health care costs for obesity increase along with the severity of obesity, so these kids are tracking along all the way through. They are having a long-term level of obesity, which means they are going to have more chronic diseases. That really translates into higher medical expenses, absenteeism, and then problems with disabilities.

The CHAIRMAN. Okay, thank you. Mr. Hamburg, I appreciate the big picture, the point of view you offered in your testimony. It is critical that we on the Subcommittee remember that there are many ways that health and obesity affect Federal law and policies as a whole.

With your outlook in mind, could you expand on your ideas of a national strategy to combat obesity?

Mr. HAMBURG. Well, sure. I mean, it has become clear, certainly, in the last few years that this is a problem that affects all aspects of society, all aspects of government. So, just looking at what you all are able to insert into the farm bill, some of the decisions that need to be made around reauthorization of the education programs, transportation bill that is coming back up. You know, there are significant funds for a program called Safe Foods for Schools.

I think to best look at it from the community level—YMCA has a program called Pioneering Healthier Communities, and what they do is try to address the obesity issue in a community-wide fashion. They bring together leaders from the community that in-

cludes everyone from the police chief to the Chamber of Commerce and the schools, and public health and voluntary health associations, and try to figure out what can be done in a cumulative way to try to fight an epidemic that, again, took 30 years to manifest.

So at the Federal level, the idea that we have—first, we should have a national plan on public health overall, but specifically on obesity, we need to make sure that policies match up, that we don't have counter-intuitive policies between different agencies.

One issue that was addressed very well in a government-wide fashion in the last couple of years was pandemic flu, the possibility for a worldwide pandemic flu. The past Administration and Congress decided we need a full plan, multi-agency plan to address that. We think that is the case for addressing obesity as well.

The CHAIRMAN. Thank you. I know that my time has expired, but have you presented these ideas to the Administration?

Mr. HAMBURG. Yes, we have. We have been pushing these ideas, both in this report and also a report called "The Blueprint for a Healthier America." It is a whole blueprint of recommendations relative to how the Federal Government needs to address public health broadly, and we can certainly forward the recommendations on to this Committee. So yes, we are talking to whoever will listen, and we are certainly talking to the individuals in both Houses who are currently drafting health reform legislation. This is, indeed, a health reform and we need to make sure that prevention initiatives are front and center.

The CHAIRMAN. Thank you. I am going to turn it over to Congressman Fortenberry to ask any additional questions.

Mr. FORTENBERRY. Thank you, Mr. Chairman. I am sorry for the disruption. Thank you all for staying. All of your testimony has been very insightful and informative. It is packed with a lot of statistics, and to highlight a couple of those key findings, going back to what Chairman Baca had mentioned regarding 48 percent of the costs of obesity are born by government programs. Is this across a spectrum of Medicare/Medicaid, veterans' programs, other types of health care subsidies that are out there through the public sector of financing, or is it concentrated among Medicare and Medicaid populations?

Ms. WOLF. The analysis could only look at Medicaid/Medicare recipients, and most of that is Medicare, because of chronic illness.

Mr. FORTENBERRY. So you would suggest it is fair to say that the majority of that cost is in the Medicare program?

Ms. WOLF. It absolutely is, and there has been a more recent paper that has really shown that it is worth the government's effort to invest in preventive efforts, because the costs down the line to the government are so large, so huge, and will continue to grow.

Remember, you are paying Medicare costs this high right now. We didn't have the population of obese children that we have now, back then.

Mr. FORTENBERRY. Can you correlate, again—set your own parameters about what nutritional increase and access to nutritional education and programs in food could do in terms of combating this problem: how that is correlated to a decrease in obesity and overweight issues, correlated to better health outcomes, correlated to better disease management, correlated to increased savings. It is

the same question I had for Dr. Dietz. Give us a number, if we did this, it would translate to this in terms of cost savings, because clearly, the trajectory we are on in terms of government financed health care programs, as well as private sector is unsustainable. This is a common sense way to get underneath some of that trajectory so—yes, sir, did you want to——

Mr. HAMBURG. Yes, in a report that we put out that basically is a return on investment report and investing in community-based interventions, we need to be mindful that there are clinically-based interventions, one to one, and then community-based interventions. Most of the interventions we looked at related to obesity. There were some tobacco interventions included as well, but it was primarily nutrition, physical activity. So we looked at all of these studies for close to 80 or 90 local and national studies, and what we found was that if we invested just $10 per person—that was a conservative number, because a lot of these programs only cost a few dollars per person—but if we invested $10 per person, that is $3 billion. And that is actually what was in the initial wellness fund in the stimulus bill that came through this House. So if we put $10 per person, $3 billion, within a year or 2, we would see, first of all, a five percent decrease in a lot of these associated diseases, and in 1 to 2 years, an immediate return in investment of that $3 billion. Within 5 years, we would see $16 billion a year in savings, and those savings are to Medicare, Medicaid—actually, the biggest one was in private health insurance and out-of-pocket expense.

Mr. FORTENBERRY. That is an aggregate savings, $16 billion, or just a public——

Mr. HAMBURG. That is each year, so it builds up to a point where it is, approximately, 5.6 return for every dollar invested.

Mr. FORTENBERRY. This is anecdotal, and it is related to a question that one of our other Members had asked earlier. But in terms of rethinking a health insurance model—the largest employer in Nebraska is a health care provider, but for their own employees, they incent healthy behaviors. In other words, if you—they pay you to go to the doctor for a checkup. If you quit smoking you get, say, $500 for your health savings account. If you are 20 pounds overweight you get—I asked the CEO of that company if they had run a calculation based upon the present value of the long-term cost savings, expecting their initial cost to actually rise as they invested in these long-term measures to reduce costs, and he said yes, that is what we did and justified doing it. But ironically, we actually saw short-term costs drop as well. So their increases have basically been cut in half. They are not saving money; it is still going up, but the rate of increase of their own health care programs has been halved, compared to the national average.

So again, we tended to focus the hearing on just trying to unpack the nature of the problem, and I think we have done a good job of that. Now, the next phase is to take the testimony that we have heard here, both in terms of public programs, but also in terms of rethinking some of the mechanisms out there in the private sector that have been set up a particular way, but there might be more productive ends to it.

Do any of you have any comments on that?

Ms. WOLF. It has been shown in a couple of studies that incentives really do help promote healthy behavior, and we know that subsidies are incentives. So right now, people are paying a certain amount of money for their health care, which is very expensive to the family. If that was reduced if they had healthy behaviors, that has been proven that that is effective in getting them to create healthy behaviors, with the result of improved diet, increased physical activity, and weight loss as well. So absolutely, those studies are few and far between. We would love to see more of the health insurance companies—we have seen in North Carolina where their Blue Cross/Blue Shield has taken us on, they too have invested immediately and are spending more, however, they are finding great returns at this point.

Mr. FORTENBERRY. I think that it is an important point. There is positive data out there to quantify these potential outcomes would be helpful to spurring this type of innovation across the country.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. Since there are no other panelists here, we can ask some additional questions and then adjourn.

I just want to ask Mr. Hamburg one thing. In your testimony you referred to a community health program that costs as little as $10 per person, yet has the potential to save our nation over $16 billion in the long term. Can you explain in more detail about what this program entails, and why is it so effective?

Mr. HAMBURG. Well, what we looked at were, first of all, successful interventions, and it wasn't any one particular program. It included school health programs, efforts like Dr. Dietz talked about in educating the public through the media, putting in bike paths, stop smoking help lines, those sorts of things. So we looked at all of those and had those costed out. On average, most of those interventions, frankly, only cost $5 or $6 per person, so it is an idea that just with a small investment in trying to educate the public, trying to change some norms around physical activity and nutrition, both in schools and the worksite, is equally important. You can see these large returns on investment if you look at diabetes, for example, and the incredible rise in type 2 diabetes.

I mean, if you just have an intervention that puts more physical activities into the schools and more healthful foods within the lunch and breakfast programs, and also competitive foods through vending machines, if kids or adults lost 10 pounds, that is a dramatic change at times. And that is why you see a lot of the return in investment early on, because within a year or 2, you can take somebody pretty quickly from type 2 diabetes back to pre-diabetes or pre-diabetes even farther back just by making some very small interventions. I think that is the concept that we need to have out there, you know. You don't have to lose the 50 pounds, you don't have to run 5 miles a day. It would be nice, but you do what you can do, and small interventions can have great effects, both in health, and we are finding in economics. That is just gravy on top if we can have reduced chronic disease and save money. That is a win-win.

The CHAIRMAN. That is true. I need to lose 20 pounds, so I am going to do it a little at a time.

I know that we are running out of time. I really appreciate your patience and your time and willingness to wait for us, but as you can see, this is exit time for many of the Members. Your testimony is very important to a lot of us. Your knowledge and your research have given us a lot of hope in terms of trying to develop some good policies as we look to end obesity in America. It also helps make us more aware of both the economic and the human effects of obesity in our communities and our neighborhoods and our schools.

I want to thank each and every one of you for coming and sharing your expertise with us here. This will not be the end. We have a lot of work ahead of us, I think that we can begin, jointly, to develop in partnership and collaboration the kind of programs that we need to reshape America. I think it is our responsibility with the kind of programs and development and the kind of legislation, kind of educational programs that we can develop, and the kind of research that also needs to be done. So I thank you for being here.

And with that, I would like to say that under the rules of the Committee, the record of today's hearing will remain open for 10 calendar days to receive additional materials and supplemental written responses from the witnesses, and any questions posed by Members, which means some of us may have some questions we didn't get an opportunity to ask, so we will submit those. The hearing of the Subcommittee of the Department Operations, Oversight, Nutrition, and Forestry is now adjourned. Again, thank you very much.

[Whereupon, at 1:00 p.m., the Subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

SUBMITTED STATEMENT OF NEAL D. BARNARD, M.D., PRESIDENT, PHYSICIANS COMMITTEE FOR RESPONSIBLE MEDICINE

Mr. Chairman, thank you for the opportunity to submit testimony to the Subcommittee on the state of obesity in the United States. The Physicians Committee for Responsible Medicine (PCRM) is a nonprofit organization founded in 1985 and based in Washington, D.C. PCRM is comprised of more than 120,000 members across the country, including some 7,000 physicians, working together for preventive medicine, nutrition, and higher ethical standards in research.

For many years PCRM has worked hard to educate Americans about good nutrition and has also conducted numerous studies on nutrition. For example, in 2006, PCRM completed an NIH-funded study on the link between diet and type 2 diabetes. The findings of that study were published in *Diabetes Care,* a journal published by the American Diabetes Association, with subsequent findings published in the *Journal of the American Dietetic Association* and elsewhere.

I would like to focus my testimony on the effect that poor nutrition is having on America's children and ways Federal policy can address this growing health crisis.

Kids need healthier diets. If you could look into the arteries of children in schools, you would find that many have early signs of atherosclerosis before they pick up their high school diplomas. One in five is overweight by the end of elementary school. According to the Centers for Disease Control and Prevention, one in three children born in the year 2000 will develop diabetes at some point in his or her life.

As children grow into adulthood, cancer will eventually strike one in three females, one in two males. And as they reach older age, the same fatty, high-calorie diets that caused these health problems will increase their risk of developing Alzheimer's disease.

There are many proposed solutions to children's health problems: more exercise, less TV, more vegetables and fruits, less meat and cheese, more meals at home, and less fast food. But there is one thing everyone agrees on: Children need healthful choices at school. People who learn about healthful foods in childhood are much more likely to choose them as adults.

But schools are in a tough spot. As food prices rise, many schools rely on inexpensive commodities—many of which are high in fat and cholesterol—and may not be able to expand their menus in healthier directions. A major part of the problem is the fact that U.S. agricultural policies continue to make those foods highest in fat and cholesterol relatively cheap.

Unfortunately, the last farm bill did not adequately address the many problems with Federal commodity subsidies. Despite record deficits, Federal taxpayers continue to provide billions of dollars in subsidies to agribusinesses for the production of the unhealthiest of food products.

From a medical standpoint, I would ask the Subcommittee to help us in tackling the obesity epidemic, and to revisit the farm bill and eliminate or dramatically reduce direct and indirect Federal subsidies for high-fat, high-cholesterol foods.

Nutrition policy is another area where Congress can make a substantive impact, particularly through the re-authorization of the Child Nutrition Act. Some commonsense changes at the Federal level will help stem the rise in obesity among our children.

The most important change is a need for healthful options in school lunch lines. A few simple choices would do a world of good.

Take a veggie burger, for example. It provides exactly the same amount of protein as a typical cheeseburger—15 grams. But while a cheeseburger harbors 10 grams of fat, a veggie burger has only five, and it has no saturated fat, no cholesterol, and fewer calories.

Vegetarian chili has exactly the same protein content as chicken nuggets—10 grams per serving. But while the nuggets have 18 grams of fat, the veggie chili has only 3 grams. It, too, has essentially no saturated fat, no cholesterol, and fewer calories. Unfortunately, most school children never see these healthful vegetarian options.

President Obama's children, Sasha and Malia, attend Sidwell Friends, a private school in Washington. On February 10, 2009, Sidwell Friends' menu featured beef chili, and students looking for a healthier choice could choose vegetarian chili. However, that same day, the Washington, D.C., public schools served meatloaf with gravy, and children who wanted a healthy vegetarian option were offered nothing at all.

On February 13, 2009, Sidwell Friends served regular pizza, and roasted vegetable pizza for students who wanted a vegetarian choice. But children in the public schools were served chicken nuggets with barbecue sauce. If they wanted a vegetarian option, they got nothing.

On February 25, 2009, Sidwell Friends served regular shepherd's pie and vegetarian shepherd's pie. Public school children were served bologna and cheese sandwiches. If they wanted a healthy, vegetarian option, they got nothing.

A child in public school has a right to a healthful lunch, just as a child in private school does. But most schools will only provide these choices if Congress pushes them to do so—and provides the wherewithal to make it happen. Schools should offer vegetarian choices every day, and they should also have the funding that makes it feasible for them to do so.

The following changes should be part of the new legislation:

1. All schools participating in the National School Lunch Program (NSLP) and School Breakfast Program (SBP) must provide a nondairy, vegetarian meal option and a healthful nondairy beverage.

2. Calcium-rich nondairy beverages should be considered as satisfying the milk requirement in fulfilling the definition of reimbursable meals. Whether due to lactose intolerance, allergy, ethics, or taste preference, a student who desires soy milk instead of cow's milk should not need a note from home or a doctor.

3. Reimbursement rates for NSLP and SBP should be increased by 20 percent for exemplary schools with meal averages as follows: saturated fat <7%, cholesterol <100 milligrams, and fiber >7grams.

4. Commodities should be selected based on current scientific evidence about the role of diet in health and illness. The commodity program should include no products with more than 7% energy from saturated fat.

5. In order to allow schools to provide more healthful meals, the calorie minimum required for meals shall be reduced. Currently, meals for grades K through 3 must average at least 633 calories. For grades 4–12, these figures are 785 calories. These figures are too high.

These changes would go a long way in improving the health of our children and addressing the obesity epidemic.

Thank you for your consideration.

SUBMITTED STATEMENT OF LUANN HEINEN, M.P.P., DIRECTOR, INSTITUTE ON THE COSTS & HEALTH EFFECTS OF OBESITY; VICE PRESIDENT, NATIONAL BUSINESS GROUP ON HEALTH

The Cost of Obesity to U.S. Business

The National Business Group on Health (Business Group) thanks the Subcommittee on Department Operations, Oversight, Nutrition and Forestry of the House Committee on Agriculture for the opportunity to submit these recommendations as our written testimony for the public hearing to review the state of obesity in the United States on March 26, 2009.

Founded in 1974, the Business Group is a member organization representing over 300 members, mostly large employers, who provide coverage to more than 55 million U.S. employees, retirees and their families and is the nation's only non-profit organization devoted exclusively to finding innovative and forward-thinking solutions to large employers' most important health care and related benefits issues. Business Group members are primarily Fortune 500 companies and large public sector employers, with 64 members in the Fortune 100.

Employers and employees fund health care in the U.S. by (1) paying claims (larger, self-insured employers) or insurance premiums (smaller, fully insured employers), and (2) paying corporate and individual income taxes for Medicare and other public programs. The costs to both employers and employees are significantly higher because of obesity, a key factor in escalating health costs due to type 2 diabetes, heart disease, some cancers, and many other conditions.

The great majority of employers want to continue sponsoring health care for employees and their families, a key feature of leading health reform proposals. However, a recent survey of nearly 500 large employers identified "employees' poor health habits" (physical inactivity, poor diet, tobacco use) as by far their greatest challenge in providing affordable health coverage.[1] This helps explain why the great majority of members of the National Business Group on Health (representing Fortune 500 employers) offer wellness and health promotion programs at work.

---

[1] The Keys to Continued Success: Lessons Learned from Consistent Performers. 14th Annual National Business Group on Health/Watson Wyatt Employer Survey, 2009.

Direct and Indirect Costs of Obesity to Employers Are Substantial

Obesity costs employers about $45 billion annually in medical costs and lost productivity.[2] The Federal Centers for Disease Control and Prevention estimate that obese employees cost employers at least $4 billion each year in lost productivity alone, and that these employees typically are absent from work twice as often as other employees. In total, the obesity contributes to nearly 10% of healthcare spending in the U.S., or as much as $93 billion annually.[3]

The direct medical costs of obesity are significant and measurable; several published studies and employers' own data easily demonstrate an increase in spending roughly correlated with increasing Body Mass Index (BMI). It is especially noteworthy that an estimated 27% of the year-over-year increase in health costs to private employers is attributable to obesity;[4] obesity is thus one of the key reasons why the trend in U.S. health costs is persistently steeper than the CPI or even the medical inflation index.

Obesity is the leading "lifestyle-related" or "modifiable" risk factor; it is more significantly associated with chronic medical conditions, reduced health-related quality of life, and increased health and medication spending than either smoking or problem drinking.[5]

This helps explain the impact of obesity on productivity; when quantified, these so-called indirect costs of obesity are as much as three times as great as the direct medical costs. Obesity generates indirect costs for employers by increasing workers' compensation claims and related lost workdays,[6] absenteeism,[7] presenteeism,[8] and disability in people aged 50–69.[9] Even without counting the cost of presenteeism (a self-reported measure of diminished on-the-job work performance due to health or life problems) which is not universally measured, productivity costs attributable to obesity are highly significant.

Obesity Rates Becoming a Workforce Differentiator

A Texas legislator tells the story of an employer who refused to relocate to his Congressional district because of the high rate of obesity in those counties. By contrast, the Metro Denver website promotes Colorado as the state with the lowest rate of obesity, claiming "while no state is immune to rising obesity rates, we're curbing the gradual expansion of our waistlines by re-adjusting our culture. Under the leadership of the Metro Denver Health and Wellness Commission, Metro Denver is aiming to become America's Healthiest Community by instituting strategies that support worksite wellness, school policy, and the creation of interlinked, walkable communities."[10]

In addition to competing at the macro level, we see plenty of competition among employers at the individual employer level for recognition as employers of choice. The National Business Group on Health has given 148 "Best Employer for Healthy Lifestyles" awards to some of America's healthiest corporations over the last 4 years. Major strategies employed by employers to improve employee and family health include: comprehensive benefits with healthy lifestyle incentives; environmental (nutrition and physical activity) support for healthy lifestyles; the fostering of an organizational culture of health; and outreach to family members and the community. These strategies are fully described in a recent publication provided to the Subcommittee (*The Milbank Quarterly March* 2009 special edition on Obesity; see especially Heinen and Darling, "Addressing Obesity in the Workplace: The Role of Employers").[11]

---

[2] Finkelstein, E., Fiebelkorn, I. and Wang, G. *National Medical Spending Attributable to Overweight and Obesity: How Much, and Who's Paying?* HEALTH AFFAIRS Web Exclusive, May 14, 2003.

[3] *cdc.gov/nccdphp/dnpa/Obesity/economic__consequences.htm.*

[4] Thorpe, K. *et al. Trends: The Impact of Obesity on Rising Medical Spending.* HEALTH AFFAIRS Web Exclusive, October 20, 2004.

[5] Sturm, R. *The Effects of Obesity, Smoking and Drinking on Medical Problems and Costs.* HEALTH AFFAIRS 21(2): 245–53, 2002.

[6] Osbye, T. *et al. Results from the Duke Health and Safety System.* ARCHIVES OF INTERNAL MEDICINE 166(8):766–73, 2007.

[7] Finkelstein, E. *et al. The Costs of Obesity Among Full-Time Employees.* AMERICAN JOURNAL OF HEALTH PROMOTION 20(1):45–51, 2005.

[8] Ricci, J. and Chee, E. *Lost Productive Time Associated with Excess Weight in the U.S. Workforce.* JOURNAL OF OCCUPATIONAL AND ENVIRONMENTAL MEDICINE 47(12): 1227–34, 2005.

[9] Sturm, R. *et al. Increasing Obesity Rates and Disability Trends.* HEALTH AFFAIRS 23(2): 199–205, 2004.

[10] *www.metrodenver.org/market-differentiators/health-wellness.html.*

[11] Heinen, L. and Darling, H. *Addressing Obesity in the Workplace: The Role of Employers.* THE MILBANK QUARTERLY 87(1):101–122, 2009.

The Next Generation: Impact on Employers (and Society) Will Be Significant

As concerned as employers are about the health and cost consequences of America's lifestyle today, the problems of tomorrow's workforce may eclipse anything seen to date. The Millennial generation (born between 1980 and 2000) is one of the largest ever—and they are the unhealthiest in modern history. Seventy-five million strong, this generation is now entering the workforce. Commonly described as ambitious, confident, and "not willing to take no for an answer," they also overwhelmingly sedentary, choosing the array of high-tech entertainment options available to them over regular, vigorous physical activity. Raised with low-cost calories freely available 24/7, they consume more calories per day on average than previous generations.

Currently 32 percent of children and adolescents are overweight or obese, with 16.3 percent possessing a BMI in the obese range.[12] As the Millennials age and these trends continue, it is projected that a staggering 86 percent of Americans will be overweight or obese by 2030.[13]

According to the 2007 Youth Risk Behavior Survey,[14] among U.S. high school students:

- 13% are obese; adolescent obesity has more than tripled in the past 25 years.
- Nearly 80% do not consume the recommended amount of fruits and vegetables.
- More than ⅓ drink at least one can of soda each day.
- 65% do not achieve the recommended amount of daily physical activity.
- More than 10% do not engage in any physical activity.
- 35% watch 3 or more hours of television each day.
- 25% play video games or use a computer recreationally for more than 3 hours each day.
- 45% are attempting to lose weight.

It is sobering to realize that this generation will comprise a significant portion of the workforce in a few short years and is on track to further burden U.S. employers and health care payers, whether they be public or private, with their poor health status and associated costs.

The evidence so far suggests the Millenials will carry their risky health habits into the workforce. A 2007 Nationwide Better Health survey [15] found:

- 22 percent of 18–27 year-old employees eat an unhealthy snack at work at least five times each week. This compares to nine percent of those over age 45.
- 27 percent of those 18–27 report a sedentary job, sitting at a desk most of the day.
- 35 percent of those under age 27 indicate that stress leads to adverse nutritional choices.

Due to declining health status over the course of this century, life expectancy in the U.S. could drop by 5 years or more.[16] Further, a Rand Corporation analysis revealed that, in recent years, 30–39 year olds have experienced the sharpest rise in disability rates of any age group—increases upwards of 50 percent.[17] New research projects an additional 100,000 annual cases of heart disease by 2035 if obesity rates are not brought under control.[18]

All of this translates into an additional $956 billion each year in medical costs by about 2030. Simply put, ***within two decades, one of every $6 spent on health care in the United States could be attributable to overweight and obesity.***[19]

Policy Can Support Healthier Weight, and a Healthier Economy

To change course and avert these dismal scenarios, we must acknowledge the threat posed by obesity to our common purpose and react accordingly. Every em-

---

[12] Ogden, C. *et al. High Body Mass Index for Age Among U.S. Children and Adolescents, 2003–2006.* JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION 299 (20):2401–2405, 2008.

[13] Wang, Y. *Will All Americans Become Overweight or Obese?* OBESITY 16(10): 2323–2330, 2008.

[14] *www.cdc.gov/HealthyYouth/yrbs/pdf/yrbs07_us_obesity.pdf.*

[15] *www.nationwidebetterhealth.com/docs/media-kit/obesity-in-workplace.pdf.*

[16] Olshansky, S.J. *et al. A Potential Decline in Life Expectancy in the United States in the 21st Century.* NEW ENGLAND JOURNAL OF MEDICINE 352(11): 1138–1145, 2005.

[17] Lakdawalla, D. *et al. Are the Young Becoming More Disabled?* HEALTH AFFAIRS 23(1): 168–176, 2004.

[18] Bibbens-Domingo, K. *Adolescent Overweight and Future Adult Coronary Heart Disease,* NEW ENGLAND JOURNAL OF MEDICINE 357(23): 2371–9, 2007.

[19] Wang, Y. *et al., op. cit.*

ployer and policymaker should understand that as a nation we are already paying for the medical costs and lost productivity costs of serous overweight and obesity. Thus it is directly in our financial interest to support policy to improve the health of employees and families.

In general, policymakers should view proposed policies and programs through the lens of "obesity impact." Just as environmental assessment is often part of laws and regulations at the state and Federal level for new energy projects, a required obesity impact assessment could focus the attention of lawmakers and organizations seeking Federal funding on this problem. Obesity impact assessments would be especially relevant to food and farm policies along with housing, urban development, public works, transportation and other projects affecting the built environment and the promotion of "livable" communities which offer walking, biking and recreational opportunities.

We must reform the tax code to reward and incentivize health and wellness and not just subsidize treatment of disease as our current tax laws do. We must make it easier for employees to participate in employee wellness programs, including weight management and weight loss programs, and to make it easier for employers of all sizes—small, medium, and large—to administer employee wellness programs by making a small change in the tax code to treat out-of-pocket expenses for health and wellness the same as it does for expenses for medical care.

While current tax law allows employers to deduct all of their costs toward employee wellness as business expenses, generally the value of employer contributions to employees for these purposes must be reported as income subject to taxation by employees—including payment for fitness, nutrition, and weight management programs—unless they are part of medical treatment.

Employees should be able to use pre-tax dollars (including through Section 125 cafeteria plans, HSAs, and FSAs) to pay for health and wellness activities, programs and purchases, including for fitness, nutrition, and weight-management programs. Employer contributions toward employee expenses for health and wellness, activities, programs and purchases should be excludable from income for tax purposes. People should be allowed to deduct post-tax out-of-pocket expenses for health and wellness activities, programs, and purchases from their taxes irrespective of whether it is for medical and treatment or for wellness, health maintenance or disease prevention if their total health care expenses meet the 7.5 percent adjusted gross income threshold for health care expenses.

Extending favorable tax treatment for employer-contributions to pay for employee health and wellness programs would remove a major barrier to more widespread adoption of these programs and lead to a healthier America.

Just as employers who subsidize employee cafeterias should only subsidize fruits, vegetables and other foods that would otherwise not be consumed at the recommended levels of daily intake, so should the Federal Government limit its subsidies to the types and classes of foods essential to a healthy diet that are currently under-consumed, particularly fruits and vegetables. Food stamp, WIC and other Federal aid should encourage the purchase of healthy, nutrient-rich foods and beverages; unprocessed or minimally processed foods; whole grains; fruits; and vegetables.

Support for locally grown produce (*e.g.,* in school lunch programs), farmers markets, tax subsidies for inner city grocery stores and other approaches to eliminate so-called "food deserts" where access to healthful foods is lacking are particularly worthwhile and should be encouraged.

Thank you for the opportunity to share the perspective of large employers on the obesity cost crisis. We believe it is essential to combat the tsunami of obesity that threatens to overwhelm us. In terms of lifetime and generational impact, obesity has ramifications that go even beyond those associated with the current economic crisis. The National Business Group on Health welcomes further dialogue with the Subcommittee on this or related matters.

National Business Group on Health contacts:

LuAnn Heinen,
Vice President, Obesity Institute,
[Redacted] or [Redacted];

Steve Wojcik,
Vice President, Public Policy,
[Redacted] or [Redacted];

Helen Darling,
President,
[Redacted] or [Redacted].

SUBMITTED STATEMENT OF CAMPAIGN TO END OBESITY

The Campaign to End Obesity ("The Campaign") is a nonprofit, nonpartisan organization dedicated to reversing the rising rates of obesity through Federal policy action. The Campaign is the only organization that brings together leaders in public health, academia, and industry to promote common policy goals for stemming the nation's obesity epidemic (a list of our Board and Advisory Board Members are attached). We commend the Health, Education, Labor, and Pensions Committee for its commitment to helping Americans live healthier lives. The Campaign looks forward to continuing to work with the Committee to assist in developing and advancing policies that enable better prevention, identification, management and treatment of obesity.

A Crisis We Cannot Afford to Ignore

Obesity is now the most costly and prevalent chronic disease affecting American adults and children, and the single most dangerous driver of every other chronic disease afflicting our nation. Eighty-three cents of every dollar spent on U.S. health care costs is associated with obesity, and that number continues to grow as the epidemic triggers greater incidence of costly chronic diseases like heart disease, cancer and diabetes. Today, nearly 33 percent of the American adult population is obese, more than double what it was in 1980.[1] Likewise, an astonishing 16.3 percent of children are considered overweight or obese.[2]

The obesity epidemic has brought other tolls as well: children with obesity suffer from a growing list of emotional disorders such as depression, social stigmatization, and poor academic performance; employees with obesity cost private employers $45 billion a year due to medical expenses and excessive absenteeism;[3] and, Americans with obesity face lower quality medical care as the current infrastructure may be inadequate to diagnose, monitor and treat them.

Working Together Toward Solutions

How can we begin to reverse the tide on rising obesity rates across the country? Families, communities, local, state, and the Federal Government all must take a leadership role to fight this perilous epidemic to improve the health of the American people and reduce the ever-growing costs of this deadly disease on our health care system.

The Campaign's leadership believes that, if powerful interests work together, we can drive the national policy change needed to achieve the goal of reducing obesity rates. The Campaign urges policymakers to work actively in the current Congress to adopt the following new and aggressive policies that will create a framework to encourage better nutrition and more healthful living:

- **Improve the Federal Apparatus for Addressing Obesity**
  - Prompt the Executive Branch to convene one or more high profile events or commissions to highlight the importance of a Federal response to U.S. rates of obesity.
  - Create an Executive Branch function to focus on obesity, *i.e.,* a coordinator across health agencies.
  - Launch public awareness efforts to educate key constituencies about risks, resources and prevention/treatment options.
  - Mandate that Executive Branch and/or legislative actions be considered with respect to their impact on efforts to reduce obesity.
- **Bolster Access for Americans to an Environment That Helps Reduce Their Prospects of Becoming Obese**
  - Expand the infrastructure to facilitate and encourage increased physical activity in communities and schools;
  - Incent or require increased physical activity for children during the school day; and
  - Increase access to healthy nutrition for children by providing incentives.

---

[1] Fox, Maggie. "Obese Americans Now Outweigh the Merely Overweight." Reuters. January 9, 2009. *http://www.reuters.com/article/domesticNews/idUSTRE50863H20090109.*

[2] Ogden, C.L., M.D. Carroll, and K.M. Flegal. "High Body Mass Index for Age among U.S. Children andAdolescents, 2003–2006." *Journal of the American Medical Association* 299, no. 20 (2008): 2401–2405.

[3] Rosen, B. and L. Barrington. *Weights & Measures: What Employers Should Know about Obesity.* New York, NY: The Conference Board, April 2008.

We commend Congress for already acting this year on one of the Campaign's priorities: including a childhood obesity demonstration project in the SCHIP reauthorization bill. Authorizing grants to community organizations across the nation to develop programs that encourage healthy living is a step in the right direction to preventing obesity, particularly as it affects one of our most vulnerable populations—children of economically disadvantaged homes.

The Campaign believes that the 111th Congress is presented with a unique opportunity to make real reforms to give Americans a chance for a better, healthier weight and life. We look forward to working with Congress and the new Administration to achieve these reforms. Please contact Noelle Lundberg ([Redacted]) or Jennifer Conklin ([Redacted]) with any questions.

ATTACHMENT 1

805 15th Street, NW, Suite 650, Washington, DC 20005
202-466-8100 • www.obesitycampaign.org

Board of Director Members

Brad Figel
Global Director, Public Affairs and Government Relations
NIKE, Inc.

Dr. Elena Rios
President and CEO
National Hispanic Medical Association

Dr. John Whyte
Chief Medical Expert
Discovery Health Channel

Dr. Lee Kaplan
Associate Chief of Research, Gastroenterology
Co-Director, Center for the Study of Inflammatory Bowel Disease
Director, Weight Center
Massachusetts General Hospital

Karen Licitra
Company Group Chairman, Ethicon Endo-Surgery
Johnson & Johnson

Mark Schoeberl
Executive Vice President, Advocacy
American Heart Association

Stephanie Silverman
Principal
Venn Strategies, LLC

AnnaMaria DeSalva
Worldwide Director of Healthcare
Hill & Knowlton, Inc.

Heidi Margulis
Senior Vice President, Government Relations
Humana Inc.

ATTACHMENT 2

805 15th Street, NW, Suite 650, Washington, DC 20005
202-466-8100 • www.obesitycampaign.org

In light of the tremendous social, economic and health costs to the nation of current obesity rates, the Campaign to End Obesity was formed to bring together leading interests from industry, public health, academic and social advocacy organizations to promote federal policy changes that can reverse dangerously high U.S. rates of adult and childhood obesity.

The Campaign was launched in 2007 as a follow-on to the National Summit on Obesity Policy, at which 100 leading organizations – including many of the Campaign's current participants - formulated a consensus agenda for reducing obesity through changes to U.S. policies in the areas of nutrition, physical activity and health care delivery.

The following organizations currently serve on the Campaign **Advisory Board**:

AARP
American Cancer Society
American Diabetes Association
American Dietetic Association
American College of Gastroenterology
American Heart Association
Amerinet, Inc.
Arena Pharmaceuticals
Center for Science in the Public Interest
Discovery Health Channel
Disease Management Association of America:
The Care Continuum Alliance
First Focus
STOP Obesity Alliance/GW University
Great Moves!
Healthcare Leadership Council
Humana
International Health, Racquet & Sportsclub Association
Johnson & Johnson

Leadership for Healthy Communities
National Association of Chronic Disease Directors
National Association of Sport and Physical Education
National Coalition for Promoting Physical Activity
National Hispanic Medical Association
National Medical Association
National Park and Recreation Association
Nemours Div of Health and Prevention Services
NIKE, Inc.
Partnership for Prevention
PhRMA
Shaping America's Health
Sporting Goods Manufacturers Association
Trust for America's Health
University of Wisconsin Medical Foundation
YMCA of the USA

○