

**CHILDHOOD OBESITY: THE DECLINING HEALTH
OF AMERICA'S NEXT GENERATION—NATIONAL
PROBLEM, SOUTHERN CRISIS**

FIELD HEARING

BEFORE THE

SUBCOMMITTEE ON CHILDREN AND FAMILIES
OF THE

COMMITTEE ON HEALTH, EDUCATION,
LABOR, AND PENSIONS

UNITED STATES SENATE

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

ON

EXAMINING CHILDHOOD OBESITY, FOCUSING ON THE DECLINING
HEALTH OF AMERICA'S NEXT GENERATION—NATIONAL PROBLEM,
SOUTHERN CRISIS

OCTOBER 23, 2008 (Nashville, TN)

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(II)

C O N T E N T S

STATEMENTS

THURSDAY, OCTOBER 23, 2008

	Page
Alexander, Hon. Lamar, a U.S. Senator from the State of Tennessee, opening statement	1
Riley, Wayne, M.D., M.P.H., MBA, FACP, President, Meharry Medical College, Nashville, TN, statement	1
Cooper, Susan R., M.S.N., R.N., Commissioner, Tennessee Department of Health, Nashville, TN	5
Prepared statement	8
Barkin, Shari, M.D., MSHS, Director of Pediatric Obesity Research, Diabetes Research Training Center Professor of Pediatrics, Monroe Carell, Jr. Children's Hospital at Vanderbilt, Nashville, TN	12
Prepared statement	14
Tropez-Sims, Susanne, M.D., M.P.H., Associate Dean of Clinical Affiliations and Professor of Pediatrics, Meharry Medical College, Nashville, TN	16
Prepared statement	18
Griffin, David, Participant, Season 4 of NBC's "The Biggest Loser," Cedar Hill, TN	20
Prepared statement	23

(III)

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HEALTH OF AMERICA'S NEXT GENERATION
—NATIONAL PROBLEM, SOUTHERN CRISIS**

THURSDAY, OCTOBER 23, 2008

U.S. SENATE,
SUBCOMMITTEE ON CHILDREN AND FAMILIES, COMMITTEE ON
HEALTH, EDUCATION, LABOR, AND PENSIONS,
Nashville, TN.

The subcommittee met, pursuant to notice, at 10:10 a.m., at Meharry Medical College Library, S.S. Kresge Learning Resource Center, 1005 Dr. D.B. Todd Jr. Boulevard, Nashville, TN, Hon. Lamar Alexander, presiding.

Present: Senator Alexander.

OPENING STATEMENT OF SENATOR ALEXANDER

Senator ALEXANDER. The Subcommittee on Children and Families will come to order.

We're delighted to be at Meharry. First, I'd like to recognize Dr. Wayne Riley, who is the president of Meharry, who is a friend, and who is here.

Thank you for letting us be here, Dr. Riley.

**STATEMENT OF WAYNE RILEY, M.D., M.P.H., MBA, FACP,
PRESIDENT, MEHARRY MEDICAL COLLEGE**

Dr. RILEY. I'm very honored—well, good morning, all. Senator, we're honored to have you with us. I just want to thank you for being here, but also thank you for your support of Meharry Medical College.

Senator Alexander has been very instrumental in securing funds through the earmark process for the renovation of this library, and I hope that the next time you come, Senator, we will have transformed this library, with the support that you were able to secure for us, plus our own resources. This is one of my major capital projects since becoming president on January 1, 2007, which is to transform Meharry Medical College Library. I'd like to thank you and your staff for the excellent support.

We're proud of Meharry. We are delighted that we could play a role in discussing a major issue facing Americans, and that is the increasing incidence and prevalence of obesity, particularly with emphasis on children.

Senator, we appreciate your leadership in the U.S. Senate, and we look forward to working with you for many years.

Thank you.

Senator ALEXANDER. Thank you, Dr. Riley. I appreciate your leadership.

One of my favorite stories is that people sometimes ask me, "What is more difficult, being Governor of a State, a member of the President's Cabinet, or president of a university?" and I always say, "Obviously, you've never been president of a university, or you wouldn't ask a question like that"—

[Laughter.]

Senator ALEXANDER [continuing]. Because it's a real challenge. And you do a great job. We're tremendously proud of Meharry and its history and reputation and service to our community and to our country every year.

Before we start, I want to thank Mary-Sumpter Johnson and Sarah Rittling, of my staff, who have worked hard on this hearing and done a great job. I want to observe that, while we're going to do a lot of changing, here—this is a great place to have a hearing like this—here's the way we'll proceed. I'd like to make a brief opening statement, and then I'll go to our four distinguished witnesses and ask them to summarize their testimony in 5 or 6 minutes, and then we'll have a conversation back and forth on the subject we're talking about today.

This is the third hearing by the Senate Subcommittee on Children and Families on this subject. Senator Dodd of Connecticut is the chairman of the committee, and I am the ranking Republican member, and we've worked together on children and family issues over the last 6 years. Part of that time, I was chairman, and part of the time he was ranking member. It depends upon what the voters have to say in elections. We work in a bipartisan way, and one of the issues that we worked on successfully was the so-called PREEMIE bill, which we worked on with the March of Dimes, to advance research and study and support for the question of premature babies and why they're born. It struck me, in studying for this hearing—and I was talking with some of our witnesses about it—in the case of premature babies, in about half the cases, we don't know why they're born premature. A lot of what we have to do is to try to understand that. In the case of childhood obesity and why the children are likely to live less longer than their parents today, we pretty well know the problem, and we know what's happening, and we're going to talk about that today. So, we have to figure out, then, what to do about the problem.

In a way, we should be a little ahead of the curve if we understand the problem. I think I'm right about that, at least; we'll find out in the testimony. A lot of the effort that we have to make is, then, What do we do about the problem? What are the tactics that we need?

We're at a time in our history—and I remember about 2 years ago, a physician said to me that this is the first generation of children who are expected to live shorter lives than their parents. It made me stop—it was such a dramatic statement that I went back to my staff, to Sarah and to Mary-Sumpter and said, "Go check that. I don't want to go say that in public if that's an exaggeration or inaccurate or something that might not be true." What we've found is that that's exactly the case. In the *New England Journal of Medicine*, and the publications of the Institute of Medicine, and

the Trust for America's Health, say that, generally speaking, for the last 1,000 years, children have lived longer lives than their parents, but children born in the year 2000 are expected to live shorter lives.

It's a real healthcare crisis. One of the biggest reasons for this crisis is what we call "childhood obesity." The increasing rate of diseases that normally have been associated with adults—type-2 diabetes—are now being found in children. I'm hopeful that—Commissioner Cooper, I think you're the first witness—maybe you can take a minute at the beginning and just explain what type-2 diabetes is and why it's different. Others may want to talk about that. I don't want to jump right into this subject, just assuming everybody knows what we're talking about, when, in fact, many people don't.

It's especially important in Tennessee, because Tennessee is the third most obese State in the year 2007, and one out of every three children born are likely to be overweight. Twenty percent of Tennessee's children, overall, are overweight.

We'll hear from our witnesses about the significant increases in this condition. One is that, over the last 40 years, obesity rates have quadrupled for children from the ages of 6 to 11 years, and tripled for adolescent ages 12 to 19 years. It's prevalent among children and youth throughout the entire population. Everybody's children. Hispanic, nonHispanic, black, and Native-American children and adolescents are disproportionately affected when compared to the general population.

This affects, of course, millions of children, and potentially will cost billions of dollars for us to deal with. What we're doing here today, in this third of a series of hearings, is to explore, "What can the Federal Government do to create solutions to this healthcare crisis?" Let's get on the upside of it and see if, over the next 10 years, we may begin to reduce it as a crisis and save millions of lives, help them live longer than their parents, and save billions of dollars, which we could use in this country for other purposes.

One of the things that struck me in the hearing was Commissioner Cooper's goal—and it may be the goal of others, as well—a good goal would be for high-school students to graduate in the year 2018 with a healthy weight. You have a report card for physics, and you have a report card for chemistry. You would know what a healthy weight would be, and you could aim for that goal. As the late Chet Atkins used to tell us, "You have to be mighty careful, in this life, where you aim, because you're likely to get there." I like that a lot better than talking about obesity, because you don't want to just walk up to someone and say, "You're overweight, you're too fat, you're obese." That's not a good way to start a conversation. That's not a good way to challenge people to improve very much. The same with illiteracy; we don't just walk around labeling people with illiteracy. Or, take the issue of the No Child Left Behind law; it's caused us to label schools, although they're not officially labeled in the law this way, as failing schools. You pick up the newspaper, and you hear that a school in Nashville is failing. I'd like to change the way we talk about schools in No Child Left Behind, to say, "Here are the schools that have succeeded, and here are the schools that have succeeded even more.

Then there are some with more work to do.” That’s the way we do everything else. We give you an A or a B or a C, and then some people have a little extra work to do.

In the case of obesity, I think we need to find a way to talk about it to each other on the street and in the school or in the home. I can see families and public policymakers and elected officials talking about, “Let’s have a healthy weight for every child. We know the importance of it. Let’s marshal every single thing we can think of to do to cause that.”

Our witnesses today are a very distinguished group. One reason we’re having this hearing is because Tennesseans are such good examples and—well, all of you are good examples and are experts on our subject. I won’t go through the whole history of each witness, but let me introduce all four, in brief to start with, and then we’ll go right down the line with their comments, and then have a conversation.

Susan Cooper is commissioner of the Tennessee Department of Health here. Tennessee is one of the three States with the biggest problem in obesity, and it’s also one of a handful of States that is doing the most about it. A lot of that is due to Commissioner Cooper and Governor Bredesen, and I commend them for that. She is a special—she made a little history, because she became the first nurse to serve as the commissioner of the Tennessee Department of Health, and she assumed leadership of Project Diabetes, a program of Governor Bredesen created to address type-2 diabetes. She’ll tell us more about their initiatives. She was born and raised in west Tennessee.

Dr. Shari Barkin is director of Pediatric Obesity Research at the Diabetes Research Training Center at Monroe Carell Children’s Hospital at Vanderbilt University. Dr. Barkin is also a National Institute of Health-funded researcher. She’s made many contributions there. She’s focused much of her work on pediatric obesity, children who are overweight, looking at prevention and early intervention approaches. She’s also a clinician, which means she works every day with children and families who are trying to deal with this problem. We look forward to her contribution.

Dr. Susanne Tropez-Sims is associate dean of clinical affiliations and professor of pediatrics at Meharry Medical College, where we are today. She’s focused her research on faculty development, HIV/AIDS prevention in adolescents, and correlations of infant obesity as related to the mother’s obesity. She’s received her M.D. at Chapel Hill, where she continued her internship and residency in pediatrics. She’s a native of New Orleans.

David Griffin is the celebrity here today. David Griffin was a participant on Season 4 of NBC’s “The Biggest Loser.” He’s currently the spokesman for “Get Fit Tennessee.” Originally from Cedar Hill, TN, his role as husband and father of four children inspired him to appear on the show. David is about 6 feet tall, and he went from weighing 368 pounds to, today, it says here, 228 pounds. That’s losing a total of 140 pounds and 38 percent of his total body weight. All of us are envious, and I’ll look forward to hearing more from him—

[Laughter.]

Senator ALEXANDER [continuing]. And congratulate him on his excellent example.

Commissioner Cooper, let's begin with you and go right down the line, then we'll go forward.

STATEMENT OF SUSAN R. COOPER, M.S.N., R.N., COMMISSIONER, TENNESSEE DEPARTMENT OF HEALTH, NASHVILLE, TN

Ms. COOPER. Thank you, Senator Alexander. I'm certainly thrilled to be with you today to really have a conversation about the leading health risk facing the children of Tennessee and our Nation, pediatric or childhood obesity.

As you said, I'm a registered nurse and the commissioner of health, and I'm also a mother of three and a grandmother of three. Nothing is more important to me than the health of our children.

As commissioner, my job is to protect, promote, and improve the health of all that live in, work in, or visit our great State. It's really important for us to have this conversation about our children.

We're facing a public health threat of an unprecedented nature. It is absolutely unacceptable to me that of the children born in the year 2000, that they would be the first generation in history not to live as long as their parents. We've heard some of the statistics today. Certainly, I think, we've talked about the obesity rate, but also, when you start thinking about type-2 diabetes, those same children born in the year 2000, one in three are anticipated to develop type-2 diabetes, a disease that used to be called "adult-onset diabetes," because we never saw it in children. Then, if you happen to be African-American or Hispanic, that number is one in two. Think about walking through a cafeteria line in any of our schools in Tennessee and looking at the children standing there, and say, "One, two, three, you're it."

Let me tell you what a life with type-2 diabetes would look like. You will become blind. You may lose a leg. You may have end-stage renal disease that will require you to receive kidney dialysis or have need for a transplant. Oh, by the way, heart attacks and strokes are just going to be part of the norm. Unacceptable. Not for these children.

Unfortunately, 8 of the 10 States with the highest obesity rates are found in the South. Twenty percent of our 10- to 17-year-olds are overweight, the fourth highest rate in the Nation. We believe that number is really under-reported. We've done screening, through our coordinated school health program, and it looks like 42 percent of our children are either overweight or at risk of being overweight. Again, that is unacceptable.

This epidemic, if left untreated or partially treated, as we do sometimes in our clinical work, will result in substantial costs to the State and to the Nation, both in health and economic terms. Obesity is associated, as we've said, with a number of chronic diseases, along with, not just the physical diseases—we see effects to the mental health of our children, as well.

From an economic perspective, overweight and obese adults cost the United States between \$69 and \$117 billion on an annual basis. The costs of childhood obesity are growing, as well. Between 1979 and 1999, that grew from \$35 million to \$127 million spent

on hospitalization costs. This State and this country cannot sustain the economic or health impacts, and we must take action immediately to halt this epidemic. Please understand that stemming the tide of childhood obesity requires that we start to shift our conversation solely from a focus on the care end of healthcare to the health end of healthcare. There's a difference between health and healthcare, and we must take a proactive prevention-focused approach to health.

As a Nation, if we were to make just a modest investment into preventive health strategies, if we invested \$10 per person in this Nation each year in proven community-based programs to increase physical activity, improve nutrition, and prevent smoking and other tobacco use, we could save this country more than \$16 billion a year. Of course, that's about a return of \$5.60 for every dollar we spend. I would respectfully say that, you know, if you invested just 1 percent of that \$16 billion into health—health, not healthcare—we could really change the tide of what we're looking at today.

As you said, the Department of Health really does believe that we can reach the goal of every child graduating in 2018 of being at a healthy weight. No one agency or entity can be responsible, in isolation, for finding the remedies that we need to address the issue. We're going to have to have governmental responses, industry responses, media, community, schools, and individuals all to commit to prevention efforts and to dissemination of promising practices.

I want to just briefly speak about Tennessee's approach. I have my chief medical officer, who's going to be the computer-whiz extraordinaire over here, in just a moment.

Tennessee's approach has really been to look at programs, policies, partnerships, and innovation, and the efforts tend to be paying off. In 2006, the Obesity Initiative from the University of Baltimore gave six States in this Nation a grade of A—and I love talking about good news—for their legislative and public policy work around childhood obesity, and Tennessee actually was one of those six States.

Some of our policies are found across a multitude of our agencies in—that's the collaborative focus we're taking. In health, we have the Childhood Wellness and Nutrition Act, where we have developed an Office of Childhood Wellness and Nutrition within the Department of Health, and our goal is really to create a State plan for addressing the childhood obesity efforts here. We also have the Diabetes Prevention and Health Improvement Act, and we've invested \$22 million of State-only dollars to fund community-based initiatives that will focus on the prevention and/or treatment of type-2 diabetes.

In finance and administration, we are the only State in the Nation that has insurance plans that said, "You know, preventive health is important, so instead of risking you on what you pay, based on—do you have heart disease or do you have diabetes—we use age, weight, and tobacco usage to determine what your premium cost will be."

In education, the Coordinated School Health Program is mandated for all school systems. Well, that's not necessarily unique

across States, but what is unique, we are the first State in the Nation that has fully funded it for every school system in the State.

The transportation department——

Senator ALEXANDER. Now, you've fully funded what?

Ms. COOPER. Coordinated school health——

Senator ALEXANDER. OK.

Ms. COOPER [continuing]. For each of the school systems.

Our transportation department has invested almost \$5 million in the Safe Routes to Schools Programs.

Economic and community development has a three-star community program to help bring new business in. And one of the indicators is health.

Also, we're working with Human Services to work with our licensed childcare facilities to set activity and nutrition standards.

We're really excited about this. We have broken down the silos that exist in State government, and we have reached out, not just to our State partners, but to our community partners, as well.

With our innovative approaches, I want to talk to you briefly about Project Diabetes.

Next slide.

In two initiatives in particular, our Get Fit Tennessee Initiative, which is an online, interactive fitness community for youth and adults that is really a program to help us all start where we are. When you think about that messaging, there is something that everybody can do to improve the health of themselves, their families, their communities. This is free online too, not only to anybody in this State, but anybody in this Nation, where you can set your own fitness and nutrition goals, you can track your progress, you can create challenges, as you can see, for Child Health Week.

Next slide.

Last week, we set a Child Health Week Challenge, for children across this State, to look at fitness points. There are dropdown boxes of about 100 different activities, built on the Governor's Physical Fitness Challenge, where everybody can get points for health and fitness. We really believe that this is a very innovative tool that helps everyone find something that they can do. It also helps in setting realistic health and fitness goals.

The second program that I want to briefly show—oh, there's our food journal. I'll just say, about food journaling, we had this up before the report came out that said, "If you journal what you eat, you will lose up to 50 percent more than if you don't journal." It's a very effective tool, and it links to the USDA database for calorie content.

Again, Get Fit Tennessee, we've spent a lot of time across the State. We've been to hundreds and hundreds, and almost thousands of community events now, really acknowledging what's happening at the grassroots effort. Every moment becomes a teachable moment. What we've found is that fitness can be fun and everybody can do something.

Those are just pictures of folks from across the State that have participated in our opportunities, and what you'll see is that folks are smiling as we're doing this. I think that's just the visualization of the hope that exists for families today.

Now, GoTrybe is an online physical fitness program, physical education program that we now have in 17 school systems in the East and Northeast, in 33 different high schools, and it's the culmination of a unique public/private partnership funded by Project Diabetes. This Web site was designed by health and fitness professionals, we'll talk a little bit—the Zoo-Do's are for grades 1 through 5. Tribe 180 is for grades 6 through 8. And Next Tribe are for our high school students, 9 through 12. We've got a 1-minute video clip explaining what this does.

[Video presentation.]

Ms. COOPER. Little—in there.

Senator ALEXANDER. Better—we want to keep going here so we stay within our time.

Ms. COOPER. Just—every child has an—and I think what's interesting is, we're beginning to see the results of our efforts here.

I want to say that we are committed to this. We appreciate your attention in everything you've done for all of us, and we'll turn it to Dr. Barkin.

[The prepared statement of Dr. Cooper follows:]

PREPARED STATEMENT OF SUSAN R. COOPER, M.S.N., R.N.

Chairman Dodd, Ranking Member Alexander, and members of the subcommittee, thank you for the opportunity to be with you today to testify about the leading health threat facing the children of Tennessee and our Nation both today and for generations to come—childhood obesity.

I am Susan Cooper, M.S.N., R.N., Commissioner of the Tennessee Department of Health, a registered nurse, mother of three and a grandmother of three. As Commissioner, my job is to protect, promote, and improve the health of all that live in, work in, and visit our great State. The health of our children is of utmost importance to me and to the future of Tennessee and the Nation. Today, I would like to briefly speak to the scope of the problem, the potential contributing factors, and give examples of Tennessee's response to this national emergency.

BACKGROUND AND SCOPE OF PROBLEM

We are facing a public health threat to our children of an unprecedented nature. It is unacceptable to me that the children born in the year 2000 are the first generation in history not expected to live as long as their parents. You have heard the statistics many times, but they are worth repeating. Today, almost 32 percent of American children and adolescents—more than 23 million—ages 2–19 are overweight or obese.¹ Rates of obesity have more than tripled since 1980, from 6.5 percent to 16.3 percent. One in three children born in the year 2000 is anticipated to develop type 2 diabetes,² a disease that was once called adult onset diabetes because it was not seen in children. The likelihood is one in two if you are an African-American or Hispanic child.

Unfortunately, 8 of the 10 States with the highest obesity rates are found in the South. In Tennessee, 20 percent of our 10- to 17-year-olds are overweight, the fourth highest rate in the Nation.³ The most recent numbers from BMI screening through the Coordinated School Health Program in Tennessee reveal an even deeper problem. Of the 16,513 students 7 through 16 years of age screened in the first year of the program, the findings show:

- 24 percent overweight (above 95th percentile),
- 18 percent at risk for overweight (85th–95th percentile),
- 42 percent total overweight and at risk,
- 56 percent normal weight, and
- 2 percent underweight.

Detailed analysis of Tennessee data reflects the national trends:

¹Ogden, CL, Carroll MD, Flegal KM. High Body Mass Index for Age Among US Children and Adolescents, 2003–2006. *Journal of the American Medical Association* 2008;299(20):2401–2405.

²Ibid.

³Trust for America's Health. *F as in Fat 2007: How Obesity Policies are Failing in America*. www.healthyamericans.org. (accessed June 24, 2008).

- More boys (26 percent) were overweight than girls (22 percent);
- A greater proportion of African-American students (29 percent) were overweight than Caucasian (24 percent);
- African-American females had the highest proportion of overweight or at risk for overweight (50 percent);
- Caucasian females had the lowest proportion of overweight or at risk for overweight (40 percent); and
- The only age group with combined proportion of overweight and at risk for overweight less than 40 percent: Students under age 7.

The proportions of overweight and at risk for overweight were considerably higher than those reported for Tennessee high school students in the 2005 Youth Risk Behavior Surveillance System (YRBSS)—42 percent BMI Screening Program versus 32.1 percent YRBSS. These findings are limited as the African-American student population and urban student populations were underrepresented in the BMI program sample.

This epidemic, if left untreated or partially treated, will result in substantial costs to the State and Nation both in health and economic terms. Obesity is associated with a number of chronic conditions and diseases such as type 2 diabetes, increased cholesterol and hypertension, heart disease, kidney disease, neurovascular disease, and some cancers. Some studies also suggest that overweight and obesity negatively affect the mental health of children and their performance in school. From an economic perspective, overweight and obese adults cost the United States between \$69 and \$117 billion per year.⁴ The costs of childhood obesity are growing as well. Obesity-related hospital costs for children ages 6 through 17 more than tripled between 1979 and 1999, from \$35 million to \$127 million.⁵ This country, and our State, cannot sustain this economic or health impact. Action must be taken immediately to halt this epidemic.

Please understand that stemming the tide of childhood obesity requires that we start to shift our conversation solely from a focus on healthcare delivery to a proactive, prevention-focused approach to *health*. If we as a Nation made a modest investment in the prevention of obesity and its related chronic diseases, rather than treating or paying for its subsequent health consequences, we could avert much greater costs later. A recent report demonstrated that for an investment of just \$10 a person, every 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 a year within 5 short years. This is a return of \$5.60 for every dollar.⁶

With this focus on health promotion in mind, the Tennessee Department of Health has set as its vision that **every child completing high school in 2018 will graduate at a healthy weight.**

NATIONAL RESPONSE

No one agency or entity is, or can be, responsible in isolation for finding the remedies we need to address this issue. In the 2006 report, *Progress in Preventing Childhood Obesity: How do We Measure Up?*, the Institute of Medicine issued a call to action to all key stakeholders—including government, industry, media, communities, schools and individuals—to commit to leading childhood obesity prevention interventions, evaluation and dissemination of promising practices. Government-specific IOM recommendations included establishing a high-level interdepartmental task force to set priorities and coordinate Federal, State, local and public-private actions; developing nutrition standards for foods and beverages sold in schools; applying for State-based nutrition and physical activity grants with strong evaluation components; expanding and promoting opportunities for physical activity in the community through changes to ordinances, capital improvement programs, and other planning practices; and working with communities to support partnerships and networks that expand the availability of and access to healthful foods. In recent years, Tennessee has undertaken many of these steps toward developing a coordinated response to childhood obesity prevention.

⁴U.D. 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 August 2008).

⁵Ibid.

⁶Trust for America's Health. *Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities*, July 17, 2008.

TENNESSEE'S APPROACH

Initiatives to address childhood obesity are grounded in four areas: policies, programs, partnerships and innovation. The efforts appear to be paying off. In 2006, the Obesity Initiative, found at the Schaefer Center for Public Policy at the University of Baltimore, gave six States the grade of "A" for their legislative and public-policy work in the past year to control childhood obesity.⁷ Tennessee was among the six. Eight types of legislative activities were evaluated to determine the grades:

- Nutrition standards—controlling the types of foods and beverages offered during school hours.
- Vending machine usage—prohibiting types of foods and beverages sold in school and prohibiting access to vending machines at certain times.
- Body mass index measured in school.
- Recess and physical education—State-mandated additional recess and physical education time.
- Obesity programs and education—programs established as part of curriculum.
- Obesity research—legislative support for other institutions or groups to study obesity.
- Obesity treatment in health insurance—expanding health insurance to cover obesity treatment where applicable.
- Obesity commissions—legislature-established commissions designed to study obesity.

In Tennessee, many State policies have been developed, and collaborative efforts among State and local entities have been implemented to address the childhood obesity epidemic. Efforts have focused on developing policies and infrastructure that enable youth and their families to make healthier choices. Specifically, policy development has been focused on the promotion of health across State agencies and designed to influence children and their families where they learn, work and live.

Health

In 2006, the Child Wellness and Nutrition Act, created the Office of Child Wellness and Nutrition within the Department of Health. This Office interacts with other State and local partners to develop and evaluate activities related to child health with particular attention to improving childhood nutrition. The Diabetes Prevention and Health Improvement Act of 2006 established a Center within State government for the purpose of developing, implementing and promoting a statewide effort to reduce the incidence of type 2 diabetes. The Center is authorized to issue grants to community and faith-based organizations, not-for-profits, local education authorities and other health service providers for programs designed to prevent and/or treat type 2 diabetes in children and adults. Furthermore, the Department of Health has collaborated on a number of innovative programs designed to increase physical activity and nutrition, which I will describe in a moment.

Finance and Administration

One of the State's insurance programs, Cover Tennessee, uses age, weight and tobacco use information to assign risk for their insurance products. TennCare, Tennessee's Medicaid waiver program, requires its MCOs to have disease management models for obesity, and has policies that support Weight Watchers and other healthy weight programs for children and their parents. In addition, TennCare issues a child and teen newsletter which includes information on healthy food choices and exercise.

Education

The Coordinated School Health (CSH) program is required for all school systems and is fully funded; Tennessee is the first State in the Nation to fully fund its CSH program. The CSH program collects BMI and other health information for youth in elementary school through high school. The Department of Education, with input from the Department of Health, has established nutritional standards for all meals and nutritional standards for all competitive foods, including those purchased from vending machines. In addition, legislation passed in 2006 requires 90 minutes of physical activity per week for all students in grades K–12.

Transportation

Tennessee supports a Safe Routes to School program which focuses on the benefits of children walking and biking to school. Its primary purpose is to encourage ele-

⁷ Cotten, A., Stanton, K.R., Acs, Z.J. and Lovegrove, M. The UB Obesity Report Card™: An Overview 2006. <http://www.ubalt.edu/experts/obesity/index.html>. October 20, 2008.

mentary and middle school children to safely walk and bike to school, thereby promoting a healthier lifestyle, reducing traffic congestion and minimizing air pollution. In 2007, the Department of Transportation provided \$4.5 million for these local programs that promote collaboration with schools, the community, and local government to create a healthy lifestyle for children and a safer, cleaner environment for everyone.

Economic and Community Development

The Department of Economic and Community Development's Three Star Program is an initiative designed to preserve existing employment, create new employment opportunities, increase Tennessee family income, improve health and quality of life and create a strong leadership base. A detailed plan that promotes access to health care is a required component of community development in order for a community to achieve Three Star designation.

Human Services

The Gold Sneaker initiative was developed to enhance policy related to physical activity and nutrition within licensed child care facilities across Tennessee, and represents collaboration among the Department of Health, Department of Human Services and Child Care Resource & Referral system. Enacted policies must include minimum requirements on physical activity (or "active play"), sedentary activities, breastfeeding, meal time and portion sizes. Child care facilities that implement the proposed enhanced physical activity and nutrition policies will earn a "Gold Sneaker" award which designates them as a "Gold Sneaker" child care facility.

INNOVATIVE PROJECTS

Tennessee has utilized many innovative approaches to improving health behaviors that rely on partnerships between State and local government and private entities. These initiatives acknowledge the critical role that local communities play in the development, implementation and evaluation of effective programs for that community. We recognize that what works to improve child health in Northwest Tennessee, for example, may not be the same program that works in South Central Tennessee. These innovative programs and initiatives challenge traditional approaches to community-based interventions, and all have an evaluation component. Examples include the following:

- Project Diabetes is a statewide initiative focusing on innovative education, prevention, and treatment programs for diabetes and obesity. The fundamental goals of Project Diabetes are to:
 - Decrease the prevalence of overweight/obesity across the State and, in turn, prevent or delay the onset of type 2 diabetes and/or the consequences of this devastating disease.
 - Educate the public about current and emerging health issues linked to diabetes and obesity.
 - Promote community, public-private partnerships to identify and solve regional health problems related to obesity and diabetes.
 - Advise and recommend policies and programs that support individual and community health improvement efforts.
 - Evaluate effectiveness of improvement efforts/programs that address overweight, obesity, pre-diabetes, and diabetes.
 - Disseminate best practices for diabetes prevention and health improvement.
- Over \$10 million in local efforts have been funded through Project Diabetes grants. Sixty-three Project Diabetes grants have been awarded; of these, twenty-nine have a child health focus, with goals to improve physical activity, nutrition and health literacy, or to provide culturally and developmentally appropriate activities. An example of one such activity is the Step Up to Health program. Step Up to Health is a collaboration between State and local government agencies, the Historically Black Colleges and Universities' Wellness Project, and the National Step Show Alliance. This program works with youth at risk for diabetes to improve their physical fitness, health knowledge and awareness, self-efficacy and self-esteem through the performance of step shows with integrated health messages. This program will reach 300 youth ages 11–15 years; baseline and post-intervention health, nutrition, and fitness data will be collected to determine program effectiveness.
- GoTrybe is an online, interactive fitness community for youth that is the culmination of a unique public-private partnership. Designed by health and fitness professionals, GoTrybe seeks to transform sedentary screen time to active screen time for participants to ultimately improve child health. GoTrybe focuses on enhancing wellness through increased physical activity, improved motivation, and improved

nutritional awareness. The tool allows the user to create an individually tailored fitness routine. Built-in data collection tools allow for tracking of individual, school or regional-level process measures.

- Get Fit TN is a statewide program to raise awareness of the risk factors for type 2 diabetes and steps that Tennesseans can take to reduce their risk. This free online tool combines a personal fitness tracker and nutrition tracker which allow the user to set realistic fitness and/or nutrition goals, and provides useful information to facilitate changes in health behaviors.

CLOSING

In closing, I want to again thank the members of this committee for your past and ongoing commitment to improving the health, safety and well-being of our Nation. We know that so much more can be and must be done to protect, promote and improve our Nation's health as we continually anticipate and prepare for a myriad of public health threats. We welcome the opportunity to continue to work with you in pursuit of that goal.

Thank you for your attention. I will be pleased to answer any questions you may have.

Senator ALEXANDER. Thank you. Thank you, Commissioner Cooper. That's exciting testimony.

Dr. Barkin.

STATEMENT OF SHARI BARKIN, M.D., MSHS, DIRECTOR OF PEDIATRIC OBESITY RESEARCH, DIABETES RESEARCH TRAINING CENTER PROFESSOR OF PEDIATRICS, MONROE CARELL, JR. CHILDREN'S HOSPITAL AT VANDERBILT, NASHVILLE, TN

Dr. BARKIN. Senator, thank you for the opportunity to discuss this growing epidemic, and, really, thank you for your leadership and interest in doing something now to make a difference.

My name is Dr. Shari Barkin. I'm the division chief of general pediatrics at Monroe Carell, Jr. Children's Hospital at Vanderbilt. Additionally, I'm an NIH-funded researcher with extensive experience conducting national research trials and the proud recipient of State-supported Project Diabetes grant funding, as well, to address this problem.

My focus is in the area of prevention and early intervention for pediatric obesity. As you mentioned, I'm a pediatrician and work with families who are dealing and struggling with this issue every day.

My testimony will be summarizing recent findings on the causes of pediatric obesity. I then will provide some insights from the National Forum on Pediatric Obesity that was held here in conjunction with the FCC last week. And last, I would like to recommend some suggestions on the role of the Federal Government to address this critical public health problem.

You heard the statistics. I would just add to that, that childhood obesity is linked to adult obesity and, via prevention, science says we could have the greatest impact on this problem. For example, rapid weight gain in infancy is associated with excessive weight at age 4. If you are an overweight toddler, you're five times as likely to be an overweight adolescent. If you're an overweight adolescent, you have a 70-percent likelihood that you'll be an overweight adult. They're linked.

So, what's going on? What are the major causes? What does science have to tell us to try to explain the causes of this epidemic? I'm breaking this down into three general categories.

The first category is that we live in a fast-paced society, and the problem with this is that we're out of balance. We consume too much, and we exercise too little. Our bodies were not made to do this every day; we were designed to move enough and feed our needs for movement with an agrarian society. In fact, we know that now we are more inactive than we have ever been in recorded history. The average American child spends 45 hours a day [sic] in sedentary media-related activities. That's more time than they spend in school, more time than they might even spend sleeping, and certainly more time than they're spending with their parents.

We also know that we respond to our environment. There has been some interesting science on this. In a study published in 2007, the easy availability of supermarkets, where consumers have access to healthy foods, was associated with a lower body mass index, the index that we use to determine if you're overweight or obese. While the availability of convenience stores, where there are fewer healthy choices instead of supermarkets, was associated with a higher BMI. We have scientists working right here at Vanderbilt looking at geographic informational systems data, showing where we have food deserts, for example, in north Nashville. Those are areas where we see higher BMIs. This study supports the science to explain that. We are responding, our behavior response, to our environment.

The third category that I'd like to bring up is that children's behavior is greatly influenced by their family and peers. We're meant to be that way. We were meant to be social creatures. We influence each other by how we act.

In a recent study in the *New England Journal of Medicine*, obesity appears to be socially contagious. If your spouse is obese, you have a 37-percent likelihood of being obese yourself. If an adult sibling is obese, you have a 41-percent likelihood of being obese. Importantly, if your friends are obese, you have a 57-percent likelihood of being obese. Very important study that was done in a longitudinal way using the Framingham heart study to look over what happens over a 30-year period. This was done with adults, not with children.

I'd like to move us now to some insights that were generated from the forum.

We know that the FCC has had a very dedicated effort bringing together a joint task force on media and childhood obesity. We were fortunate to host the FCC commissioners here, and, with the leadership of Commissioner Tate, look at some of the recommendations that several of our media outlets and food and beverage advertisers have considered.

They noted, for example, in the task force, that during children's programming, advertisers typically have about 80-percent unhealthy foods that are advertised during that period, and a suggestion was made to create more of a balance in advertising. If we are influenced by what we see, and science shows that that is so, that we should promote things that children see that promote a healthy lifestyle.

Second, through self-regulation, media can use common childhood characters to promote healthy lifestyles, and voluntarily, media giants like Sesame Street and Disney and Nickelodeon have

taken on this challenge so that the content reveals positive role modeling with this popular culture.

Third, we discussed at the forum that behavior plays a larger role in obesity than genetics. Genetics is an important contributor, but behavior contributes largely to whether you'll become obese.

We were fortunate to hear about some of our efforts here in Tennessee. Easy access to recreational facilities, for example, allows the promotion of healthier active lifestyles.

Last, we talked about the importance of creating linkages between multiple stakeholders, and these stakeholders include policy-makers, scientists, media, food and beverage companies, schools, communities, and, of course, parents.

Here's an example of some things that have already been tried that seem to be promising. The vice president of Disney Channels Worldwide, Kelly Pena, presented some initiatives that they put into place, just about a year ago, in the Disney theme parks. Disney, I was surprised to learn, is the seventh largest restaurateur in the world. People consume a lot of food there. What they did with their attention to nutrition and change is that they changed how they offered children's menus. Rather than automatically getting fries and a soda with your children's meal, you would automatically—the default was set at getting fruits, vegetables, and milk. You could always request replacing that with soda and french fries, but 80 percent of people didn't; they ate what they were given.

Based on the recommendations of the Institute of Medicine and the National Forum on Pediatric Obesity, I would like to respectfully put forth the following recommendations for governmental consideration. Here are some suggestions.

Government could provide coordinated leadership to truly make pediatric obesity prevention a clear national priority, echoing the sentiments of Commissioner Cooper, focusing our efforts on prevention.

Second, government can provide significant funding for research on childhood obesity and, importantly, the translation of those effective successful findings into sustainable programs designed to impact large populations of children.

Third, government could address the issue of food advertising imbalance for both children's and adults' programming through a combination of self-regulation and perhaps legislation.

And last, government could consider incentives that would support built environments that encourage healthy living.

Once again, I'd like to thank you, Senator Alexander, for your leadership, for your focus, for your clear dedication to action. I look forward to serving as a resource to your committee in the future.

Thank you.

[The prepared statement of Dr. Barkin follows:]

PREPARED STATEMENT OF SHARI BARKIN, M.D., MSHS

Chairman Alexander and members of the committee, thank you for the opportunity to discuss the growing epidemic of childhood obesity and its impact on our Nation. My name is Dr. Shari Barkin. I am the Division Chief of General Pediatrics at the Monroe Carell Jr. Children's Hospital at Vanderbilt University. In addition, I am a NIH-funded researcher with extensive experience conducting national research trials. My focus is in the area of pediatric obesity, developing and testing pre-

vention and early intervention approaches. I also work as a clinician with children and families battling obesity every day.

My testimony will summarize recent findings on the causes of pediatric obesity, provide insights from the National Forum on Pediatric Obesity held this month at Monroe Carell Jr. Children's Hospital, and offer recommendations on the role that government should play to address this critical public health problem.

Longitudinal studies demonstrate that childhood obesity is inextricably linked to health outcomes later in life. For instance, rapid infant weight gain often leads to excessive weight gain by age 4. Overweight toddlers are 5 times as likely to be overweight adolescents. Overweight adolescents have a 70 percent risk of becoming overweight adults. Furthermore, 60 percent of overweight children aged 5–10 already have one or more risk factors for heart disease and diabetes. In fact, the CDC predicts that without aggressive intervention, over 30 percent of children born in the year 2000 will go on to have type two diabetes.

This will likely be the first generation where a child's life expectancy is less than their parents due to obesity-related health problems.

What has led to this emergence of pediatric obesity? Studies show there are three major factors:

- First, we live in a fast-paced society. More families eat on the run than sit down together. More children sit in front of TV than play outside. The problem is that we are out of balance. We consume too much and exercise too little. In fact, we are more inactive than we've ever been in recorded history. The average American child watches **45 hours** of media per week. That is more time than they spend in school or with their parents. *Media has become a full time job for our children.*

- The second factor is that our bodies are adapting to this new lifestyle. We are born into this world with very little hardwiring. Instead, we adapt to our environment. For example, in a study published in 2007, the easy availability of supermarkets (where consumers have a greater abundance of healthy food choices) was associated with a lower body mass index (BMI) while the availability of convenience stores (where there are fewer healthy choices) instead of supermarkets was associated with a higher BMI.

- The third and final factor is that children's behavior is greatly influenced by their family and peers. We are meant to be social creatures. Children live in the context of their families; families live in the context of their communities; and communities live in the context of society. We influence each other by how we act. In a study in the *New England Journal of Medicine*, obesity appears to be socially contagious. If your spouse is obese, you have a 37 percent likelihood of being obese. If your sibling is obese, you have a 41 percent likelihood of being obese. And, importantly, if your friend is obese, you have a 57 percent likelihood of being obese. The challenge is to make *being healthy* socially contagious.

On October 15, 2008, the Monroe Carell Jr. Children's Hospital at Vanderbilt and Department of Pediatrics in conjunction with the Federal Communication Commission hosted a conference entitled, "The National Forum on Pediatric Obesity: Developing Unique Partnerships to Halt the Epidemic." The Forum was structured on The Institute of Medicine's (IOM) blueprint for action. The IOM report stressed that pediatric obesity can only be addressed effectively if multiple stakeholders act together, including: Government at all levels, Food and beverage companies, Advertising and marketing companies, Multimedia industry, Communities, Schools, Health providers, and Parents.

With the IOM recommendations as our guide, the National Forum on Pediatric Obesity concluded the following: We live in a media-saturated world and media exposure influences both children's and adults' behavior. During children's programming, advertisers should be responsible for presenting a balance of healthy to unhealthy food ads. Currently, 80 percent of the advertising is for unhealthy foods. FCC Commissioner and Forum participant Deborah Tate is leading the effort to encourage media to improve advertising for healthy food options.

The media through self-regulation should encourage the use of common characters (such as Elmo and Mickey Mouse) to promote healthy choices. Senior executives from Sesame Workshop and Disney who participated at the Forum spoke of how their companies have voluntarily made important changes in both their programming and advertising approaches to focus on healthy lifestyles.

While genetics is important, behavior plays a larger role in determining obesity outcomes. Easy access to recreational facilities is one area in which government can positively impact children's health. Forum participant and Nashville Mayor Karl Dean discussed efforts to create built environments such as more green space for outdoor activities. Nashville has also built more community centers thereby increasing access to recreational facilities in all communities.

Stakeholders should discuss how they could partner together in innovative ways. One suggestion discussed was partnering media, scientists, food vendors and policy-makers to create what are called “healthy default environments.” For example, children who request meals at Disney theme parks are now automatically provided with fruit as a side item instead of French fries. The great majority eat what they are given, rather than requesting anything different. Another example could be policy-makers at the local level working with grocery chains to create incentives to build supermarkets in communities with limited access to food.

Based on the recommendations of the IOM and the National Forum on Pediatric Obesity, I would like to respectfully put forth the following recommendations for governmental action. Government could:

- Provide coordinated leadership to make pediatric obesity prevention a clear national priority.
- Provide significant funding for research on childhood obesity and translation of these findings into sustainable programs designed to impact large populations of children.
- Address the issue of food advertising imbalance for both children’s and adult programming through a combination of legislation and self-regulation.
- Consider incentives to support built environments that encourage healthy living.

Once again I would like to thank you Mr. Chairman and the other members of the committee for allowing me to appear before you today and for your strong leadership on this very critical issue. I look forward to serving as a resource to your committee, if ever you need me, in the future.

Senator ALEXANDER. Thank you, Dr. Barkin.
Dr. Tropez-Sims, thank you for being here.

**STATEMENT OF SUSANNE TROPEZ-SIMS, M.D., M.P.H., FAAP,
ASSOCIATE DEAN OF CLINICAL AFFILIATIONS AND PRO-
FESSOR OF PEDIATRICS, MEHARRY MEDICAL COLLEGE,
NASHVILLE, TN**

Dr. TROPEZ-SIMS. Thank you for inviting me to be here. I’m proud to represent Meharry.

As has been stated already, most of the statistics—one statistic that has not been mentioned is that Tennessee ranks first in deaths due to heart disease and strokes. If this is so, and most of our children are becoming obese, does that mean that we will have serious consequences of early heart disease and strokes in young adults? I believe it is so.

The other thing, too, is that in African-Americans in Tennessee, 43 percent are higher to die of strokes than our Caucasian partners, and for diabetes, the rate of death due to it in Tennessee is 146 percent higher among African-Americans than in Caucasians. Hispanic Americans are also one of the fastest growing minority groups, and they, too, are obese and are having alarming rates of type-2 diabetes.

Dr. Nicholas Stiffler, from the University of Pennsylvania, hypothesizes that rapid weight gain during early infancy is associated with obesity, especially in African-American young adults. The critical period is proposed to be between birth and 4 months of age, where there is a rapid increase in weight for age greater than one standard deviation.

I don’t want to repeat everything that has been said previously, so I’m running through this.

Senator ALEXANDER. No, no, we’re interested in whatever you have to say.

Dr. TROPEZ-SIMS. All right.

One of the major contributing factors—they're really multifactorial in this disease or problem—it's environmental, behavioral, genetic, metabolic, cultural, socioeconomic status, and energy imbalance, which has been mentioned, where we consume more than the physical activity.

Other health risk behaviors also play a major role. In Tennessee, 36 percent of our Caucasian high-school students and 12 percent of African-American students smoked in 2001. As I see patients, most of them state that they smoke to keep from eating, because they do not want to become obese. They don't realize that this causes them to be at risk for other health diseases, but it still increases their risk for heart disease and strokes.

Fifty-eight percent of our students in Tennessee in 2001 were not enrolled in an organized physical education class. With our high rates of crimes and drive-by shootings, this hampers outside play for most of our children in this entire country. These students are prime set-ups for obesity and its consequences.

One of the other things that I want to discuss is that the socioeconomic status plays a major role in obesity. For all racial and ethnic groups combined, women of lower socioeconomic status—that's income less than 130 percent of poverty threshold—are approximately 50 percent more likely to be obese than of higher socioeconomic status. African-American girls from lower socioeconomic status experience a higher prevalence of overweight—obesity—than those from a higher socioeconomic status. The exact etiology is not known, but I hypothesize that the high cost of nutritious fresh fruits, vegetables, and lean meats prohibit the possibility of improving eating habits.

In the past, the increase in television viewing or use of electronic games was proposed as the key factor. In McMurray's study, he says it may play role, but it's not the total answer.

At Meharry, we have several programs that are looking at obesity. It ranges from pregnancy in mothers to adolescents to looking at communities and how, working with community agencies, that we can make a hallmark in changing the obesity rate.

In conclusion, thus far we have learned that obesity is a multifactorial issue, and it will take everyone to become a part of the solution. As we see from some studies, the battle against obesity and its consequences begin as soon as we are born. It must be stated that not only overweight and obese children and adolescents are at risk for these consequences, but even non-obese individuals run similar outcomes, albeit lower rates secondary to inappropriate dietary consumption, smoking, and lack of physical activity.

In our schools, not only the three R's must be taught, but preventive and healthy lifestyles must be integrated as a lifelong learning experience. Good nutrition is not a diet, and changing the mindset of the population of this aspect is usually overlooked.

Research must look at all aspects of obesity, including the psychological aspects. Going back to basics, as growing one's own vegetables and fruits, even in a city, can assist in improving one's health. Children and adolescents need guidance in lifestyle healthy behavior. Parents need to increase their knowledge first to allow children to inherit their example. Tennessee has multiple guidelines and plans in place to implement a change in behavior of its

constituents. It's a daunting task, but with everyone playing a major role, the State can be successful.

Thank you.

[The prepared statement of Dr. Tropez-Sims follows:]

PREPARED STATEMENT OF SUSANNE TROPEZ-SIMS, M.D., M.P.H., FAAP

ABSTRACT

Tennessee is one of three States in the United States with an Obesity rate of greater than 30. It is the State who has the leading cause of death due to heart disease and strokes in the Nation. In Tennessee, deaths from strokes are reported 43 percent higher in African-Americans than Caucasians. The rate of death due to diabetes in Tennessee is 146 percent higher among African-Americans than among Caucasians. Hispanic Americans are one of the fast growing minority group and they are obese at an alarming rate and suffer similar consequences.

Children and adolescents are not unscathed in this dilemma. Obesity has risen threefold in this age group. In children, the prevalence increased from 5.0 percent to 13.9 percent; aged 6–11 years increased from 6.5 percent to 18.8 percent; and those aged 12–19 years increased from 5.0 percent to 17.4 percent. These children and adolescents are at increase risk of dyslipidemia, hypertension, metabolic syndrome and type 2 diabetes. In addition, CDC reports 80 percent of children between the ages of 10–15 years who are overweight or obese will persist to adulthood. Yet only 25 percent of obese adults were overweight as children. If a child of 8 years of age is obese, they will suffer severe obesity as adult. Metabolic syndrome is a useful tool in assisting to diagnose adults but it has not been documented to diagnose children and adolescents at risk. A serious consequence to early obesity is the risk of early heart disease and strokes.

Children and adolescents have a multifactorial reason for their obesity. Contributing factors are environmental, behavioral, genetic, metabolic, cultural, socioeconomic status, energy imbalance (consuming more than physical activity). Other health risky behaviors also play a major role. In Tennessee, 36 percent of Caucasian high school students and 12 percent of African-American students smoked in 2001. Fifty-eight percent of high school students are not enrolled in an organized physical education class, but with the high rate of crime, as kidnapping of children, outside play is also hampered. These students are prime set-up for obesity and its health consequences.

Children and adolescents need guidance in lifestyle healthy behavior. Parents need to increase their knowledge first to allow children to inherit their examples. Tennessee has multiple guidelines and plans in place to implement a change in behavior of its constituents. It is a daunting task but with everyone playing a major role the State can be successful.

CHILDHOOD OBESITY

Obesity is a growing dilemma in the United States and specifically three States have the highest rate greater than 30 percent. They are Alabama (30.3), Mississippi (32) and Tennessee (30.1). However, the increase in health adversity is of major concern. Diseases such as coronary heart disease, stroke, dyslipidemia (high blood cholesterol and triglycerides), type 2 diabetes, some cancers (breast, colon and endometrial), osteoarthritis and sleep apnea are hallmark consequences. The National Vital Statistics report these diseases contributed \$117 billion to the medical cost in the year 2000. According to the Center for Disease Control (CDC), Tennessee has the leading cause of deaths due to heart disease in this country. In 2002, 29 percent of the States deaths were due to heart disease and in addition, stroke ranked 3rd causing 7 percent of the States deaths. Cancer caused 22 percent of the deaths. Despite the above statistics, in 2005 the Behavior Risk Factor Surveillance System revealed adults continue to have increase in health risk factors as 30 percent screened reported increase blood pressure, which ultimately leads to strokes and heart disease, and 32 percent of those screened had high blood cholesterol. In Tennessee, deaths from strokes are reported 43 percent higher in African-Americans than Caucasians. The rate of death due to diabetes in Tennessee is 146 percent higher among African-Americans than among Caucasians. Hispanic Americans are one of the fast growing minority groups and they are obese at an alarming rate and suffer similar consequences.

Children and adolescents are not unscathed in this dilemma. Obesity has risen threefold in this age group. In children, the prevalence increased from 5.0 percent to 13.9 percent; aged 6–11 years increased from 6.5 percent to 18.8 percent; and

those aged 12–19 years increased from 5.0 percent to 17.4 percent. These children and adolescents are at increased risk of dyslipidemia, hypertension, metabolic syndrome and type 2 diabetes. In addition, CDC reports 80 percent of children between the ages of 10–15 years who are overweight or obese will persist to adulthood. Yet only 25 percent of obese adults were overweight as children. If a child of 8 years of age is obese, they will suffer severe obesity as an adult. Metabolic syndrome is a useful tool in assisting to diagnose adults but it has not been documented to diagnosing children and adolescents at risk. A serious consequence to early obesity is the risk of early heart disease and strokes.

Dr. Nicolas Stittler out of the University of Pennsylvania School of Medicine “hypothesized rapid weight gain during early infancy is associated with obesity in African-American young adults, a group at increased risk of obesity.” The critical period that he proposes, is between birth and 4 months where there is a rapid increase in weight for age greater than one standard deviation. Of the 29 percent patients with rapid weight gain, 8 percent were obese by age 20 years. This proposal requires further investigations.

Contributing factors are multifactorial, environmental, behavioral, genetic, metabolic, cultural, socioeconomic status, energy imbalance (consuming more than physical activity). Other health risky behaviors also play a major role. In Tennessee, 36 percent of Caucasian high school students and 12 percent of African-American students smoked in 2001. Fifty-eight percent of high school students are not enrolled in an organized physical education class, but with the high rate of crime, as kidnapping of children, outside play is also hampered. These students are prime set-up for obesity and its health consequences.

In addition to behavioral and risky behaviors, socioeconomic status has shown a relationship to obesity. “For all racial and ethnic groups combined, women of lower socioeconomic status (income < 130 percent of poverty threshold) are approximately 50 percent more likely to be obese than those of higher socioeconomic status. African-American girls from lower SES experience a higher prevalence of overweight/obesity than those from higher SES families” (American Journal of Clinical Nutrition 2006 October; 84(4) 707–16). The exact etiology is not known, but the high cost of nutritious fresh foods as fruits and vegetables and lean meats prohibit the possibility to improve eating habits. In the past, the increase in television viewing or use of electric games was proposed as key factors. These items may play a role but it is not the total answer. (McMurray, et al., 2000).

Tennessee has mounted a tremendous response to assist its constituents to decrease their risk of heart disease and stroke. It has partnered or collaborated with multiple agencies to improve the quality of care and institute preventive measures. The State is a part of the Delta States Stroke Consortium which is led by Arkansas Department of Health; the State formed a Heart Disease and Stroke Prevention Program (HDSP) Advisory Council Task force which has implemented guidelines for treatment of strokes, heart failure and coronary heart disease in 40 hospitals, as well as a comprehensive preventive plan for the entire State. HDSP has collaborated with Joint Commission on Accreditation of Healthcare Organization (JCAHO) to certify hospitals as primary stroke centers. HDSP has also partnered with American Heart Association to increase awareness of signs and symptoms and institute ways to decrease Tennesseans risk factors of heart disease and stroke.

Meharry Medical College has two programs underway to address some of these issues. One is in Obstetrics and Gynecology where Dr. Sandra Torrente is the Project Investigator. She is investigating overweight and obese women who are pregnant to denote if they can safely go on a diet and have a good birthing outcome. Dr. Xylina Bean is beginning a project on overweight and obese adolescents by providing a mentor in addition to nutritional counseling and exercise to improve a successful outcome. Dr. Tropez-Sims has completed a study reviewing if overweight or obese mothers during pregnancy transfer their poor eating habits and produce overweight and obese infants during the first year of life. The conclusion of this study is there is no clear relationship in the first year of life.

In conclusion, thus far, we have learned that obesity is a multifactorial issue and it will take everyone to become a part of the solution. As we see from some studies the battle against obesity and its consequences begins as soon as we are born. It must be stated that not only overweight and obese children and adolescents are at risk for these consequences but even non-obese individuals run similar outcomes albeit lower rates secondary to inappropriate dietary consumptions, smoking and lack of physical activity. In our schools not only the three “R’s” must be taught but preventive and healthy life styles must be integrated as a life-long learning experience. Good nutrition is not a diet and changing the mindset of the population of this issue is required. Research must continue to look at all aspects of obesity including the psychological aspects, which is mostly overlooked. Going back to basics as growing

ones own vegetables and fruits even in a city can assist in improving ones health. Children and adolescents need guidance in lifestyle healthy behavior. Parents need to increase their knowledge first to allow children to inherit their examples. Tennessee has multiple guidelines and plans in place to implement a change in behavior of its constituents. It is a daunting task but with everyone playing a major role the State can be successful.

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Senator ALEXANDER. Thank you, Dr. Tropez-Sims.

David Griffin, we appreciate your coming and look forward to hearing more about your story, which by now is pretty well known across the country.

**STATEMENT OF DAVID GRIFFIN, PARTICIPANT, SEASON 4 OF
NBC'S "THE BIGGEST LOSER," CEDAR HILL, TN**

Mr. GRIFFIN. Unfortunately, sometimes it is a little too known. [Laughter.]

Senator Alexander, I'd like to thank you for what you are doing for our great State and for inviting me to be involved in this witness panel.

I'd like to make one thing clear, and I want this on the record. It's not fair to put the former fat kid with all the smart people.

[Laughter.]

I definitely don't have the statistics to prove what the epidemic is, but I do have eyes. All we have to do is take a walk through a shopping mall, we have to go to a school, and we can see what our problems are. They lie more than just in economic regions, more—more, to me, profoundly, is with our children's health and the health of their parents.

So, briefly, about me, I am 33 years old. I'm from Cedar Hill, TN. I was an obese child. I was the fat kid. I was the kid that was ridiculed. Even though I was an athlete, I was always heavier than all of my peers. It was important, growing up, you know, for the football coach to keep the defensive linemen heavy, "Give the kid an extra hot dog." You know, I remember baseball coaches even saying, "I'll buy you a hot dog for every home run you hit." It wasn't even about the hot dog. It didn't hurt.

Those habits of eating unhealthy—because I grew up in the South, like most people here did. My grandmother could fry a banana, and it tasted good, so we ate it.

[Laughter.]

We knew nothing, you know, about healthy nutrition. I didn't know, really, anything about healthy nutrition until I started my journey to get healthy.

I grew up eating poorly. I exercised during the school year during athletics, but I did nothing outside of that. With all the knowledge that we have now—I mean, we have more knowledge about obesity, about health and fitness and nutrition, available to us in the world than we ever have, and we're in a poorer State of health than our country's ever been.

With that being said, my weight continued to escalate. I stayed around 275 all through high school. I remember that, because I wrestled heavyweight, and there was a weight limit of 280 pounds. I didn't cut weight. I just didn't gain any. I remember laughing at the skinnier guys, the lighter-weight guys that would run around the gym with trash bags on and not eat for 3 days so they could make weight. I was eating an extra piece of pizza in the lunchroom. There again, that bad nutrition was available. It was readily there. I didn't know any better. I could do it. It was comfortable. I got away with it.

From graduating high school at 275 to age 31, I was 400 pounds. That was my heaviest. I know it's kind of rude to correct a Senator, but, you know, leave it to the fat kid.

[Laughter.]

I went to the doctor as a scared adult. I was a heavy smoker. I never really passed by a fast-food restaurant without at least visiting to say hello.

[Laughter.]

I was on a first-name basis with most of the people at McDonald's in the area. I didn't exercise at all. We have a small place in Robertson County where we raise some livestock, and we are very physical in our daily lives, along with being, you know, full-time career people, my wife and myself. Even that work ethic never kept me slim, it never put me on the right direction to healthy life.

At the point of 31, I didn't go to a doctor, ever. I never got on a scale. That would be a joke. I fooled myself for a lot of years that, "Maybe I'm 300 pounds." Maybe. Then, when I went to the doctor and realized—you know, my doctor told me that I had two choices. I was 31. I could do one of two things. He said, "Your blood pressure is high, your sugar is borderline." You know, I was a borderline diabetic. He said,

"You can leave today and make a decision to change your life and make gradual changes and lose some weight here and there and get active, do something besides what you do on a normal basis, because your body gets used to that. Talk to a dietician, talk to a nutritionist, get a personal trainer, go to the Y, workout, make it inexpensive,"

because there are means in most communities that you can go to a facility fairly inexpensive, as a family. If not, there are a lot of parks that I have not seen a ticket booth at yet to get in to take advantage of the playgrounds and the basketball courts. He said,

“You can either start now, or you can do nothing. In 5 years from now, when you fall dead on the sidewalk, it’ll be no medical mystery why.”

That was a huge wake-up call for me. Being a father of four and a dedicated husband, it was important to me to do the right thing for my family.

Even though I was extremely unhealthy—I didn’t watch a lot of television, I knew nothing about “The Biggest Loser.” But, I did get started. The only thing I did in the beginning was change my diet. From January 2007, I changed my diet. An old friend of mine, in February, suggested trying out for the show, “The Biggest Loser.” I’d never seen it, had no clue what it was. One—if I could give you guys any advice besides that obesity epidemic, if you’re going to try out for a reality show, just find out what it’s all about.

[Laughter.]

I went down in Nashville, went to an open casting call, stood in line with everybody, and was fortunate enough to be selected to go to Season 4. It wasn’t like we went out there and we just had a little medical test and they said,

“OK, you guys need to lose weight, and our chef’s going to cook this for you every day, and, you know, we’ll go to the spa after you work out, and you’ll get a back rub.”

It was horrible.

[Laughter.]

Everybody thinks that being on television’s a great thing, you know, and it’s—it’s a flashy-type deal. There was nothing flashy about what I did. We trained 6 or 8 hours a day, boot-camp style. We were in the gym, we were in the sand, we were outside, were on the beach, we were in the mountains, whatever it took. The way we lost our weight there is not necessarily that I condone losing weight. It’s not healthy to work out 6 or 8 hours a day. It’s not healthy to lose 140 pounds in 6 months. It wasn’t about a game for me. I never played the game. I never focused on the cash prize. I do a lot of speaking, and people ask me, all the time, if I’m upset that I didn’t win the \$250,000 or I didn’t win the \$100,000. I did end up in the top 5 percent out of 18 people that were on our season. My answer to that is, I didn’t win a monetary prize, but what I did win was my health. And you can never put a dollar figure on that.

Now I can lead the example for my children, what it is to be healthy, what we can do. Even though all my children are fit, were fit, have always been fit, I want to show them how their parents should live fit, the foods that should be in our cupboard at home. And yes, my kids hate me sometimes, because we don’t have Pop-Tarts anymore, we don’t have sugary cereal at my house anymore. We all treat ourselves, from time to time, but it can’t be a daily treat, because then it becomes a habit, and those habits, along with the more sedentary lifestyles that we have in our new age, have put us where we are.

I want to give you guys one example. I have recently passed my personal training certification, and, as a study—I’m not necessarily focused on children, but I have a niece who’s 10, who is about 45 pounds overweight. That’s a lot of extra weight for a 10-year-old,

especially a little girl. For some reason, men have always been able to get away with a little extra weight, more than women.

She's, of course, close to my heart, because she was family. She always struggled—socially, personally—with her weight. All I did was sit her down, and I sat her mom and dad down, and we basically talked about nutrition. I'm not a dietician, I'm not a nutritionist, but what I've learned, I can give you commonsense advice. I gave her a cookbook. I told her, "Three days a week, do something different than just sit on the couch and watch television or play video games." They have a park right across the street from their house, so I said, "Three days a week, it's your job, 45 minutes you spend at that park." It's not like they're just going to sit over there for 45 minutes on the ground and twiddle their thumbs; they're going to find something to do. In the last 6 months, she's lost 25 of those 45 pounds. That's pretty fast. She's a child, she can lose it faster and get away with it. Just simply changing her diet and getting her out of the house, it's changed her whole life.

That's what we can do to change the lives of the children that we affect. I do my spokeswork with Get Fit Tennessee because it is important to me to get in front of the children. We're going to win our war with obesity with this generation. We need to affect their parents, because that's going to affect what they have in their homes, that's going to affect their lifestyle, that's where their examples are going to come from. As adults, it's our job to reach out to these children personally and try to find a way to help. We can't move them all in our house, we can't save them, necessarily, we can't capture them, but we can help them. We can lead by good examples, and we can continue with the great programs that we've started in this State and reach more people.

I do think some of the things in this panel—well, actually, everything that I've heard were great examples, but one thing that's really near and dear to my heart is the nutrition in our schools. I know there are budgetary concerns, but I know that buying in mass quality [sic], you can get better rates on anything. There are a lot of schools, even where my children go to school, in Robertson County, that physical education is not mandatory. I think it's 90 minutes a week for our kids. I think we're focusing a lot on their formal education, which is extremely important, but if we don't focus on their health education, it doesn't matter how much book smarts they have, because without their health, they're not going to go anywhere.

And that's about as smart as I get. Thank you, guys.

[Laughter.]

[The prepared statement of Mr. Griffin follows:]

PREPARED STATEMENT OF DAVID GRIFFIN

Good morning. My name is David Griffin. I am 33 year's old and live in Cedar Hill, TN in Robertson County with my wife, Sheri and four beautiful children.

I know what it feels like to deal with childhood obesity. As a child, around age 9 or 10, I started to rapidly gain weight. I didn't receive nutritional education from my parents. And although I was in athletics, I didn't exercise outside of athletics. As a child, I was ridiculed for being the big kid, the fat kid.

During my childhood I developed stressed eating habits. I turned to food for comfort, and I continued to gain weight throughout my high school years. I graduated high school weighing 275 pounds. The problems didn't stop when I left high school, and at 31, I weighed 400 pounds.

I went to see my doctor and he gave me the bad news—my blood pressure was borderline high, my blood sugar was borderline, and it was a wake-up call for me. As I mentioned, I have four children, and I knew I needed to get busy getting healthy, so I could spend time with my children and be here to see them grow up.

My children were all fit, but I wanted to lose the weight and get healthy to set a positive example for them. I wanted to form the healthy habits I wanted to see in them, and set them up for a healthy future.

An old friend of mine suggested trying out for the television show, “The Biggest Loser.” I had never watched the show before. I went down, tried out, and I was lucky enough to be selected for Season Four. I lost 30 pounds before the show, because my doctor said I needed to get healthy, and there was no guarantee that I would get on the show, so I began working even before being accepted for the show.

We began filming the show in May 2007. From that time until December 2007, when it ended, I lost 140 pounds. After the show, I lost about another 10 pounds. To date, my total weight loss is about 180 pounds!

Losing the weight and getting healthy has transformed my whole life. It wasn’t about a diet; it was about learning what to do to be healthy, for my family to be healthy. We restructured our lives together. We removed sodas, teas and junk food from our home. Our children are not exposed to it because they know it’s not healthy for them.

For me it was a choice to get healthy. Everyone has to make the decision for themselves. Knowing what I know now, I have learned that you can treat yourself from time to time and it’s important to do that so you don’t binge eat. If you are training hard and staying on track with your exercise, you feel it when you eat unhealthy foods.

I went from not working out at all before “The Biggest Loser,” to spending 6 to 8 hours a day working out on the show. Today, I do an hour every day, 6 days a week. No excuses. In moments of weakness I try to remind myself that nothing tastes as good as fit feels.

Since the show it’s been important to me to sign on with Get Fit Tennessee, and get in front of children to talk about healthy choices. I recently passed my certification exam to be a trainer to teach people to be healthy, and I am starting a boot camp aerobics class in the middle Tennessee area in November.

In my opinion the war with obesity will be won with this generation of children. As you know, statistics show us this generation of children is the first that won’t outlive the life expectancy of their parents. Our society and our government must push for more physical education testing in our school systems. I believe children need physical education 5 days a week.

I think moving soft drink and vending machines from schools will be very effective. If they want it that badly they can bring it to school. And to the critics who say they need these vending machines for revenues to pay for things at school, I say put water and sugar-free drinks or juices in them. Work with vendors to offer healthier alternatives.

Our children’s health should be a priority in school systems. School nutrition also needs to be addressed. The menu choices should be healthier. Again, working with vendors to make healthier selections to offer to children is an important step we can take. As far as children go, a healthy mind is an open mind.

Now that I am healthy, I can do so much more with my children. We play outside, I can run and play touch football, go for a walk, or roll around on the floor with my children. My wife and I are closer, too, because we can get closer. We take cycling class together, walks, and those are things we couldn’t do together for a long time. I wouldn’t trade these things I have now for any food out there today.

Senator ALEXANDER. Thank you, David. That’s very impressive. Thank you. Thank you.

Let’s talk a little bit more. To let you know, we’re recording all of this, so your testimony will be given to all the other Senators on the committee, and it’ll be a part of the public record, and they’ll have a chance to review it. This builds our record for what we’re hoping to do later.

Let’s talk about ways to make a difference. I’ve always been curious about—money seems to be a pretty good incentive in our society. How has the insurance plan worked? Has it been in effect long enough—you said—it’s part of Cover Tennessee, right?

Ms. COOPER. That’s correct.

Senator ALEXANDER. And Cover Tennessee is the State of Tennessee's program to spend Federal—well, explain what Cover Tennessee is and who's a part of it.

Ms. COOPER. There are three different components to the overall Cover Tennessee program. There's the CoverKids Program, which is the SCHIP Program.

Senator ALEXANDER. Right.

Ms. COOPER. There is Access Tennessee, which is—

Senator ALEXANDER. Which is a combination of Federal and State money.

Ms. COOPER. Correct. Then, there's Access Tennessee, which is a high-risk pool for those persons who are classified as uninsurable by insurance standards. Then, there's CoverTN, which is a limited benefits plan for the working uninsured, so small businesses or those folks that had worked sometime in the past year—

Senator ALEXANDER. These all are part of Cover Tennessee.

Ms. COOPER [continuing]. That's correct—and now would be unemployed.

The way it works for CoverTN, which is the working uninsured program, the average premium is about \$150 a month; a third is paid by the person, a third is paid by the employer, and then a third is paid for by the State. And your premium, based on your age, which, unfortunately, we haven't figured out what to do with, but your weight or tobacco use either—it comes down, basically, if you are at a healthy weight or if you do not use tobacco products.

Senator ALEXANDER. Now, how do you determine healthy weight?

Ms. COOPER. A healthy weight is a BMI under 30, so it's not that we're asking everybody to be marathon runners and all be very lean.

Senator ALEXANDER. Well, how do you determine that, even?

Ms. COOPER. The BMI?

Senator ALEXANDER. Yes.

Ms. COOPER. Through a physical screening—

Senator ALEXANDER. OK.

Ms. COOPER [continuing]. A physical exam.

Senator ALEXANDER. So, you go in for a physical exam, and they measure your body mass.

Ms. COOPER. Correct. It's self-reported at first, and then everyone has a physical exam during that first year, to verify that. Same way with tobacco usage. Self-reported, "Do you smoke? Yes or no." Then, if you do or if your weight is above 30—if you're enrolled in a program and you're taking action to reduce your rate, and the healthcare provider can see a change over the first year, you'll pay a lower premium the next year.

Senator ALEXANDER. Does this—the insurance is a factor in one of the three—

Ms. COOPER. Yes. Well—

Senator ALEXANDER. Cover Tennessee—

Ms. COOPER [continuing]. Also in Access Tennessee. The kids program, you can't use weight and tobacco usage as a modifier, it's just—everybody qualifies if their income is less than 250 percent of the Federal poverty level.

Senator ALEXANDER. Now, you can't because of the Federal rules?

Ms. COOPER. Right.

Senator ALEXANDER. Although, Dr. Barkin, what we've heard, or what both of you said, I think, was that there's this link between babies who are overweight and—and one of you said it was the first 4 months. How pronounced is that?

Dr. TROPEZ-SIMS. Dr. Stiffler said that if you were overweight or if you gained weight at a rapid pace between the first 4 months of life, then 8 percent of those will be obese by the time they're 20.

Senator ALEXANDER. Well, now, what is a way to get at that? I remember when I was Governor, my wife was working on a—we were working on prenatal healthcare, because it made so much sense to do it that way. Probably the most effective thing we did was to form an alliance with pediatricians and try to make it possible for every mother—every pregnant woman to find a pediatrician before the baby's born, if we could. We made a lot of progress with that. Is that—does the profession of pediatrics use a healthy weight as part of its advice to young mothers?

Dr. TROPEZ-SIMS. Yes, we do. We follow a growth chart, that's national, from out of the CDC, and we're able to plot—and it's expected that every child, for every visit, whether it's a well or a sick visit, that they—we plot their weights, their heights, and their head circumferences, so we can tell if a child is gaining weight more rapidly than they should.

Senator ALEXANDER. I guess I've heard that, my own children and many of my grandchildren, but I'm not sure I had heard before about the link. Is that a new understanding, or do mothers and fathers of babies know that now?

Dr. BARKIN. The link actually has been shown in longitudinal studies, many of them done in other States, such as—

Senator ALEXANDER. Yes.

Dr. BARKIN [continuing]. Finland, over 30 years. I believe when we're counseling our families, we know, and through our research, that families see a chubby baby. And I work with a lot of Latino families—we call these "gordito babies," they're chubby babies—that equals health. While information is an important part, it is a necessity, but not sufficient for changing behavior, so that while we might both, in our clinic settings, talk, as we do every time we see families, on growth and what is healthy growth, our perception versus parental perception is quite different, and that has been shown over and over again in studies.

Senator ALEXANDER. Well, going back to the insurance for a minute, that would seem such an obvious thing to do. Has it been in place long enough where you can make any judgment now about whether it has any effect or not?

Ms. COOPER. I think it's still very new. It's about 2 years old. We've got our first year of data, and I think it's made some difference. Whether it's replicable across other populations, it's too early to tell.

Senator ALEXANDER. It seems to me like Governor Huckabee in Arkansas were doing some of the same kind of thing, were they not?

Ms. COOPER. They were. They actually have quite a bit of interest, in Arkansas, around our Cover Tennessee program—

Senator ALEXANDER. Yes.

Ms. COOPER [continuing]. The way we've stratified and identified risk.

Senator ALEXANDER. Maybe he had a program for State employees insurance, where he tried to introduce healthy weight into that.

Ms. COOPER [continuing]. I can't speak to that. I know, in Alabama, they're getting ready to charge State employees if they're not at a healthy weight or if they use tobacco. There's some type of an increase in premium. I can't speak to Arkansas.

Senator ALEXANDER. We would have to introduce that into various insurance policies for a few years and see what difference it makes.

Ms. COOPER. I think, look at the data. I also think, again, a lot of our solutions are community-based. I think insurance will come, down the road. It gets back to some of the cultural differences we see. When you talk about money, one of the things we hear is, "It costs too much to be healthy." You know, it costs too much to eat healthy. It costs too much to join a gym. I think David hit on something that was really important. This ability to create a healthy environment for people, where they eat, where they work, where they play, where they live, where they study. This ability to link all of that, to open school playgrounds at night, where families could go, to make linkages with the great State parks we have in—certainly in our State—to create healthy grocery stores in these food deserts that we have, to create healthy foods in schools—as David said, you know, when you look at the foods that come down from the USDA in the free breakfast and lunch programs, there are some limits to the healthfulness of the food, because of the trans fats and the calorie count that all come down. I think, to be able to incent schools to have healthier meals is certainly important.

Senator ALEXANDER. David, let me ask you—a lot of this is about changing behavior, which is something the government has a hard time doing, at least in a relatively free society. What was the one thing that turned you around? Was it that visit to the doctor? What caused you to make the visit to the doctor?

Mr. GRIFFIN. My health was poor. I was constantly out of breath. Like I said before, I was a heavy smoker, which was a no-brainer why I was out of breath. I just continually got more sluggish and was worried about my activity. I couldn't even go outside and play with my kids. You know,—get on the floor—

Senator ALEXANDER. So, that took you to the doctor.

Mr. GRIFFIN. It really did.

Senator ALEXANDER. Then the doctor's message is what got you turned around?

Mr. GRIFFIN. Yes, that was a big part of it. And, too, it was important to me—I had made a promise to my wife, a long time before, that, you know, "I'll get healthy." I just kept—like, I had lost 100 pounds one time before, and I gained 160 back. So, to me, it was a trend. And—

Senator ALEXANDER. Yes.

Mr. GRIFFIN [continuing]. All the history and all the studies will show that changing human behavior is never easy.

Senator ALEXANDER. No, it's not. Now, you've talked to a lot of people since then, and—

Mr. GRIFFIN. Yes, sir.

Senator ALEXANDER [continuing]. People have talked to you. What's your guess about what are the most effective ways to change human behavior in this case?

Mr. GRIFFIN. The things that I've found in my studies is, people change when it becomes easier to change than it does to stay the same.

Senator ALEXANDER. Easier to change.

Mr. GRIFFIN. Yes. When it's easier—

Senator ALEXANDER. Oh, easier—

Mr. GRIFFIN [continuing]. For them to change their behavior or their habit than it is to stay the same. The medical studies show that people change when they get to that point that if they don't do something, they're going to die.

Senator ALEXANDER. Yes.

Mr. GRIFFIN. It's easier for them to get healthy then, or to try to attempt it, when, I think, we're going to win the battles more on the forefront when we're getting in front of our children and we're getting in front of our adults with healthier programs. I think, too, if—I don't have a vision for this. As a thought, I think if we could find more programs that put our children and adults together—parents, families doing healthier activities, doing things—you know, there's always these walks, these 5K's and these runs, and—but, there are so many other things that, as communities and as a State, I think we can try to create some programs to keep our families closer.

Senator ALEXANDER. Well, you all have emphasized that there are a multitude of factors. As someone my age can look back to an era where there was no television, no video games, walk to school, Boy Scouts every week, hiking on the weekends, playing every day. I had to do my piano lessons—practice the piano in the morning so I could play all afternoon. That was sort of the incentive—I didn't want to be practicing the piano while all the boys were out playing in the afternoon. There was an incentive to be outside. Now today, we've gone a couple of generations, and we have parents who know so little about the outdoors, they're even afraid to take their children outdoors, they're afraid they'll see a bear or something and won't know what to do.

[Laughter.]

No, really. I grew up in an area where all the adults had outdoor experiences, and so, they were eager to teach them to us, and then we became confident in the outdoors.

Dr. Barkin, you were about to say something.

Dr. BARKIN. May I comment on something?

Senator ALEXANDER. Yes.

Dr. BARKIN. First, I see that David, to me, is the biggest winner, not the biggest loser. And you hear his story, which is so compelling, because he found his own motivation to change, and then he was pushed over, he was nudged toward action by both his family and his physician and, I'm sure, every time he looked at his children. He made a lot of choices, and it was hard, but he kept striving for it. We see—at our weight management clinic, we see 3-year-olds who weigh 200 pounds, who have fatty livers.

Senator ALEXANDER. Three-year-olds?

Dr. BARKIN. Three-year-olds. We see families who don't see this as a problem. We show them our growth curves and the body mass index is determined by a weight-to-height ratio, so we're able to give them that information, show them the curves that you heard Dr. Tropez-Sims discuss, and show them that they are way outside of the curve, that they're far away from health. When they look at their child, they see an active child who looks cherubic and healthy to them. While we provide them with information, at that stage—so, David tells a very important story as an engaged adult, an engaged father—for these families, they see health. The problem with so many of these diseases, like hypertension and diabetes, which we are diagnosing right and left in our clinic, for young children, is that you can't see them, they're invisible.

Senator ALEXANDER. Has anything been successful? What's been most successful for you in changing the minds of these parents?

Dr. BARKIN. It's something very important that David said and what the literature shows. If obesity is socially contagious, how can you create health to be socially contagious? Much of that is done through social networks, by developing programs that are sustainable in communities and in schools that bring the community together—the child, in the context of their family; and the family, in the context of their community.

Dr. TROPEZ-SIMS. I was going to add that I've found that, especially with my adolescents, the more children that lose weight, it's because the mother was also overweight and they worked together to try to lose the weight. If they can make it a family affair, they can be much more successful. If you have parents who say, "Well, you know, I'm not changing my cooking habits, they can just not eat the foods that I buy," those children have no support, and, therefore, they do not lose weight.

Sometimes the adolescents don't even see themselves as being overweight. You have to get them to the mindset to understand that they are overweight and they need to do something about it.

Senator ALEXANDER. I wonder if any of you want to comment on the—I was very attracted to the idea of healthy weight being a goal that every child have by the year 2018. It's always a conflict between whether you scare people to death or whether you tell them, "Here's a goal. We can do this together." I know, in my case, I stopped smoking when my friend John showed me a picture of a pair of lungs of a smoker. The next day, I quit. Some nice-sounding goal probably wouldn't have done it for me before. It would seem to me that having such a goal would at least be a good way to start, and then, after that, you can develop various horrible stories about 300-pound 3-year-olds and the consequences of that, to help people see it. Tell me what you're doing with that goal.

Ms. COOPER. What we've found is—we've traveled across the State and talked to Tennesseans, mothers and their kids, dads and their kids—is that people want to do the right thing, but they're bombarded by the media, by the restaurants, supersize, biggie-size, value-size. They get all of this information coming at them, and they don't necessarily know what the right thing is. You have to put something out there that's achievable for them. You know, if you came to me and said, "You've got to lose 100 pounds," I wouldn't hear anything else you said. If you came to me and said,

“Look, let’s just start where we are. Did you get up and move at all today? Did you do any physical activity?” Well, if the answer is no, then you can say, “Well, how about 5 minutes of playing with your kids in the backyard,” or, “Are you willing to go out for a walk?” Then, what we’ve found is, 5 minutes becomes 10 minutes, 10 becomes 30, 30 becomes an hour. It’s something that families can do together.

We also hear that people want to know that they’re valued. I mean, as we’ve traveled across the State, again, people appreciate that you go out and spend time with them, with a message that, again, is attainable: get fit, healthy ways. Not, “You’re fat, you don’t do this, you don’t do that, you don’t do that.” The message just doesn’t resonate. You take those teachable moments, and then you build upon that. As you said, we’ve seen this in the literature with tobacco, over and over again, about creating the environment of health. If you take tobacco out of a restaurant, more people tend not to smoke, because it becomes what is known. I think the same thing works for obesity.

Think about the labels on food, as you drive through your favorite fast-food restaurant. If you saw, on a kid’s meal, that that kid’s meal—not an adult meal—contained 1,400 calories, that’s 1,400, not 140—you know, for an average adult—I mean, I need about 1,500 calories a day; getting it in one kid’s meal, think what it’s doing to a child. Unacceptable. Thinking about what we could do with our restaurant foods is important.

Senator ALEXANDER. Let me do this. We’ve about gotten to the point where we should conclude, but I want to ask each of you if you have a minute or two, any other thought that you’d like to add to the record or something you’d like to say.

This has been a very important discussion. I think it’s enough of a startling thought to say to anybody that this is the first generation of children that may live a shorter life than their parent, and that we know what the cause is. We’ve got to figure out how to deal with it, and each of you, in your own ways, have made a very significant contribution to this. I’ll do my best to make it a part of the Senate record and a part of how the Federal Government supports what you’re doing.

As a former Governor, you know, I’m very skeptical of the Federal Government’s ability to change behavior. I really think we do more, locally and individually and in our families. Obviously, the Federal Government can help create an environment in which it’s easier for this to happen. You’ve mentioned two or three examples, school lunches as an example. That is certainly a very important place, where we’re in everybody’s face with that, so we ought to be very careful about what is served there.

Let me thank you for your work and for taking your time today, and thank Meharry for being such a great host. Let me start at the other end, if I may this time, and start with David Griffin and go back to Commissioner Cooper and see if you have any last word you’d like to leave with us here.

Mr. GRIFFIN. Just a couple of things. Thank you, again, for allowing me to be here today. It’s been a pleasure. It’s nice to be on the good side of the law for a change. No.

[Laughter.]

When I was talking about nutritional education before, and me not really knowing, and—I'm sorry, Dr. Barkin—I can't see your name tags, it's not fair—Dr. Barkin had talked about the food deserts north of Nashville. We live in Robertson County. There's two grocery stores in Springfield, a Kroger and a Wal-Mart. And I, still today, shop there, but when I learned what to read on labels and what to look for in the grocery store and how to eat healthy and how to feed my body, to train the way I was trained—because all that 140 pounds was not lost in that 6 months in California; 2 months of it was there, the other 4 was home, after I was eliminated from the show. I did my healthy eating from a Wal-Mart shelf. It can be done if we educate our people. They can shop where they have the means. It can be done more cost-effectively than eating at McDonald's 4 to 5 days a week. It really can. A can of tuna fish is, like, 80 cents. You know? Tuna's healthy.

The other thing that—when we were talking about school lunches, it's not just the school lunches, it's also the unhealthy things that they have available to them at schools. I don't think that I've walked through a high school that I've done a talk at that I didn't see at least four soda machines. I mean, they're a treat from time to time, and kids can get away with a lot more than adults can. That's where we're going to have to start their healthy education, in their schools.

Senator ALEXANDER. Thank you, David. And your—

Mr. GRIFFIN. Thank you.

Senator ALEXANDER [continuing]. Comment about the availability of food, Wal-Mart's the largest seller of groceries in the country. The percentage they sell is—I heard it the other day, and I don't remember it, but it's surprisingly high, maybe 15 or 20 percent or 10 percent of all the groceries in the country.

Dr. Tropez-Sims.

Dr. TROPEZ-SIMS. Yes, two comments I wanted to make. One is that I think we need to make sure that people no longer think that eating fruits and vegetables is a diet, that that is just normal food that should be incorporated in daily life, and that we need to try to change our perception of a diet.

The other thing is, is that, a lot of times, with parents, especially new parents, when they take their children home, when the baby cries—they think that every time the baby cries, they need to feed them. We need to try to encourage them that every time a child cries does not mean they need to eat. Every time that child, as a toddler, asks for something to eat does not mean that you need to give them the junk food that they're requesting. We need to make sure that, as adults, we feel more self-assured, ourselves, that we're not starving our children, but they do not have to eat every time we think that they are hungry.

Senator ALEXANDER. Thank you.

Dr. Barkin.

Dr. BARKIN. Thank you, again, Senator Alexander, for allowing us to have this kind of really engaged discussion.

I would like to focus that information is necessary, but not sufficient. It's not that people don't know. For example, smokers know they shouldn't smoke. It's not that parents don't know that their

children shouldn't be eating every meal in a fast-food place. Knowledge is necessary, but not sufficient. What is sufficient?

When we look at behavior-change theory, people do what's easy. If you can find ways to support healthy default environments, such as the examples made about school lunches—if we're not offering tater tots or french fries there, our children won't be eating it. Considering how we create those healthy default environments is really critical for changing behavior that is sustainable.

And last, this notion of affordable and accessible food—because if we say, for example, for insurance, you will get a lower premium if you are a lower weight, but, as you heard from Dr. Tropez-Sims, that lower socio-economic-strata individuals have a harder time with weight, and they don't have access or affordability, then we've given them a goal that's unattainable, which we don't want to set forth as a precedent.

Here's just an example. I know that our surgeon general has been working with the National Institute of Child Health and Human Development. One of the things that they're looking at is the economics of obesity. I just have a picture here of a plate of broccoli and a tiny little dollop of peanut butter. They have exactly the same amount of calories, 200 calories. For that dollop of peanut butter, it costs 17 cents. For this plate full of broccoli, it costs almost \$2. We have to consider affordable and accessible access to food.

Senator ALEXANDER. Commissioner Cooper.

Ms. COOPER. Well, I'm going to take it, I guess, a different place.

We're going to move Tennessee, and we're going to move it from being one of the unhealthiest States in this Nation to becoming one of the healthiest States in this Nation. And I will tell you, it's also not really a goal that is sufficient, because our Nation is not the healthiest Nation in this world, and there's no excuse for us not to be. We need to build health in all of our policies, whether they're health policies, education policies, transportation policies. Health should be included in all of them.

We should address those areas where we eat, where we learn, where we play, where we work, how we commute, where we live. I would challenge us to find the world that we move, to close our eyes and remember the time when it was OK to turn off the television, where it was great to go out to the backyard and play. Do you remember lying down on the ground and looking up at the sky and seeing these great, wonderful things you made out of clouds? Kids don't know how to do that today. You've got to figure out how to influence their behavior to get them outside more.

You know, I believe, fundamentally, we have to make a commitment in this Nation to change, to say that this is unacceptable, and to move, not just our State, but every State in this Nation to look at those children born in the year 2000 and their graduation date in 2018 and say, "All children, not just Tennessee children, will graduate at healthy weight in 2018."

Senator ALEXANDER. Thank you very much, Commissioner Cooper.

Thanks, to each one of you. Thanks, to all of you for coming. And, Dr. Riley, thank you, again, for making Meharry's great facilities available.

The hearing is adjourned.
[Whereupon, at 11:21 a.m., the hearing was adjourned.]

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