

**NOURISHING OUR GOLDEN YEARS: HOW PROPER
AND ADEQUATE NUTRITION PROMOTES
HEALTHY AGING AND POSITIVE OUTCOMES**

HEARING
BEFORE THE
SPECIAL COMMITTEE ON AGING
UNITED STATES SENATE
ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

WASHINGTON, DC

JULY 12, 2017

Serial No. 115-7

Printed for the use of the Special Committee on Aging



Available via the World Wide Web: <http://www.govinfo.gov>

U.S. GOVERNMENT PUBLISHING OFFICE

27-803 PDF

WASHINGTON : 2019

SPECIAL COMMITTEE ON AGING

SUSAN M. COLLINS, Maine, *Chairman*

ORRIN G. HATCH, Utah
JEFF FLAKE, Arizona
TIM SCOTT, South Carolina
THOM TILLIS, North Carolina
BOB CORKER, Tennessee
RICHARD BURR, North Carolina
MARCO RUBIO, Florida
DEB FISCHER, Nebraska

ROBERT P. CASEY, JR., Pennsylvania
BILL NELSON, Florida
SHELDON WHITEHOUSE, Rhode Island
KIRSTEN E. GILLIBRAND, New York
RICHARD BLUMENTHAL, Connecticut
JOE DONNELLY, Indiana
ELIZABETH WARREN, Massachusetts
CATHERINE CORTEZ MASTO, Nevada

KEVIN KELLEY, *Majority Staff Director*
KATE MEVIS, *Minority Staff Director*

CONTENTS

	Page
Opening Statement of Senator Susan M. Collins, Chairman	1
Statement of Senator Robert P. Casey, Jr., Ranking Member	2

PANEL OF WITNESSES

Connie W. Bales, Ph.D., RD, Professor, Division of Geriatrics, Senior Fellow, Center for the Study of Aging, Duke University School of Medicine; Asso- ciate Director of Geriatrics Center, Durham VA Medical Center, Durham, North Carolina	4
Seth A. Berkowitz, M.D., MPH, General Internist, Massachusetts General Hospital, Assistant Professor of Medicine, Harvard Medical School, Boston, Massachusetts	6
Elizabeth Pratt, MPH, SNAP–Ed Program Manager, University of New Eng- land, Portland, Maine	8
Patricia Ann Taylor, Retiree, Penn Hills, Pennsylvania	10

APPENDIX

PREPARED WITNESS STATEMENTS

Connie W. Bales, Ph.D., RD, Professor, Division of Geriatrics, Senior Fellow, Center for the Study of Aging, Duke University School of Medicine; Asso- ciate Director of Geriatrics Center, Durham VA Medical Center, Durham, North Carolina	32
Seth A. Berkowitz, M.D., MPH, General Internist, Massachusetts General Hospital, Assistant Professor of Medicine, Harvard Medical School, Boston, Massachusetts	35
Elizabeth Pratt, MPH, SNAP–Ed Program Manager, University of New Eng- land, Portland, Maine	43
Patricia Ann Taylor, Retiree, Penn Hills, Pennsylvania	45

ADDITIONAL STATEMENTS FOR THE RECORD

Meals on Wheels, Testimony	48
National Association of Nutrition and Aging Services Programs, Testimony ...	51

**NOURISHING OUR GOLDEN YEARS: HOW
PROPER AND ADEQUATE NUTRITION
PROMOTES HEALTHY AGING AND
POSITIVE OUTCOMES**

WEDNESDAY, JULY 12, 2017

U.S. SENATE,
SPECIAL COMMITTEE ON AGING,
Washington, DC.

The Committee met, pursuant to notice, at 9:31 a.m., in Room SD-562, Dirksen Senate Office Building, Hon. Susan M. Collins (Chairman of the Committee) presiding.

Present: Senators Collins, Fischer, Casey, Gillibrand, Donnelly, Warren, and Cortez Masto.

**OPENING STATEMENT OF SENATOR SUSAN M. COLLINS,
CHAIRMAN**

The CHAIRMAN. The Committee will come to order.

Good morning. We all know the importance of nutritious food to our health and well-being. Yet as many as one out of every two older Americans is at risk for malnutrition.

The number of older Americans who are food insecure, or uncertain of their ability to acquire nutritious foods, is troubling. In 2014, more than 10 million Americans age 65 or older experienced food insecurity. This represents 16 percent of all older Americans.

In Maine, one out of six seniors lives with the threat of hunger. With the arrival of America's Baby Boomers into older age, the number of seniors who are food insecure will increase.

Seniors in Maine and across the Nation are increasingly finding themselves choosing between buying nutritious food and paying essential bills. Donna, a 76-year-old woman from Steuben, Maine, reports having to make this trade-off. She has a farm, grows her own vegetables, and raises her own meat. Yet she still struggles to make ends meet. Donna said, "I never thought I would have to ask anyone for any help. At 76, you should be retired, or you should be able to take care of yourself." Donna turns to her local food bank for staples such as lettuce, dried beans, and rice to help her get by during Maine's long winters.

Federal programs that help to keep such food banks stocked and meals delivered to seniors play a critical role. These programs work. They reduce food insecurity and improve health outcomes. They are also cost-effective. For the cost of a single day in a hospital, Meals on Wheels is able to feed a senior for an entire year.

We will hear today about how the University of New England is coordinating SNAP–Ed in my State. This is a Federal program that helps families and older Americans learn how to shop, cook, and eat healthy meals on a budget.

Private partners are also playing an important role. Four years ago in Maine’s most northern county, a local family donated land and a company donated seeds to begin what would grow into a program called “Farm for Maine” to provide vegetables to those most in need. Farm for Maine partnered with Catholic Charities and has produced hundreds of thousands of pounds of nutritious food for those in need in Aroostook County—my home county, I would point out.

With changing demographics, it will take all hands on deck to stay afloat. Today 15 percent of Americans are ages 65 and older. By 2060, this proportion will grow to one-quarter of our population. At the same time, markers of poor nutrition among seniors are on the rise.

While the traditional image of a malnourished senior has been a frail and underweight older American, we will learn today that overweight, rather than just underweight, and obese seniors can also suffer from severe malnutrition.

More than one-third of American adults are obese, and this trend is reflected in our seniors. If current trends continue, the obesity rate would raise to 44 percent by 2030. With the convergence of an aging population and poor nutrition, we are challenged to meet a public health threat of unknown proportions.

We will learn today about the ways in which industry stakeholders, from grocery stores to health systems, are partnering with academia and community organizations to respond to food insecurity and to change the trajectory that worries us all.

One solution puts into practice a piece of sage advice heeded by the father of medicine. Hippocrates said, “Let food be thy medicine and medicine thy food.”

Hippocrates gave us that advice more than two millennia ago. Today we will learn from modern research how food can indeed serve as medicine, and vice versa.

We are beginning to discover solutions that work. Research has found that appropriate nutrition in seniors promotes better health outcomes from reducing falls and diabetes to improving mobility and cardiovascular function. Translating this research can help to alter the forecasted tides of malnutrition for the one out two seniors at serious risk, while improving daily life for all older Americans.

I would now like to call on our Ranking Member, Senator Casey, for his opening remarks.

**OPENING STATEMENT OF SENATOR ROBERT P. CASEY, JR.,
RANKING MEMBER**

Senator CASEY. Thank you, Chairman Collins, for holding this hearing and for allowing us to discuss the issue of nutrition among older Americans and food insecurity as well.

Today far too many older Americans do not know where their next meal is coming from, as Senator Collins just outlined.

These are the hardworking Americans who fought our wars, taught our children, and built the middle class. They should not have to struggle in their golden years for something as basic as the security of knowing they will have enough to eat.

In 2014, 10.2 million seniors aged 60 and up faced this terrifying insecurity. More than 13 percent of seniors in Pennsylvania alone reported food insecurity. That means tens and tens of thousands of Pennsylvanians facing that insecurity. Those who are food insecure often suffer in silence, embarrassed to admit that they need help. And lack of adequate nutrition creates significant economic costs to society through increased doctor visits, emergency room visits, hospitalizations, and disability.

Meals on Wheels reports that the disease-related cost of malnutrition is estimated to be approximately \$51 billion. Their report finds that about 60 percent of older adults in emergency rooms are either malnourished or at risk of malnutrition. Up to 33 percent of older adults admitted to the hospital may be malnourished.

The menu of nutrition programs supported by the Federal Government can actually help.

We will hear from researchers today who will tell us that investing in nutritious meals for seniors contributes to better health outcomes and lower health care spending for the individual as well as the system itself.

We know that healthy eating leads to healthier living. It is just common sense. And it is for this reason that I will continue to vocally oppose cuts to the Supplemental Nutrition Assistance Program (SNAP)—we used to call it “food stamps”—cuts to Meals on Wheels, Congregate Meals; The Senior Farmers’ Market Nutrition Program; as well as the Commodity Supplemental Food Program, which serves the senior food box that our witness, Mrs. Taylor, receives in Allegheny County.

These programs help seniors from having to decide between putting food on the table—specifically nutritious food—and refilling a prescription.

Unfortunately, seniors right now are facing a threat to their nutrition and, I believe, their health care at the same time. The proposed budget cuts that I outline to those senior programs, senior nutrition programs, paired with the proposals to decimate Medicaid could devastate the health and financial security of entire families.

We are better than that in America. And so we are grateful today to our witnesses for joining us here today to shed light on the important role that Federal Government programs play in promoting healthy aging.

Thank you very much.

The CHAIRMAN. Thank you, Senator. And I want to acknowledge that the idea for this hearing came from Senator Casey, and I thought it was an excellent one, and I was happy to pursue it.

Our first witness today is Dr. Connie Bales, a professor at Duke University School of Medicine in the Division of Geriatrics. Dr. Bales also serves as the associate director of the Geriatric Center at the Durham VA Medical Center. She is the editor in chief of the Journal of Nutrition in Gerontology and Geriatrics. I am not sure I know what the difference between the two of those are. Dr. Bales will also discuss her most recent work concerning new trends in

senior malnutrition and the development of diet-based interventions.

We will next hear from Dr. Seth Berkowitz, an assistant professor at Harvard Medical School. Dr. Berkowitz is a primary care physician at Massachusetts General Hospital. His research focuses on the impact of adverse social and economic circumstances on chronic disease management. Dr. Berkowitz will discuss food insecurity and interventions to prevent and treat chronic diseases through nutrition. And if the two doctors could cure my cold while you are here, I would appreciate that as well.

Next I am delighted to introduce Elizabeth Pratt. She is the program manager of the Maine Supplemental Nutrition Assistance Education Program at the University of New England. SNAP-Ed is a U.S. Department of Agriculture program that teaches low-income individuals the knowledge and skills needed to make healthier lifestyle choices within a limited budget. UNE delivers SNAP-Ed through 23 community-based coalitions and reached more than 3,000 Maine seniors in 2016 alone. Ms. Pratt will discuss the innovative work she is leading in Maine to increase seniors' access to healthy foods.

And I would now like to turn to Ranking Member Casey to introduce our witness from Pennsylvania, but I welcome you also.

Senator CASEY. Thanks, Chairman Collins. I am pleased to introduce Pat Taylor from Penn Hills, Pennsylvania. I mentioned Allegheny County in my opening. I was just making a reference to the home county of Pat and where Penn Hills is located.

Pat is a wife, a mother, a grandmother, and as of today a community advocate and a witness on this critically important issue that we are here to discuss. Pat, along with her husband, James, has raised 10 children in total—5 biological children, 5 adopted boys with disabilities. My mother raised eight. I thought that was—my mother and my father, but mostly my mother, raised eight, and I thought that was a lot.

Two of Pat's daughters have joined us here today. Would you mind putting your hands up? Thank you very much for being here.

Having worked her whole life, Pat never imagined to have to struggle to make ends meet after retirement. Pat will tell us about the monthly food box she receives from the Commodity Supplemental Food Program.

So, Pat, we want to thank you for being here, for telling your story and that of your family, so that we can learn from you and also so that we can help other older Americans and their families facing similar challenges. Thanks, Pat.

The CHAIRMAN. Thank you, Senator.

We will start with Dr. Bales.

STATEMENT OF CONNIE W. BALES, PH.D., RD, PROFESSOR, DIVISION OF GERIATRICS, SENIOR FELLOW, CENTER FOR THE STUDY OF AGING, DUKE UNIVERSITY SCHOOL OF MEDICINE; ASSOCIATE DIRECTOR OF GERIATRICS CENTER, DURHAM VA MEDICAL CENTER, DURHAM, NORTH CAROLINA

Dr. BALES. Good morning, Chairman Collins, Ranking Member Casey, and members of the Aging Committee. Thank you for this opportunity to testify. My name is Dr. Connie Bales, and I am a

professor at the Duke University School of Medicine and an associate director of the Geriatrics Center at the VA Medical Center in Durham, North Carolina. I have been working in nutrition and aging research for the past 30 years, focusing on older adults as a population at high risk for malnourishment. Leading reasons for this malnutrition risk include physical changes that increase nutrient needs as well as social and economic limitations that reduce access to food. Older adults commonly also face multiple chronic health conditions; the medications they take and special diet restrictions they need to follow further increase their nutritional risk.

I will bring to your attention two important trends that have dramatically altered the profile of malnutrition in older Americans. The first of these trends is the ongoing epidemic of obesity occurring in the United States.

Rather than gaining weight slowly over time, now over one-third of Americans spend decades of their lives exposed to obesity. This is a situation that has never before been encountered in our society.

As this Committee is well aware, the second dramatic trend is that of population aging. With the convergence of these two trends, geriatric obesity is now very common. Almost 40 percent of older Americans are obese, many with morbid levels of obesity.

Contrary to what people may believe, being overweight or obese does not correspond with over-nutrition. In fact, obesity is a marker of malnutrition. Many obese older adults are not getting the nutrients they need. With low metabolic rates and little energy being spent on activity, their food intakes may actually be quite low while their nutrient requirements are the same or even higher.

This state of chronic malnutrition creates major threats to health. We know that risk of chronic conditions like diabetes, heart disease, and arthritis increase with age. Aging muscles reduce in size and strength and fat accumulates around essential organs in the body core. Obesity leads to all of these same changes. So it brings a double threat, hastening chronic disease progression and hindering the ability to move around and be functionally independent.

No longer is the typical picture of malnutrition in older adults one of a weak, thin elder subsisting on "tea and toast." Soon the most common type of nutritional frailty will be the older adult who has excessive body fat that masks weak muscles and limits function. This condition, which is called "sarcopenic obesity," enhances a host of health problems. It makes surgery and other medical treatments more risky, and it hastens the need for institutionalization.

Obese older adults have a much greater likelihood of getting admitted to a nursing home than non-obese elders. Besides the increased cost to society of this early admission, nursing homes incur greater costs caring for the obese. Renovated facilities, larger equipment, and higher personnel costs are needed for their care. Some nursing homes are turning away those who are excessively obese.

Obesity is highly correlated with food insecurity, the situation of having uncertain or limited access to nutritious food. We know that

both poor health and food insecurity interfere with the intake of adequate amounts of protein, vitamins, and minerals.

Obesity treatment is challenging at any age, and it can be especially challenging in older adults. But we know that reducing obesity and improving diet quality is achievable for seniors and it lessens health problems like diabetes and hypertension and reduces the risk of falls while dramatically improving function.

My research focuses on older adults with distinct mobility limitations due to their excessive body fat. These individuals often have multiple chronic diseases. They also have a very limited ability to burn calories and strengthen their muscles through exercise. My research team and I are testing a special 6-month diet intervention based on generous servings of high-quality protein from lean meats and low-fat dairy products at each meal. Our goal is to achieve the loss of body fat without the loss of muscle. We have shown that there are marked improvements in functional ability when frail, obese older adults reduce their obesity; but our higher protein diet does produce the best results for function so far.

We have also discovered potential problems, however, with diet adherence and treatment responses that are linked with race and lower income level. Our future studies will explore enhanced interventions for these individuals who are also at higher risk for food insecurity

In closing, I hope that I have raised your awareness regarding an important challenge facing many older Americans. Please realize that even though it is not shown outwardly, an overweight or obese elderly person may very well be undernourished in ways that threaten their health and ability to live a life of quality. Our research has shown that dedicated efforts to improve the nutritional status of these individuals can literally transform them in terms of their abilities to live more independent and healthy lives.

I thank you for the opportunity to share my thoughts with you.

The CHAIRMAN. Thank you very much, Doctor.

Dr. Berkowitz.

STATEMENT OF SETH A. BERKOWITZ, M.D., MPH, GENERAL INTERNIST, MASSACHUSETTS GENERAL HOSPITAL; ASSISTANT PROFESSOR OF MEDICINE, HARVARD MEDICAL SCHOOL, BOSTON, MASSACHUSETTS

Dr. BERKOWITZ. Thank you. Chairman Collins, Ranking Member Casey, members of the Aging Committee, thank you for this opportunity to testify and to shine a spotlight on the importance of food security and nutrition in America's seniors.

As we heard, food insecurity, defined as uncertain or limited access to nutritious food, affected over 40 million Americans in 2015. Though the American economy has been out of recession since 2009, food insecurity rates have been slow to decline and remain higher than pre-recession levels.

Three risk factors for food insecurity hit older adults particularly hard: disability, social isolation, and having a low income. Epidemiological studies have associated food insecurity with a large and growing number of health conditions, including obesity, diabetes, hypertension, coronary heart disease, congestive heart failure, chronic kidney disease, depression and serious mental illness, and

osteoporosis. Food insecurity also leads to increased use of expensive health care services such as hospitalizations and emergency department visits. Given all this, it is not surprising that food insecurity is estimated to result in \$77 billion in excess health care expenditures annually. Even more importantly, food insecurity has been associated with a 30 percent increase in mortality over long-term follow-up.

Current research has identified three key pathways by which food insecurity affects health.

First, and perhaps the most obvious, is by worsening dietary quality. Less nutritious foods are often cheaper than healthier foods like fresh fruits and vegetables, lean proteins, and whole grains.

Second, people experiencing food insecurity face competing demands for their scarce resources. Those with food insecurity frequently make trade-offs between food and other necessities, in particular, medications. What is sometimes called the “Treat or Eat” trade-off, where individuals face difficulties affording food, medication, or both, affects one out of three adults with chronic illness and is a significant contributor to poor health.

Third, it is important to realize that food insecurity is not only about food. It is also about the insecurity. Food insecurity worsens stress, depressive symptoms, and anxiety, and can sap the “cognitive bandwidth” needed for chronic disease self-management.

Addressing food insecurity is critical for our Nation’s health. Our largest food insecurity intervention is SNAP, the Supplemental Nutrition Assistance Program. SNAP is known to reduce the depth and breadth of food insecurity, and, moreover, recent evidence shows that even though it is not specifically designed to do so, SNAP has important effects on health. By helping improve chronic disease management, a recent study found that SNAP saved \$1,400 per person per year in health care expenditures.

Beyond SNAP, however, we have exciting new interventions to help combat food insecurity and improve health. One type of intervention involves screening for food insecurity and nutrition issues in clinical care, followed by linking patients to community resources to help meet these needs such as referral to a local food pantry. These programs have been found to improve blood pressure and cholesterol in older adults with chronic illness.

Another very promising type of intervention is medically tailored meal delivery. As its name suggests, medically tailored meal delivery provides home delivery of fully prepared meals specifically tailored to the medical needs of the patient. For our sickest older adults, medically tailored meals offer many benefits. The Food Is Medicine Coalition is a group of charitable organizations that provide these types of meals and study their health effects.

In California, medically tailored meal delivery was found to decrease depressive symptoms and increase medication adherence and dietary quality in patients with HIV and diabetes. Where I work, in Boston, a medically tailored meal organization called “Community Servings” is also doing groundbreaking work.

In partnership with the health insurer Commonwealth Care Alliance, we found dually eligible Medicare-Medicaid beneficiaries who received medically tailored meals had major reductions in hos-

pitalizations and emergency department visits. This translated into important cost savings. Participants in the medically tailored meal delivery programs saved \$6,500 per year in health care expenditures.

Public-private partnerships are at the heart of these nutrition interventions. Government partnering with health care delivery systems, social service providers, and nonprofit organizations enable resources to be efficiently targeted to those in need and maximize the health gains achieved. The interventions described above all make clear what public-private partnerships can accomplish.

When everything is taken together, I think the evidence is compelling. Food insecurity along with malnutrition and hunger are major public health threats for older adults. Nutrition programs offer important improvements in health, health care use, and health spending. You as Senators and policymakers need to make decisions based on the best available evidence. And in this case, I can give you unequivocal advice: Do not just protect but expand our investment in food security and nutrition programs for our Nation's seniors. This will promote healthy aging, and improve the public's health.

The CHAIRMAN. Thank you very much for your testimony.

Ms. Pratt.

STATEMENT OF ELIZABETH PRATT, MPH, SNAP-ED PROGRAM MANAGER, UNIVERSITY OF NEW ENGLAND, PORTLAND, MAINE

Ms. PRATT. Good morning, Chairman Collins, Ranking Member Casey—

The CHAIRMAN. I think your mic may not be on.

Ms. PRATT. Oh, sorry.

The CHAIRMAN. There you go.

Ms. PRATT. Good morning, Chairman Collins, Ranking Member Casey, and members of the U.S. Senate Special Committee on Aging. Thank you so much for inviting me to testify. My name is Elizabeth Pratt, and I am the program manager of Maine SNAP-Ed based at the University of New England in Portland.

We administer the SNAP-Ed contract through the Maine DHHS Office for Family and Dependents. SNAP-Ed is the USDA's nutrition education arm of SNAP, the Supplemental Nutrition Assistance Program. It offers education, social marketing, and environmental support in all 50 States. SNAP-Ed uses evidence-based, comprehensive public health approaches to improve the likelihood that low-income individuals will make healthier food and physical activity choices, consistent with the current USDA Dietary Guidelines for Americans. SNAP-Ed is designed to complement SNAP with nutrition education and obesity prevention. It is not focused on outreach or promotion of SNAP.

The purpose of the Maine SNAP-Ed program is to provide low-income Mainers with easy ways to shop, cook, and eat healthy on a limited budget, essentially stretching their limited food dollars.

We have 44 highly qualified nutrition educators who work in every Maine district, and they are based in local community coalitions and hospitals. They work with partner organizations to reach low-income Mainers across the age spectrum. The program follows detailed guidance from the USDA Food and Nutrition Service. Our

educators provide series-based nutrition education and implement policy systems and environmental change strategies.

As you may know, Maine is the oldest state in the country. We have the highest percentage of older adults, and many of them are low-income. Food insecurity is very prevalent in our rural State. Roughly 203,000 Mainers face hunger every day.

Maine's seniors have a reputation for being independent and proud. They are reluctant to ask for help despite their need.

However, Maine seniors are open to learning, and this is part of why I think our program is successful in reaching low-income seniors. While many seniors know how to cook, they are facing new health issues and dietary restrictions and are very interested in learning about nutrition as a way to improve their health.

Our educators are often from the same communities where they work. They know where the eligible sites are and how to engage with them effectively and respectfully. All of the sites must serve at least 50 percent low-income individuals. Examples include housing sites, food pantries, and federally qualified health centers. In Maine, it is not difficult to find eligible sites.

In 2016, there were almost 3,000 seniors who participated in three curricula that we offer for this age group: 10 Tips for Adults, Eat Smart Live Strong, and Cooking Matters for Adults. Our Cooking Matters programming is implemented in partnership with Good Shepherd Food Bank and Hannaford Supermarkets.

In order to give you a sense of our work, I just want to give you two different examples of nutrition educators doing great work with seniors in Maine.

Sara McConnell works in the Down East District, a rural and coastal region of Maine with significant poverty. In Sara's own words, she describes the class and the unexpected result: "I think one thing that stands out to me with the work that I have done with seniors is the connections they made in the community because of SNAP-Ed. This really rings true when I think of the group of seniors living with cancer that participated in a Cooking Matters series in Calais. People from many communities traveled to the class not only to learn about healthier eating but to support each other while they were living with cancer or taking care of a loved one with cancer."

"After the 6-week course, participants were more like family than class members. About a month after teaching the class, I ran into a participant at the grocery store. She was so excited to tell me that many in the class had continued to meet on a regular basis to do crafts, cook, and socialize. With few social events and resources available in the communities, the SNAP-Ed classes are very beneficial, not just in improving people's health. It is much bigger than that."

As Sara's story illustrates, not only do seniors benefit from improved nutrition, SNAP-Ed helps address the social isolation of rural seniors.

I also want to tell you a brief story about an educator in Aroostook County. Heather McGuire is the educator based out of Houlton. She grew up in "The County," as Mainers call northern Maine, and was raised as many children are in this special part of our State—to hunt, grow food, forage for fiddleheads, and help out

during the potato harvest. Because of this upbringing, she understands the importance of growing food in the county. She did a couple projects to increase access to the farmers' market in Houlton and also to build raised-bed gardens at a senior housing facility.

As the oldest State in the country, Maine has a responsibility to care for its seniors and optimize their health as they age. SNAP-Ed plays a critical role in addressing one of our Nation's greatest challenges. The number of food-insecure seniors is growing, and it is expected to increase by 50 percent by 2025.

Thank you for this opportunity to share our experience with this 100 percent federally funded program and its importance to low-income seniors in Maine.

The CHAIRMAN. Thank you very much, Ms. Pratt.
Mrs. Taylor, welcome.

**STATEMENT OF PATRICIA ANN TAYLOR, RETIREE, PENN
HILLS, PENNSYLVANIA**

Mrs. TAYLOR. Chairman Collins, Ranking Member Casey, and members of the Committee, thank you for inviting me to testify today. It is an honor to be here. My name is Patricia Ann Taylor. I am 72 years old and a resident of Penn Hills, Pennsylvania.

I am married to the love of my life, James, who is 79 years old, and this past April we celebrated 51 years together. We have five biological children. Two of my daughters, Dawn and Toni, have joined me here today, both who are employed and volunteer at our food pantry. James and I also adopted five boys with special needs.

We have always had a full house. We are a close-knit family, and I love having my 10 children, 15 grandchildren, and 17 great-grandchildren around us.

My husband and I have always worked to support our large and boisterous family. James was self-employed, an owner of a beer distributor and laundromat. I have held various positions in the health care sector, at times having to work two jobs. It was not always easy to put food on the table and pay our bills, but we managed somehow. My husband has always had a strong work ethic and always believed that he should be the provider for his family.

As we have gotten older, our health care costs have taken up a greater share of the bills, and we were forced to struggle because of our health care expenses. My husband has beaten prostate cancer, survived two heart attacks, is an insulin-dependent diabetic, has blood clots in both lungs, and has been fighting blindness due to diabetic neuropathy. I have beaten breast cancer, had back surgery, total right knee replacement; I have multiple sclerosis, which now is in remission, and heart disease.

It was not easy to ask for help with our food expenses. When talking with other adults in our age bracket, we learned about a food pantry in our neighborhood, the Lincoln Park Community Center, which is run by Joyce Davis. This center serves over 600 needy families monthly, and seniors such as ourselves receive a senior food box once a month. The help that Ms. Davis provides to my husband and I has truly been a blessing.

Because of the senior food box that we receive through the Lincoln Park Community Center, we do not have to decide between paying for our medication and putting nutritious food on the table.

Ms. Davis serves so many needy families that have come to the Lincoln Park Community Center. She also serves over 100 people at another local senior center and over 75 at another food pantry monthly. Her services, as you can see by the number of needy families that come to these centers, show the need in our community. She has definitely been an asset in our community by how efficient, organized, and successful her food pantry is. She tells me that the Federal support she receives for this work is essential.

Neither my husband nor I ever dreamed that we would come to rely upon the senior food box. We were hardworking adults, and we saved for our retirement. Again, at times I even worked two jobs.

Before the senior box, I noticed that I was not purchasing as much food that would help keep us healthy. It started a vicious cycle that I knew was not good for our health.

Things changed when I started receiving the senior food box. Last month, I received canned fruit and vegetables, spaghetti sauce, cereal, dry milk, cheese, pasta, peanut butter, and canned chicken.

I can supplement these items with groceries like, fish, meat, fruits, vegetables, Ensure, and Boost. With those items that I receive from the senior food box, I can make creative dishes. Last month, I was able to make chicken salad, spaghetti, grilled fish, and baked chicken. These are nutritious meals for me and my husband. The senior food box stretches our groceries and our budget. I am especially appreciative of the senior food box because it helps my family afford Ensure and Boost, which my husband needs to drink due to his loss of appetite caused by health issues and medications.

When Senator Casey's office called me to talk about my experience with the senior food box, I said that I would do anything to help support nutrition programs that benefit seniors, and that is how I wound up in this chair.

The senior food box has been a godsend to me and James, and I strongly urge you to support the senior food box programs, food banks, and other programs that help people like me. I urge you to help spread the word that programs like the senior food boxes are available. And I hope that people will be able to continue to receive the senior box.

Again, thank you for the invitation to testify before the Committee, and I look forward to answering any of your questions.

The CHAIRMAN. Thank you very much, Mrs. Taylor, for being with us today.

As I listened to each of you testify, I was struck by the fact that the programs that you mentioned all help to reduce social isolation as well as meeting nutritional needs. And we know from previous hearings that this Committee has held that seniors who are socially isolated and lonely have higher rates of disease and mortality. So it seems to me these programs have the function of not only helping ensure that people get better nutrition, but bringing people into contact with other people, whether through home-delivered meals or a senior center visit. And I think that is really important, and it struck me, as all of you talked about it, that that was a common element.

Dr. Berkowitz, I am going to start with you because I was so struck by the statistic that you gave us that food insecurity is estimated to result in \$77 billion in excess health care expenditures annually. And this truly is an example of where we have to be careful not to be penny wise and pound foolish by reducing essential nutrition programs that help keep people healthier and would help lower that astonishing figure.

You described the promise of using medically tailored foods based on pilot projects and demonstrations, and I had not heard of that concept, but it fits in with the advice from Hippocrates that I mentioned in the opening statement.

Tell us a little bit more about that and how you would move from demonstration projects to scaling up this concept of medically tailored foods.

Dr. BERKOWITZ. Thank you. That is a great question. Medically tailored meals are a program I am very excited about. We have known for a long time that home-delivered meals that are often non-tailored, like Meals on Wheels, have important benefits. But as people get sicker and their nutritional needs become more complicated, there becomes an opportunity to increase the value by specifically tailoring it in that way.

A number of organizations across the country are able to provide these, but their overall numbers are small. And I think moving forward, the way to scale this is really through a public-private partnership. I think the organizations with the skills are out there, but we do not currently have a good mechanism to finance and grow these organizations, and so something that has been proposed that has worked well in demonstration projects is making this a covered benefit under certain circumstances.

Now, you need to be selective about who these are for. This is not something where you would just rush out to do this if you have not tried other things, like the senior food box or SNAP enrollment or even non-tailored food. But for the most expensive people, if you can find the sort of appropriate situations to use it in, I think we have evidence to guide us in doing that. I think making this a covered benefit and then partnering with these private organizations that have experience in both the logistics of delivering the meals and the skills with registered dieticians on staff to really make sure the meals are meeting the needs of the people they serve has a lot of promise.

And as you pointed out, these are often interventions that have a relatively small day-to-day cost but can avert a lot of the big-ticket items, like a very expensive hospitalization or emergency department visit or need for surgery or something like that.

The CHAIRMAN. It seems to me that they also could be particularly helpful for people with cognitive impairments who may be having difficulty in swallowing certain foods. Is that another part of this?

Dr. BERKOWITZ. That is absolutely right. So I think one of the real advantages of these are that you can sort of meet people where they are in terms of their needs. And so if their need is that they need a mechanical soft diet or, you know, they are on dialysis and need to avoid particular concentrations of potassium or something

like that, you can really finely dial in and get people exactly what they need.

Other people may not need that. They may be able to shop themselves, prepare the food they need, and do that. But I think there are a lot of people in this situation where having that fine control over the healthy diet for them can really help meet their needs in the short term and prevent these long-term consequences.

The CHAIRMAN. Thank you.

Ms. Pratt, I love the metaphor that you told my staff, that SNAP provides a family with a fish and SNAP-Ed teaches a family to fish, and I would say teaches the family how to prepare that fresh fish, which is not necessarily a skill that all of us would have.

You also told us that nearly three-quarters of Maine adults do not eat enough fruit and vegetables. After enrolling in the SNAP-Ed programs and training sessions, have you seen changes in the nutritional patterns of participants? In other words, is this program working to help solve that problem?

Ms. PRATT. That is a great question, and we do have a lot of data nationally from all the SNAP-Ed programs across the country and our own data in Maine that shows that there is an increase in fruit and vegetable consumption with some of our curricula.

We do have a small evaluation—we have one staff person who does internal evaluation on our team. She does a lot of quality improvement work and looks at key outcomes and tracks the classes and looks at two things, really, looks at their intent to change behavior and then also increases in fruit and vegetable consumption; and we have seen that this is working in Maine. And we also have an external evaluator. The State hires Altarum Institute to also evaluate our program, and a lot of the high-level data is in the annual report that I provided to each member on the Committee, and there are summaries of some of this data. And then we also have a full report with additional data that we can provide, if people are interested, or some of the Altarum data.

But I do want to mention that all of the curricula that we choose is evidence-based, so we are using—and the USDA provides guidance to all SNAP-Ed programs and wants them to choose curricula that have been proven to work, that have been proven to increase fruit and vegetable consumption. And so my role as a manager is really to ensure that all of our educators are following and using that curricula with fidelity. And then I know that if they are doing that and if we really do a lot of work with them and training and technical assistance, then we know that we are following the guidance and most likely, you know, all of that work will pay off with increased benefits, and we will see behavior change across the State.

The CHAIRMAN. Thank you.

Senator Casey?

Senator CASEY. Thanks very much, Chairman Collins.

Pat, I wanted to start with you and highlight some of your testimony and focus in particular on the food box, the impact that has on your life and the life of your family.

I was interested to read in your testimony that in addition to talking about what the food box means to you, you said something which was interesting in the sense that it is probably an under-

appreciated part of this discussion. You said on page 2 of your testimony, "The senior food box stretches our groceries and our budget." And I wanted to have you talk about that for a moment, because sometimes I guess we think of it as just a quantity of food as opposed to having a positive impact in other ways on your budget. Can you talk about that?

Mrs. TAYLOR. I guess I am talking about my family, our nutritional needs, my husband's especially, he needs the Boost and the Ensure along with the protein and vegetables and all those other things. Without the food box, I could not stretch my budget to meet those needs.

Just to give you an example, his insulin test strips—and we have insurance. You know, we have Medicare and good supplemental insurance. Still, he is paying out of pocket \$75 for the test strips several times a month because of how much testing he has to have done.

I do not want to make the decision of his health care versus what I put on the table. I want protein, and I want the nutritional—you know, the food elements that we should be eating to keep him healthy, to keep us healthy. And that would go for all seniors.

In talking with other people that are in our age group, you know, some of those people really cannot afford based on what their Social Security is monthly. I have worked all my life, so mine might be higher than somebody who has been just a mother—not "just a mother," but, you know, a stay-at-home parent and does not have that X amount of dollars put into Social Security.

So juggling is definitely a task that, you know, when you are faced with food, medicine, and other needs, it is difficult to do.

Senator CASEY. So the food box, it is not just the quantity of the food; it is the healthy impact of it.

Mrs. TAYLOR. Well, it is the nutrition that is in that box. It is the proteins and all those things that are needed on that table monthly to get us through, you know, that we should have for healthier living. You know, you hope that the cost of medical expenses is cut down because you are eating better. You know?

Senator CASEY. Well, I was noting as well that I am not sure I have ever seen a list this long of health challenges for one individual. Your husband: cancer, two heart attacks, insulin-dependent diabetic, blood clots, fighting blindness. And you yourself had breast cancer, back surgery, lung replacement, and MS. That is quite a set of challenges.

Mrs. TAYLOR. And I had to quit work because of heart disease. You know, again, we have worked all our lives, and, you know, to ask for somebody or go somewhere for additional help was a struggle. My husband is a very proud man and, as I said earlier in my testimony, always felt that he should be the one to put the food on the table and, you know, it is like—it was a lot of soul searching to be able to go to the food pantry and accept that food box. But, you know, I am glad we did, and I am hoping for other seniors that, again, I have talked to, it is a blessing.

Senator CASEY. Thanks, Pat.

The CHAIRMAN. Thank you.

Senator FISCHER?

Senator FISCHER. Thank you, Madam Chairman.

Dr. Bales, you mentioned in your testimony that the convergence of obesity and population aging are causing serious health problems for society, and one trend that we have seen in Nebraska is an increase in the number of community gardens, which, as you know, involve multiple people and they use a shared space to grow food. And these gardens often encourage a healthier lifestyle, more outdoor physical activity, healthier eating with fresh fruits.

It seems to me that promoting further development of community gardens would be one way that we could combat both malnutrition and obesity at the same time. Would you agree with that?

Dr. BALES. I definitely would agree with that. You know, the two pillars of the health that we are talking about are diet and exercise. The need to have a very high nutrient density in the amount of calories that you eat is difficult to meet as I said, because appetites are not that big for some of these older folks, but they still have to get all the vitamins and minerals. They almost need like the most nutritious diet they have ever had, and so the garden would do that. And then the moving around, move it or lose it, you know, is so important.

So I think both of those things would be accomplished, along with the connection of reduced loneliness that Senator Collins mentioned.

Senator FISCHER. And do you have any other suggestions on a way that we can promote combating obesity and what comes with aging, including physical activity and loneliness?

Dr. BALES. I think that we need nutrition screening in primary care. Like when you go at least once a year for your check-up, there needs to be an assessment. And if an individual is malnourished or at risk of malnutrition, that would be picked up. And they should spend an hour with a registered dietician or a nutritionist and identify their plan: Do I have osteoporosis? Do I have heart disease? And I know that I am not addressing obesity specifically with this comment, but you cannot do all things. We get more and more different as we age, and so you cannot get your health priorities from the news or the back of the cereal box. You need to know: What do I need as an individual? And some guidance with that would really help.

And then they are going to need guidance to reduce their weight. If you can lose just even 5 percent of your body weight or more, you will get benefits to your chemistries, to your metabolism.

So I think the fact that older adults like to work together, they are actually quite open to new things, that they can actually do this. You know, they learn diabetic exchanges in our classes, and they can quote you the calories in different foods. So they can do it. The education really helps. But also putting things into their hands, like the gardens would do, like home-delivered meals do, that is the other piece that they lack.

I want to say something about the independence. The group allows them to be independent of their children, to not ask for help and continue to be on their own, and that is the great thing about things that get food close to or actually into the home.

Senator FISCHER. You had talked about the 6-month diet intervention, and your team is currently testing that. Could you tell us

a little more about that? And if you can, tell us some of the early findings that you have seen in that.

Dr. BALES. Sure, sure. So let me just say that 6 months is not a magic time. That is just usually about how long funding allows you to do a research study, so you see a lot of them that way. So what we are doing is a very moderate weight loss intervention for obese older adults who are functionally limited, meaning that they are having trouble getting around, walking, getting up out of a chair, mostly because of the heaviness of their bodies. So we want them to lose their body fat but not their muscle, which we all have a tendency to do when we diet if we do not exercise. Well, it is a little hard to exercise if you walk with a cane or a walker. You can do some, but not a lot.

So what we are testing is a higher protein intake at every meal during the day while the calories are low enough to lose weight. We are hoping that that can kind of substitute for exercise until they can get to the point that they are able to exercise more.

So let me just say that in all of our frail, obese older adults, when they lose some weight, their function improves dramatically. It is wonderful to see. But we are getting preliminary findings that show that when we have the higher protein intake, we do get a significantly better improvement in function. This is preliminary, but it makes a lot of sense. Older adults probably have a higher protein requirement anyway.

So that is what we are finding. We are continuing to test that. And if you want to ask more about that, feel free.

Senator FISCHER. Thank you very much.

Thank you, Madam Chair.

The CHAIRMAN. Thank you.

Senator Cortez Masto?

Senator CORTEZ MASTO. Thank you. Thank you, Chairwoman Collins and Ranking Member. Thank you for this conversation, and all of you today, I so appreciate what you do on behalf of our communities.

You know, my grandmother, Mrs. Taylor, was a sales clerk her entire life, worked hard, got up every day, was independent, nothing slowed her down, and was even known to be in my back yard landscaping. She just was a busy woman and retired on Social Security. There were days when I would go over and visit with her, and there were times when she had to make a decision to be able to afford her prescription drugs or pay the energy bills. And I would say, "Grandma, why aren't you calling? Why aren't you reaching out?" Because it is about dignity. It is about that independence that she had her entire life and not wanting to reach out. And I get it, and I worked most of my career on senior issues and understanding that it is hard sometimes to ask for that help when you have been so independent.

But what these programs bring and what I see and I hear from you—and I thank you for being here—is that peace of mind and dignity that you can still have. Though you have a beautiful family, and your two daughters are sitting behind you, there is still that fight to have that independence and that dignity, and I appreciate it and am willing to fight for that for you, for many of our seniors, and that is why I thank you all for being here.

One of the things I find, besides the fact that it is hard for many of our seniors to reach out, is also that many do not know about the programs, and particularly—I am from Nevada, and we have some rural communities. In two of them, in Laughlin and Searchlight, which are in southern Nevada, Meals on Wheels service is provided through a nonprofit called “Silver Rider,” and they do amazing work in that community. The executive director and her team, though, are very active in getting the word out about the program. They do public service announcements. They do print media. They are on radio stations. They do brochures. They are even appearing on a local morning show on a local TV station which is very popular.

And so I guess I am going to open this up for the panel. Do you know of instances of seniors not accessing these programs like Meals on Wheels, the food box, the Senior Farmers’ Market Programs, et cetera, because they do not know that these programs exist? And how do we improve upon that? How do we make sure that they are aware of these programs? And I will open it up. Mrs. Taylor?

Mrs. TAYLOR. I know in my situation, my husband and I were totally unaware, and it was through word of mouth. And I know where I live, you know, there is nothing. There are no morning TV programs or even on the radio that you hear about it. And my suggestion would be the senior high-rises have either somebody post notices, speak to the seniors in those areas, and what about public TV, you know, the local—because my understanding, it is not that expensive to do advertising through that kind of public television. A lot of your seniors are sickly and sitting at home and watching TV. So, you know, for them to be informed, because I know, again, if it had not been for someone telling me about it and directing me, I would be clueless. You know, I just would not know. That is very important.

Senator CORTEZ MASTO. Thank you. Any other thoughts? Thank you very much.

Dr. BERKOWITZ. So I can say in my own practice of seeing older adults, I would say it is more common than not that people do not know about the programs they may be eligible for or may not be using what they are eligible for. And I think a lot of it has to do with a lack of a systematic approach to doing this. I think one of the reasons in health care we have made such progress against breast cancer and colon cancer is because we screen for it, and when we find it, we do something about it.

We have lots of great nutrition programs in the U.S. We have evidence that they work, but it is often a patchwork as to how you get into them, how you hear about them. And so I think really systematizing the approach of screening for food insecurity and malnutrition would be very helpful.

One of the great advantages of an organization I work with, Health Leads, which I mentioned briefly, is that they do exactly that. So we have a systematic screening, and then they have a comprehensive database of all the resources someone may be eligible for, and they can go through and say, all right, this one will work for you, this one is a little too far, this one you do not meet the criteria. But there is a systematic assessment and then a com-

prehensive listing of the resources, and I think that together is really how we put more people into the programs that are out there and will help them.

Senator CORTEZ MASTO. Thank you.

Ms. PRATT. I know in Maine we have amazing partners, organizations who do a lot of outreach and promotion of these programs to seniors. And one of them is Maine Hunger Initiative, but also the Maine Area Agencies on Aging do a lot of that work. And then our educators do encounter seniors who are very reluctant to access food pantries, and so they do some work with them to do more gardening, to go to farmers' markets, and also to promote gleaning programs, because a lot of seniors are more willing to take a free box of gleaned produce that they see as it just might go to waste, and that is more appealing to them than going to a food pantry. So we do have some creative strategies to work with seniors.

Senator CORTEZ MASTO. Thank you. That is very helpful. Thank you for the conversation. I have to leave to get to another committee hearing, but thank you so much. I appreciate the responses and the conversation this morning.

The CHAIRMAN. Thank you so much, in a busy schedule, for taking the time to be here.

Senator Gillibrand?

Senator GILLIBRAND. Thank you, Madam Chairwoman and Mr. Ranking Member. I appreciate this hearing very much. It is a huge issue in my State.

Dr. Berkowitz, in your testimony you mentioned that there are three ways food insecurity affects seniors: the quality of their diet, the cruel choices they have to make between food and medication, and the stress that makes caring for themselves more difficult. Would a reduction in SNAP benefits like those contained in the President's budget affect low-income seniors more than other groups of SNAP recipients due to potential underlying health concerns?

Dr. BERKOWITZ. I think it absolutely would. I think the effects on diet may be the same, but the other two issues are likely to be particularly worse in seniors. And I think the real thing they may see and may need to watch out for—and we have heard a lot about this—is the trade-offs between food and medications and other essential services. So I think if the resources provided by, say, SNAP or the senior nutrition boxes are taken away, that money has to be made up somewhere. And you will often see people scrimping on their medications, delaying filling their medications, taking less than they are prescribed, and we know that sets off a spiral of poor health, health consequences. And I think as Senator Collins alluded to, we could very well wind up causing more costs in excess health care than we save by reducing SNAP.

Senator GILLIBRAND. So how can we get this message out? It is so frustrating to me as someone who fights for SNAP benefits every year that there seems to be a disconnect, a real disconnect, of who actually receives SNAP benefits. And there seems to be this general theory that the SNAP program is riddled with waste and fraud and abuse and that people are taking advantage of the system. But my understanding of SNAP beneficiaries is they are seniors, they are children, they are veterans, and families who are working, who

are trying their best to make ends meet but do not. And without the benefit of SNAP, they do not have the nutrition quality they need. They are starving nutritionally by the end of every month, which causes childhood obesity and other terrible health outcomes.

How do we change Congress' understanding of what the benefit of SNAP is and why it saves money long term?

Dr. BERKOWITZ. I think that is a great question, and certainly people smarter than me have tried to answer it. I agree completely with what you are saying. A large number of people on SNAP are working. A large number of people on SNAP are on it for a short period of time where they have a bump in the road and they get back on their feet. And the vast majority of people who are on SNAP and are not working, it is because they cannot; either they are a child or an older adult or someone with a disability.

The evidence is there, but, honestly, I think—though I know she is not on SNAP specifically, I think testimony from people like Mrs. Taylor talking about the value of nutrition programs, showing that these are programs that are used by hardworking Americans, that they are really part of a safety net that helps people who are not trying to take advantage of the system but are just trying to do the best they can in the circumstances they find them in may hopefully be something that succeeds when simply looking at the data fails.

Senator GILLIBRAND. Well, maybe something from the medical community, to the extent we could get a nationwide letter signed by doctors about the effects on seniors' health, particularly your testimony, from all 50 States, I think that would be exceedingly meaningful, because it has become an ideologic issue, which is outrageous. There is nothing ideologic about it. It is just: Does it work or doesn't it work? Does it protect people or doesn't it? The facts are there, and I would like a fact-based analysis to be part of this discussion that, unfortunately, becomes a terrible political argument, which breaks my heart.

Dr. Bales, in New York we have a program called N-Y-S-N-I-P, NYSNIP, that we automatically enroll seniors in SNAP if they live alone and receive Supplemental Security Income, SSI. I know there are a number of ongoing USDA pilot programs that can simplify the SNAP application process for seniors. Could programs that make it easier for seniors to enroll in SNAP and so be able to afford to buy lean meats and dairy products make a difference to your patients?

Dr. BALES. Yes. We have talked a lot about fruits and vegetables, and they are key for getting the vitamins and minerals. But protein is a little bit of a neglected nutrient, especially with our highly processed kind of high-carb, low-fat trends that we have had. And as I mentioned before, we know that protein requirements are a little bit higher as we get older, and we also know that intakes go down.

So these are expensive foods, relatively speaking. I did not mention this, but in my research we actually provide to them all of this generous serving, 30 grams of protein for two of the three meals a day, into their hands. When I first created this, my feeling was there was no way it would happen unless we provided it.

So it is the same ideas as the food box, that the closer you can get the food to them, into their homes, the better, or making it af-

fordable also does the same thing. And I do occasionally have, I must say, unfortunately, people who join my study just for the free food because that is very helpful to them.

Senator GILLIBRAND. The reality.

Dr. BALES. So, you know, protein has been around a long time, but it is a very important nutrient. And protein calorie malnutrition is actually what is going on when people do not eat, regardless of what they weigh. You know, if they are not eating enough protein and calories, they are slowly losing their muscle from their body and other important, detrimental things are going on.

I think the idea of calling this malnutrition is good. That is what this Committee is doing, this meeting is doing. It sounds dramatic, but I think in order to get the attention of the Congress, we need to call it by its name and really talk about that idea that it is going on.

Senator GILLIBRAND. Thank you.

Thank you, Madam Chairwoman.

The CHAIRMAN. Thank you.

Ms. Pratt, we have talked a lot today about how to get the word out about programs that Mrs. Taylor and others are using that are so vital, and also how to reduce the reluctance, particularly of seniors, to come forth and use those programs. And I was impressed with your chart on SNAP-Ed in my State of Maine, and you have shown where the nutrition educators are located, in which district or county. But, to me, what is more significant is how integrated they are into places where people shop, learn, work, play, go to church.

Could you talk a little bit about the partnerships you have with everything from public housing sites to grocery stores to farmers' markets to churches? That is what really impressed me, because if we have that kind of integration, people are going to know about these programs because they are going to come across this integration in their everyday lives.

Ms. PRATT. Thank you. That is a great point. And as you can see on the map, we have coalitions and we have organizations. Some of the coalitions are based in hospitals, but we have them in every district in Maine. And because the Directors of these agencies and the staff are so integrated in their communities and many of them live there and really know where eligible sites are, that is really the strength of our program in Maine.

We at UNE in Portland cannot really understand all of the needs across the State, and every district, as you know, is very unique. And there are unique needs up in Washington County and Aroostook County. We have food deserts. And then in the urban areas we have a lot of new Americans from other countries with very different issues, and even across the ages, we have different needs.

So it really is important, and we rely a lot on those local agencies and the fact that our educators are based in those agencies. And then they do needs assessments. They really do a lot of work in their communities and are able to take that USDA guidance and tailor the work to what the needs are in their districts. And they do go to all of these different settings to meet the needs.

The easiest setting, of course, is the schools, and they all go to schools that are eligible. So any school that has 50 percent or more

students on free and reduced lunch, they can go to those to do nutrition education. And then for adults, they use a similar criteria from the USDA to qualify adult sites, and they can work with senior housing facilities, other low-income facilities, and federally qualified health centers, as just some examples.

So I am glad you raised that, and I think that really is the strength of our program in Maine.

The CHAIRMAN. I think it is, too. I truly was struck by the number of different sites, adult education training sites, child care centers, public and community health centers, grocery stores, food pantries, farmers' markets, churches, senior centers, public housing sites. It seems like you are everywhere, and I think that is a real strength in getting the program delivered, and I congratulate you for that.

Ms. PRATT. Thank you.

The CHAIRMAN. Dr. Bales, I want to follow up on a very interesting point that Senator Fischer was starting to approach with you. I am curious, in your 30 years of working in this field, if you have seen a change in the attitudes of the medical profession toward the importance of screening for nutrition. Dr. Berkowitz says that he does it routinely, but I think you are the exception to the rule in doing that. Maybe I am wrong. And, of course, Federal policies on whether or not that hour with a dietician or a nutritional expert is going to be reimbursed is also an issue.

But have you seen a greater awareness among primary care physicians, nurse practitioners, those who are on the front lines in evaluating a patient's nutrition?

Dr. BALES. So I would like to say, "Oh, yes," but nutrition in medical education is still variable. It has to do with the competing items in the curriculum for medical schools, and it does not always come out on top. So I think overall, yes, I think physicians certainly recognize more about the importance of nutrition than in the past. But it is variable whether they have enough training to actually know how to implement it in the very short time that they have now for examinations.

For special programs, we do see dietitians and nutritionists at the table to discuss complex medical programs. At Duke we have a program where we rehab seniors prior to surgery, and nutrition is there.

So I think overall, yes, but it is not at the level that we need. The reimbursement problem that you mentioned is a key issue, because, first of all, you have to screen, but also if you do not have somewhere to hand off for that individualized help that we were talking about to occur, then you have not been able to do very much with the identification of that risk.

So progress has been made, but more is needed, and it would be great if nutrition was more of a part of medical training. And I would certainly appreciate my colleague's comment on that as well.

Dr. BERKOWITZ. Sure, so I completely agree with you that I think nutrition training is underemphasized in medical training overall. And I certainly did not mean to suggest that I think this is happening routinely anywhere. I think the opposite.

I think you would be hard pressed to find people who do not think it is important. If you talk to doctors and say is nutrition im-

portant? Absolutely. Does it happen routinely? No, it happens on an ad hoc basis; it happens in specific circumstances. But I think to take that next step of move beyond the promise of the interventions to actually really improving the public's health, I think we need the systematization to be in place, and that includes screening, that includes having something to do with it, and that includes a financial mechanism to make it happen.

The CHAIRMAN. Thank you.

Dr. BALES. And if I could just add one more thing?

The CHAIRMAN. Yes.

Dr. BALES. If my physician—if I am an older person—tells me to do it, I am much more likely to do it.

The CHAIRMAN. Very good point.

Senator Warren?

Senator WARREN. Thank you, Madam Chair, and thank you so much again for having this hearing. I think this is just a powerfully important point, and I commend you and Senator Casey for pulling this together and everyone for coming today.

We all understand that nutrition is vitally important for health. So is access to health care. And if someone is not getting adequate nutrition or cannot afford to go to the doctor for preventive care, it is not just bad for the person. It is expensive for the system.

In Massachusetts, we have been working hard to keep health care costs low by focusing on both sides of the equation: on nutrition and near-universal health care coverage.

Tufts has a world-class research center where researchers study the links between nutrition and healthy aging. Our community health centers partner with local food banks and with grocery stores to improve access to nutritious foods. They have some really creative programs. I visited several of them. And our new State Medicaid waiver now incentivizes health care providers to keep people healthy by including providing nutrition services.

So, Dr. Berkowitz, you have done a lot of research studying the links between food and health. Could I ask you, how do programs like SNAP or meal delivery impact health care costs for older adults?

Dr. BERKOWITZ. Thanks for that question. I think what we are learning is that they have a very positive impact on health care costs, meaning that they reduce costs, and they do it in sort of the way we want to as well. Health care services cost money, whether that is a primary care visit or an emergency department visit or an inpatient admission. But I think we would all rather spend the money on prevention, spend the money on keeping people healthy, and not have it turn into a complication or a crisis.

And what we see is that not only do programs like SNAP or meal delivery reduce health care costs, they do it by reducing these big-ticket items, like inpatient hospitalizations or emergency department visits that usually signal something has gone wrong.

Senator WARREN. Right. Now, I know that in one of your research studies, you looked specifically at how meal delivery lowered health costs for low-income seniors on Medicaid. So what would happen to seniors receiving food assistance if their Medicaid benefits were taken away? Would the meal delivery program be enough on its own to keep them healthy and out of the hospital?

Dr. BERKOWITZ. So I would say it is not. First, the program really came as part of their Medicaid benefit, so it was part of a very innovative health insurer in Massachusetts, Commonwealth Care Alliance, who made it a covered benefit. So it is not even clear that the program itself would continue without Medicaid. But even if it were to for some reason, these are programs that work hand in hand with health care. Nutrition is an important part. Seeing your doctor is an important part. Seeing your nutritionist is an important part. Taking your medications is an important part. These all go together, and I do not think there is any one thing on its own that is going to keep people healthy. Just like just seeing your doctor will not keep you healthy without nutrition, just having the nutrition without being able to see your doctor or afford your medications is not likely to keep you healthy either. So I think this really all goes together.

Senator WARREN. I really appreciate your emphasizing the importance of the integration and how many low-income seniors rely on Medicaid to be able to stay as healthy as possible.

Ms. Taylor, you and your husband have raised ten children, five of them adopted. Congratulations. I know that food assistance has helped you make ends meet, but I want to ask you about another program that I think has helped a lot: Medicaid. I understand that several members of your family receive Medicaid benefits. Can I just ask, Ms. Taylor, if your children and grandchildren's Medicaid benefits were taken away, what would that mean for your family?

Mrs. TAYLOR. This is a very important part of my adopting five special-needs boys, because part of the adoption package was that they would receive Medicaid until they were 18. I could not by working, both my husband and I, again, all our lives, be able to afford health care, especially with special needs. You know, I have one child who, genetically, his teeth were falling out. It was a genetic problem. The dentist called it "aesthetics," so it had to come out of pocket. You know, it is those kinds of things that you pay for. But if I had to do the whole total caring or coverage for these children, I would not be able to take care of them. So not having Medicaid in my situation would impact them because I could not adopt and not be able to take care of five special-needs boys. It will impact the foster care system tremendously. They are crowded now. They are looking, begging for families. It is powerful.

My one daughter that I brought with me today, she has taken—her godmother gave her a Down Syndrome child who is 96 percent blind. His life expectancy was supposed to be to 10 years of age. He is 22 now. It is necessary. She works. You know, she could not afford his needs to be met just by working alone. Where would he be? He would be a burden on the system in some facility. You know, it is important. You know, not in all cases. My husband and I, you know, we have worked, we have paid our dues. But in some cases, there are people who cannot. They just cannot. And it is important that those needs be met.

Senator WARREN. Well, thank you very much. Thank you for all you have done. You have made a real difference in the lives of a lot of people. And I just appreciate all the work you are doing and the importance of health and nutrition here and how they go together.

Thank you, Madam Chair.

The CHAIRMAN. Thank you, Senator.

Senator Casey?

Senator CASEY. Thanks very much. Listening to Senator Warren's question, it is apparent that a lot of these issues begin to compound or problems begin to compound, depending on what we do here.

I wanted to focus, Dr. Berkowitz, on—I have not had a chance to ask you a question about the SNAP program itself. I was struck by the line in your testimony where you said that you would hope that we would expand and not just maintain funding for the SNAP program. Let me make sure I read it correctly, if I have it here. You said at the very end of your testimony—well, now I cannot find it, but I think that is the gist of it.

What we are facing here in this budget debate and the only caveat or reminder that provides a little bit of a measure of comfort is that budgets proposed by Presidents usually are not adopted by either party, even the party of the President. So that is good. But what I worry about is the proposal in my judgment is so extreme that what is a program elimination may not be elimination but will end up being a drastic cut.

The cuts to SNAP, for example, the 10-year number, is \$190 billion of a cut over 10 years just in the SNAP program. To say that is devastating does not begin to describe it.

Another program that is being proposed for cutting—not for cutting, it is for elimination, is LIHEAP, Low-Income Home Energy Assistance Program. And in your testimony, Doctor, you pointed out that the—you went through and itemized some of the other parts of the cuts. You said “people experiencing food insecurity face competing demands for their scarce resources, often leading to cruel choices. Those with food insecurity frequently make trade-offs between food and other necessities, such as, one, medications, two, housing, and, three, heating.”

All three have implications for the budget debate. So if you could talk to us about those implications just in terms of what that could mean for one family.

Dr. BERKOWITZ. Sure. So I think this situation of competing demands is really all too common. As you mentioned, you know, it takes a lot to stay healthy. There is the health care part. There is the healthy eating part, where you need to have a safe home, you need to have a warm home. Especially where I live in Massachusetts, probably where you are in Pennsylvania, winters can be long. Where I grew up in North Carolina, summers can be hot. And we see year after year seasonal variations in health conditions that are related to this.

There have been studies that have shown families where they have to use the oven to heat their homes in the winter, and people have respiratory illness from this. People go to the emergency department with COPD, emphysema exacerbations. Their children go to the emergency department with asthma exacerbations from this.

So, again, I wanted to emphasize one of Senator Warren's questions. These programs all work together to help keep people healthy, and, you know, I think we now understand that health is not just, you know, what a doctor says or what comes from the

medical community. It is really a state of being and that there are a number of things, basic needs that need to be met in order to do this. And I think cuts or eliminations to any of these programs will really have effects that impact other areas that may even be unintended or unforeseen, but will no doubt wind up hurting people's health and costing more money.

Senator CASEY. Senator Warren just gave me the right page here. You said, "Do not just protect but expand our investment in food security and nutrition programs for our Nation's seniors." The exact words.

The last thing I would say is a lot of us I think sometimes forget in the numbers and the debate what this means. Look, believe me, I think that that kind of cut to the SNAP program, the opposition to it is bipartisan. The opposition to a lot of these cuts is bipartisan. That is the good news. The bad news is the impact on one senior could be devastating.

I was looking at some numbers from the Center on Budget and Policy Priorities where they break down the characteristics of seniors receiving SNAP. This is as of 2015. Almost 4.8 million seniors are receiving SNAP. But here is among the most dramatic numbers. Seniors living alone and receiving SNAP, 73 percent of those who are seniors and receiving SNAP live alone. So we have to ask ourselves, what if that same senior not only is affected by the SNAP cut, but what if they are living alone in an apartment in those winters you mentioned and their low-income home energy assistance gets eliminated—not cut, eliminated?

And I think sometimes we also forget some of the numbers here. This same report talks about what it means in monthly benefits. We are talking as of, I guess, 2015, in Pennsylvania 121 bucks. They are not getting hundreds of dollars or thousands of dollars. One hundred and twenty-one bucks. The national number is about 128 bucks.

So I think we have got to think long and hard about these budget issues as we approach the season.

Madam Chair, sorry I am over my question time.

The CHAIRMAN. Thank you very much.

I want to thank all of our witnesses for being here today. You have advanced our understanding greatly of the importance of sustaining proper and adequate nutrition among our Nation's seniors and the impact not only on their personal health but also on health care expenditures of our Nation.

It may have come as a surprise to some of those who are watching on C-SPAN or listening in the audience today that malnutrition disproportionately affects our seniors, and many of you have talked about the convergence of an aging population—and as Ms. Pratt pointed out, this is particularly of concern to those of us who represent States with a disproportionately older population—and the malnutrition trend as well.

And the stakes are very high. As I mentioned earlier, I think one of the most startling statistics of this hearing is from Dr. Berkowitz when he estimates that \$77 billion in health care expenditures are attributable to poor nutrition. So armed with the knowledge that we have gained today, we can better prepare to reverse those forecasted tides for our aging population.

I am encouraged by the number of effective programs and research interventions that we have learned about today. I am reminded of a practice, a medical practice in Maine, which, for its patients with diabetes, sets up a weekly phone call to see if they are in compliance with their nutritional regimen and their exercise regime, and they check on their blood sugar levels. And it has been extraordinarily effective, and it is because they do have them spend time with a dietician or other nutritional expert and work out a regime for them for both food and exercise. But I think it is that annual call—not annual, that weekly call checking on them that really helps to encourage compliance.

But one of the problems is that they are not reimbursed for that call, and from my perspective, given the results that they can document, they should be. After all, if we can help someone with diabetes avoid amputations or blindness or other impacts on the entire body which diabetes causes, we are going to reduce health care costs, and we are going to improve the quality of life for that individual. And it is ironic to me that the reimbursement, which would be so small, for that essential phone call and that time with a nutritional expert is difficult to come by or impossible to come by, and yet if someone ends up having an amputation, of course, we will pay for that. And I am not suggesting we should not, but wouldn't it be better if we avoided that kind of heartache, illness, and high cost?

So we have learned a lot today about outstanding examples of how we can come together to help our older population age more successfully, and I thank each of you for bringing a different perspective and enhancing our knowledge.

Senator Casey, any final words from you?

Senator CASEY. Thank you, Madam Chair, and thanks for advocacy not only for seniors in Maine but across the country on this issue and so many others.

I also want to thank our witnesses for your testimony, your expertise, and your life experience. And, Pat, I am speaking to you particularly on that because you are bringing your story here, and your daughters, Toni and Dawn, with you. We are grateful for the time you have spent with us.

As we have heard today, senior nutrition programs like the Supplemental Nutrition Assistance Program, SNAP, the Senior Farmers' Market Nutrition Program, and senior food boxes are a lifeline for many older Americans. Research supports the importance of these programs, and access to proper nutrition is critical to support healthy aging.

We have also seen there are communities doing innovative work to connect seniors with these resources and to decrease the stigma of asking for help. Our seniors deserve to age with dignity, and it is clear that federally funded nutrition programs help provide that dignity.

We must continue to support SNAP, the Senior Farmers' Market, and senior food boxes, and I look forward to this Committee continuing support of seniors and their access to proper nutrition.

And, again, Madam Chair, thank you for this hearing, a critically important hearing for this Committee.

The CHAIRMAN. Thank you, Senator Casey.

I want to thank all of our witnesses one last time for your valuable contributions today, and all of the Committee members who felt that this was important enough that, even though this is an extraordinarily busy day here with a lot of committee conflicts and meetings on very important issues, they took the time to come by and express their concern. And, finally, I want to thank our staff who always work very hard in putting these hearings together.

This concludes this hearing. This hearing is adjourned.

[Whereupon, at 11:04 a.m., the Committee was adjourned.]

APPENDIX

Prepared Witness Statements

Prepared Testimony of Connie W. Bales, Ph.D., RD, Professor, Division of Geriatrics, Senior Fellow, Center for the Study of Aging, Duke University School of Medicine; Associate Director of Geriatrics Center, Durham VA Medical Center, Durham, North Carolina

Good morning Chairman Collins, Ranking Member Casey, and members of the Aging Committee. Thank you for this opportunity to testify. My name is Dr. Connie Bales, and I am a Professor at the Duke University School of Medicine and an Associate Director of the Geriatrics Center at the Durham VA Medical Center. I have been working in nutrition and aging research for the past 30 years, focusing on older adults as a population at high risk for malnourishment. Leading reasons for this include physical changes that increase nutrient needs as well as social and economic limitations that reduce their access to food. Older adults commonly face multiple chronic health conditions; the medications they take and special diet restrictions further increase their nutritional risk (1).

I will bring to your attention two important trends that have dramatically altered the profile of malnutrition in older Americans. The first of these trends is the on-going epidemic of obesity occurring in the United States. Rather than gaining weight slowly over time, now over one third of Americans spend decades of their lives exposed to obesity, a situation that has never before been encountered in our society. As this committee is well aware, the second dramatic trend is that of population aging. With the convergence of these trends, geriatric obesity is now very common. Almost 40% of older Americans are obese, many with morbid levels of obesity (2).

Contrary to what people may believe, being overweight or obese does not correspond with over-nutrition. In fact, obesity is a marker of malnutrition. Many obese older adults are not getting the nutrients they need. With low metabolic rates and little energy being spent on activity, their food intakes may actually be quite low (3).

This state of chronic malnutrition creates major threats to health. Aging increases the risk of chronic conditions like diabetes, heart disease and arthritis. Aging muscles reduce in size and strength and fat accumulates around essential organs in the body core. Obesity leads to all of these same changes! This brings a double threat, hastening chronic disease progression and hindering the ability to move around and be functionally independent (4).

No longer is the typical picture of malnutrition in older adults one of a weak, thin elder subsisting on "tea and toast". Soon the most common type of nutritional frailty will be the older adult who has excessive body fat masking weak muscles and limited ability to move around (5). This condition, which is called "sarcopenic obesity", enhances a host of health

problems, makes surgery and other medical treatments more risky, and hastens the need for institutionalization due to loss of functional independence (6, 7).

Obese older adults have a much greater likelihood of getting admitted to a nursing home than non-obese elders (8). Besides the increased cost to society of this early admission, nursing homes incur greater costs caring for the obese (9). Renovated facilities, larger equipment, and higher personnel costs are needed for their care. Some nursing homes are turning away those who are excessively obese.

Obesity is highly correlated with food insecurity, having uncertain or limited access to nutritious food. We know that poor health and food insecurity interfere with the intake of adequate amounts of protein, vitamins, and minerals.

Obesity treatment is challenging at any age, and, it can be especially challenging in older adults (9). But we know that reducing obesity and improving diet quality is achievable for seniors and that it lessens health problems like diabetes and hypertension, reduces risk of falls, and dramatically improves their function (4, 10, 11). My research focuses on older adults with distinct mobility limitations due to their excessive body fat. These individuals often have multiple chronic diseases. They also have a very limited ability to burn calories and strengthen their muscles through exercise. My research team developed and we are testing a special six-month diet intervention based on large servings of high quality protein from lean meats and low-fat dairy products at each meal (12). The goal is to achieve loss of body fat without the loss of muscle. We have shown that marked improvements in functional ability take place whenever these frail older adults reduce their obesity but our higher protein diet produces the best results for function (13). We have also discovered potential problems with diet adherence and treatment responses linked with race and lower education level (14). Our future studies will explore enhanced interventions for these especially vulnerable populations, which are also at higher risk for food insecurity.

In closing, I hope that I have raised your awareness regarding an important challenge facing many older Americans. Please realize that even though it is not shown outwardly, an overweight or obese elderly person may very well be under-nourished in ways that threaten their health and ability to live a life of quality. Our research has shown that dedicated efforts to improve the nutritional status of these individuals can literally transform them in terms of their abilities to live more independent and healthy lives.

Supporting References:

1. Porter Starr K, McDonald S, Bales C. Nutritional Vulnerability in Older Adults: A Continuum of Concerns. *Current Nutrition Reports*. 2015; 4(2): 176–184.
2. Flegal KM, Kruszon-Moran D, Carroll MD, Fryar CD, Ogden CL. Trends in Obesity Among Adults in the United States, 2005 to 2014. *JAMA*. 2016;315(21):2284-91.
3. Bernstein M, Munoz N. Position of the Academy of Nutrition and Dietetics: food and nutrition for older adults: promoting health and wellness. *J Acad Nutr Diet*. 2012;112(8):1255-77.
4. Porter Starr KN, McDonald SR, Bales CW. Obesity and Physical Frailty in Older Adults: A Scoping Review of Lifestyle Intervention Trials. *J Am Med Dir Assoc*. 2014;15(4):240-50.
5. Alley DE, Ferrucci L, Barbagallo M, Studenski SA, Harris TB. A research agenda: the changing relationship between body weight and health in aging. *J Gerontol A Biol Sci Med Sci*. 2008;63(11):1257-9.
6. Chung JY, Kang HT, Lee DC, Lee HR, Lee YJ. Body composition and its association with cardiometabolic risk factors in the elderly: a focus on sarcopenic obesity. *Arch Gerontol Geriatr*. 2013;56(1):270-8.
7. Lee J, Hong YP, Shin HJ, Lee W. Associations of Sarcopenia and Sarcopenic Obesity With Metabolic Syndrome Considering Both Muscle Mass and Muscle Strength. *J Prev Med Public Health*. 2016;49(1):35-44.
8. Marihart CL, Brunt AR, Geraci AA. The high price of obesity in nursing homes. *Care Manag J*. 2015;16(1):14-9.
9. Porter Starr K, McDonald S, Weidner J, Bales C. Challenges in the Management of Geriatric Obesity in High Risk Populations. *Nutrients*. 2016;8(5):262.
10. Villareal DT, Aguirre L, Gurney AB, Waters DL, Sinacore DR, Colombo E, et al. Aerobic or Resistance Exercise, or Both, in Dieting Obese Older Adults. *N Engl J Med*. 2017;376(20):1943-55.
11. Porter Starr KN, Bales CW. Excessive Body Weight in Older Adults. *Clinics in Geriatric Medicine*. 2015;31(3):311-26.
12. McDonald SR, Porter Starr KN, Mauceri L, Orenduff M, Granville E, Ocampo C, Payne ME, Pieper CF, Bales CW. Meal-based enhancement of protein quality and quantity during weight loss in obese older adults with mobility limitations: Rationale and design for the MEASUR-UP trial. *Contemp Clin Trials*. 2015;40:112-23.
13. Porter Starr KN, Pierper CR, Orenduff M, McDonald SR, McClure LB, Zhou R, Payne ME, Bales CW. Improved function with enhanced protein intake per meal: A pilot study of weight reduction in frail, obese older adults. *J Gerontol A Biol Sci Med Sci*. 2016;71(10):1369-75.
14. Bales C, Porter Starr K, Orenduff M, McDonald S, Molnar K, Jarman A, et al. Influence of protein intake, race, and age on responses to a weight reduction intervention in obese women. *Curr Dev Nutr*. 2017;1(5):1-10.

Food Insecurity, Malnutrition, and the Health of Older Adults:
Testimony for the United States Senate Special Committee on Aging

July 12, 2017

Prepared Statement of Seth A. Berkowitz, M.D., MPH
General Internist, Massachusetts General Hospital
Assistant Professor of Medicine, Harvard Medical School, Boston, Massachusetts

The opinions herein are solely my own, and do not reflect the official position of any organization

Chairman Collins, Ranking Member Casey and Members of the Aging Committee, thank you for this opportunity to testify, and help shine a spotlight on the importance of food security and nutrition in America's seniors.

Food insecurity, defined as uncertain or limited access to nutritious food¹, affected 12.7% of American households in 2015, or over 40 million Americans.² Though the American economy has been out of recession since 2009, food insecurity rates have been slow to decline, and remain higher than pre-recession levels.² Food insecurity is a particular problem for older Americans, as many live on a fixed income, and often have worse health than younger adults. These health conditions are often caused or exacerbated by an inadequate diet. Two related concepts also important for understanding the public health implications of food insecurity: hunger and malnutrition. Food insecurity may cause hunger, which is a physiological experience "that, because of prolonged, involuntary lack of food, results in discomfort, illness, weakness, or pain..."¹ Malnutrition "refers to deficiencies, excesses or imbalances in a person's intake of energy and/or nutrients."³

The picture of food insecurity and malnutrition in older adults is changing. Historically, an older, frail person consuming a restricted 'tea and toast' diet with scant calories exemplified food insecurity and malnutrition. However, the advent of cheap but non-nutritious foods has given rise to the coexistence of food insecurity and obesity, along with complications of obesity, such as diabetes and heart disease. Less healthy foods are often much cheaper, on a per-calorie basis, than healthier foods such as fresh fruits and vegetables, lean protein, and whole grains. Because adhering to a healthy diet is vital both for maintaining health and managing many illnesses once they occur, food insecurity can significantly affect health even for older adults who are not frail or underweight. It is critical to realize that, far from being paradoxical, food insecurity and obesity go hand-in-hand.

Key risk factors for food insecurity include being a racial/ethnic minority, disability⁴, social isolation, and having a low income.² The latter three are particularly important for older adults. Epidemiological studies have associated food insecurity with a large and growing number of health conditions, including obesity^{5, 6}, diabetes⁷, hypertension⁸⁻¹⁰, coronary heart disease⁸, congestive heart failure⁸, chronic kidney disease^{11, 12}, depression and serious mental illness^{13, 14}, and osteoporosis.¹⁵ Furthermore,

food insecurity may exacerbate these illnesses once they occur. For example, food insecurity is associated with worse blood sugar control among diabetes patients^{16, 17}, and increased use of expensive healthcare services such as inpatient admissions and emergency department visits.^{18, 19} Given all this, it is not surprising that food insecurity is estimated to result in \$77 billion dollars in excess healthcare expenditures annually.¹⁸ Even more importantly, food insecurity has been associated with a 30% increased risk of mortality over long-term follow-up.²⁰

Food insecurity is also important in the management of illnesses that are not caused by food insecurity. For example, while there is no evidence that food insecurity causes breast cancer, adequate nutrition is vital when undergoing breast cancer treatments such as chemotherapy. The body simply cannot respond appropriately to chemotherapy when nutrition is compromised. Similarly, adequate nutrition is needed for healing after surgery, or to recover from a broken bone sustained in a fall. Even infectious diseases, such as tuberculosis or pneumonia, are much more deadly in the presence of malnutrition. Studies have estimated that achieving nutrition goals would reduce the global burden of tuberculosis by 20%.²¹

As scientific knowledge has grown, experts have developed a conceptual model of the relationship between food insecurity and chronic illness.²² While there are likely many ways that food insecurity affects health, three key pathways have strong scientific support. The first, and perhaps the most obvious, is through dietary quality. As described above, food insecurity can lead to worsened dietary quality, malnutrition, and hunger, with attendant consequences on health. Second, people experiencing food insecurity face competing demands for their scarce resources, often leading to cruel choices. Those with food insecurity frequently make trade-offs between food and other necessities, such as medications, housing, or heating. This is particularly relevant to health in the context of medications. What is sometimes called the "Treat or Eat" trade-off, where individuals face difficulties affording food, medication, or both, is all too common. Almost one third of American adults with chronic illness report this trade-off.²³ Patients unable to adhere to their medical therapy for this reason face needless suffering, solely because they cannot otherwise afford enough to eat. Third, food insecurity's effects are psychological: food

insecurity worsens stress, depressive symptoms, and anxiety, and can sap the “cognitive bandwidth” needed for self-management of complex illnesses.

The problems associated with food insecurity have led to interventions meant to improve health and healthcare use by addressing nutrition. Programs have generally taken one of two forms. The first, sometimes called “linkage” interventions, involves assessing for food insecurity and/or nutrition issues in clinical care, followed by “linking” patients to community resources to help meet these needs, such as enrolling in the Supplemental Nutrition Assistance Program (SNAP), or referral to a local food pantry. The other type of intervention, sometimes called “direct provision”, involves providing food directly to those in need. Both of these are emerging areas of scientific investigation, where knowledge of how best to intervene is increasing rapidly. From this new evidence, we are seeing that these types of programs can lead to important improvements across a wide variety of health outcome types, including clinical, health service use, and expenditures.

Examining clinical outcomes, a recent study of a “linkage” program run by Massachusetts General Hospital and the non-profit organization Health Leads, found that the intervention led to important improvements in blood pressure and cholesterol control.²⁴ A study from Feeding America, America’s largest network of food banks, found that education and providing foods tailored to the needs of diabetes patients at local food pantries improved blood sugar control.²⁵ A particularly promising type of “direct provision” intervention is medically-tailored meal delivery, where fully prepared meals, specially tailored to the medical needs of participants, are delivered to their homes. In California, a medically-tailored meal delivery organization, Project Open Hand, found that medically tailored meal delivery decreased depressive symptoms, and increased medication adherence and dietary quality in patients with HIV and diabetes.²⁶ A study of a similar medically-tailored meal organization in Boston, Community Servings, also found improvements in dietary quality in diabetes patients with meal delivery.²⁷

Studies of SNAP deserve special attention. As our nation’s largest food security intervention, SNAP is known to reduce the depth and breadth of food insecurity. However, recent evidence shows that, even though it is not designed specifically to do so, SNAP may have important effects on health. Studies of SNAP have found that participation led to improved dietary quality²⁸, emergency low blood sugar events went down during a period

of increased SNAP benefit levels²⁹, the SNAP-education program helps improve fruit and vegetable consumption and lower consumption of sugar-sweetened beverages³⁰, and that making additional resources available for purchasing fruits and vegetables helped achieve the healthy diets they need.^{31, 32}

Regarding health service utilization and expenditure, the evidence is also clearly in favor of nutritional interventions. A recent study found that SNAP participation was associated with approximately \$1400 less in annual healthcare expenditures.³³ A study of Meals on Wheels-type meal delivery programs for older adults found that these programs helps keep older adults out of nursing homes.³⁴ Most recently, a study of Commonwealth Care Alliance's dually eligible Medicare-Medicaid beneficiaries found that both a Meals on Wheels-type non-tailored food intervention and a medically tailored meals intervention from Community Servings had important benefits, showing reductions in emergency department visits and ambulance transportation.³⁵ This translated into cost savings: participants in the non-tailored food program had \$1900 lower annual healthcare expenditures, and participants in the medically tailored meal program had \$6500 lower annual healthcare expenditures.³⁵

It is important to note that public-private partnerships are at the heart of these nutrition interventions. The charitable food system is a critical stop-gap for those facing hunger, but the federal government provides the bulk of nutrition program spending in the U.S., and the charitable system could not make up for a funding reduction. By no means, however, is the federal government is working alone. Partnerships with state and local agencies, healthcare delivery systems, social service providers, and non-profit organizations enable federal resources to be efficiently targeted to those in need, and maximize the health gains achieved. The interventions described above make clear what public-private partnerships can accomplish. In addition to spending on nutrition programs in, for example, the Farm Bill, waivers and pilot programs within Medicare and Medicaid have been vital to developing and testing new interventions, as has specific legislation like the Ryan White CARE Act, and research funding from the NIH, CDC, AHRQ, and PCORI.

While there is always more to learn, and no single study is ever definitive, the evidence is compelling when taken together. Food insecurity, along with malnutrition and hunger, are major public health threats for older adults. Nutrition programs offer

important improvements in health, healthcare use, and health spending. As a scientist, I always want to learn more, study more, and improve on what we already have. I can spend years trying to get a study just right. But you, as senators and policy makers, need to make decisions now, based on the best available evidence. Therefore, my unequivocal advice is this: Don't just protect but expand our investment in food security and nutrition programs for our nation's seniors. This will promote healthy aging, and improve the public's health.

References

1. United States Department of Agriculture Economic Research Service. Definitions of Food Security. 2016; <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/>. Accessed 08 July 2017.
2. Coleman-Jensen A, Rabbitt MP, Gregory CA, Singh A. Household Food Security in the United States in 2015. In: United States Department of Agriculture Economic Research Service, ed2016.
3. World Health Organization. What is malnutrition? 2016; <http://www.who.int/features/qa/malnutrition/en/>. Accessed 08 July 2017.
4. Coleman-Jensen Alisha, Nord Mark. Food insecurity among households with working-age adults with disabilities. *USDA Economic Research Report* 2013;No. ERR-144.
5. Morales ME, Berkowitz SA. The Relationship Between Food Insecurity, Dietary Patterns, and Obesity. *Current Nutrition Reports*. 2016;5(1):54-60.
6. Cheung HC, Shen A, Oo S, Tilahun H, Cohen MJ, Berkowitz SA. Food Insecurity and Body Mass Index: A Longitudinal Mixed Methods Study, Chelsea, Massachusetts, 2009-2013. *Preventing chronic disease*. Aug 06 2015;12:E125.
7. Seligman HK, Bindman AB, Vittinghoff E, Kanaya AM, Kushel MB. Food insecurity is associated with diabetes mellitus: results from the National Health Examination and Nutrition Examination Survey (NHANES) 1999-2002. *Journal of general internal medicine*. Jul 2007;22(7):1018-1023.
8. Berkowitz SA, Berkowitz TSZ, Meigs JB, Wexler DJ. Trends in food insecurity for adults with cardiometabolic disease in the United States: 2005-2012. *PloS one*. 2017;12(6):e0179172.
9. Irving SM, Njai RS, Siegel PZ. Food insecurity and self-reported hypertension among Hispanic, black, and white adults in 12 states, Behavioral Risk Factor Surveillance System, 2009. *Preventing chronic disease*. Sep 18 2014;11:E161.
10. Seligman HK, Laraia BA, Kushel MB. Food insecurity is associated with chronic disease among low-income NHANES participants. *The Journal of nutrition*. Feb 2010;140(2):304-310.
11. Banerjee T, Crews DC, Wesson DE, et al. Food Insecurity, CKD, and Subsequent ESRD in US Adults. *American journal of kidney diseases : the official journal of the National Kidney Foundation*. Jul 2017;70(1):38-47.
12. Crews DC, Kuczmarski MF, Grubbs V, et al. Effect of food insecurity on chronic kidney disease in lower-income Americans. *American journal of nephrology*. 2014;39(1):27-35.
13. Leung CW, EpeL ES, Willett WC, Rimm EB, Laraia BA. Household food insecurity is positively associated with depression among low-income supplemental nutrition assistance program participants and income-eligible nonparticipants. *The Journal of nutrition*. Mar 2015;145(3):622-627.

14. Mangurian C, Sreshta N, Seligman H. Food insecurity among adults with severe mental illness. *Psychiatric services (Washington, D.C.)*. Sep 01 2013;64(9):931-932.
15. Lyles CR, Schafer AL, Seligman HK. Income, food insecurity, and osteoporosis among older adults in the 2007-2008 National Health and Nutrition Examination Survey (NHANES). *Journal of health care for the poor and underserved*. Nov 2014;25(4):1530-1541.
16. Berkowitz SA, Meigs JB, DeWalt D, et al. Material need insecurities, control of diabetes mellitus, and use of health care resources: results of the Measuring Economic Insecurity in Diabetes study. *JAMA internal medicine*. Feb 2015;175(2):257-265.
17. Berkowitz SA, Baggett TP, Wexler DJ, Huskey KW, Wee CC. Food insecurity and metabolic control among U.S. adults with diabetes. *Diabetes care*. Oct 2013;36(10):3093-3099.
18. Berkowitz SA, Basu S, Meigs JB, Seligman HK. Food Insecurity and Health Care Expenditures in the United States, 2011-2013. *Health services research*. Jun 13 2017.
19. Kushel MB, Gupta R, Gee L, Haas JS. Housing instability and food insecurity as barriers to health care among low-income Americans. *Journal of general internal medicine*. Jan 2006;21(1):71-77.
20. Zhu J, Parikh A, Lipsitz SR, Natarajan S. ASSOCIATION BETWEEN FOOD INSUFFICIENCY AND MORTALITY: JOINT EFFECT WITH INCOME ON ALL-CAUSE AND CAUSE-SPECIFIC MORTALITY *JGIM: Abstracts from the 35th Annual Meeting of the Society of General Internal Medicine*. 2012;27(Suppl 2):S126-127.
21. Odone A, Houben RM, White RG, Lonnroth K. The effect of diabetes and undernutrition trends on reaching 2035 global tuberculosis targets. *The lancet. Diabetes & endocrinology*. Sep 2014;2(9):754-764.
22. Seligman HK, Schillinger D. Hunger and socioeconomic disparities in chronic disease. *The New England journal of medicine*. Jul 01 2010;363(1):6-9.
23. Berkowitz SA, Seligman HK, Choudhry NK. Treat or eat: food insecurity, cost-related medication underuse, and unmet needs. *The American journal of medicine*. Apr 2014;127(4):303-310 e303.
24. Berkowitz SA, Hulberg AC, Standish S, Reznor G, Atlas SJ. Addressing Unmet Basic Resource Needs as Part of Chronic Cardiometabolic Disease Management. *JAMA internal medicine*. Feb 01 2017;177(2):244-252.
25. Seligman HK, Lyles C, Marshall MB, et al. A Pilot Food Bank Intervention Featuring Diabetes-Appropriate Food Improved Glycemic Control Among Clients In Three States. *Health affairs (Project Hope)*. Nov 2015;34(11):1956-1963.
26. Palar K, Napoles T, Hufstedler LL, et al. Comprehensive and Medically Appropriate Food Support Is Associated with Improved HIV and Diabetes Health. *Journal of urban health : bulletin of the New York Academy of Medicine*. Feb 2017;94(1):87-99.
27. Berkowitz SA, Delahanty LM, Terranova J, Pyke A, Wexler DJ. Medically Tailored Meal Delivery for Diabetes Patients with Food Insecurity: A Randomized Clinical Trial. *Society of General Internal Medicine 40th Annual Meeting*. 2017.
28. Gregory C, Ploeg MV, Andrews M, Coleman-Jensen A. Supplemental Nutrition Assistance Program (SNAP) Participation Leads to Modest Changes in Diet Quality. *Economic Research Service: Economic Research Report Number 147* 2013; https://www.ers.usda.gov/webdocs/publications/err147/36939_err147.pdf. Accessed 06 Jan 17.
29. Basu S, Berkowitz SA, Seligman H. The Monthly Cycle of Hypoglycemia: An Observational Claims-based Study of Emergency Room Visits, Hospital Admissions, and Costs in a Commercially Insured Population. *Medical care*. Jul 2017;55(7):639-645.
30. Molitor F, Sugerman SB, Sciortino S. Fruit and Vegetable, Fat, and Sugar-Sweetened Beverage Intake Among Low-Income Mothers Living in Neighborhoods With Supplemental Nutrition

Assistance Program-Education. *Journal of nutrition education and behavior*. Nov - Dec 2016;48(10):683-690 e681.

31. Choi SE, Seligman H, Basu S. Cost Effectiveness of Subsidizing Fruit and Vegetable Purchases Through the Supplemental Nutrition Assistance Program. *American journal of preventive medicine*. May 2017;52(5):e147-e155.
32. Olsho LE, Klerman JA, Wilde PE, Bartlett S. Financial incentives increase fruit and vegetable intake among Supplemental Nutrition Assistance Program participants: a randomized controlled trial of the USDA Healthy Incentives Pilot. *The American journal of clinical nutrition*. Aug 2016;104(2):423-435.
33. Berkowitz SA, Seligman HK, Rigdon J, Meigs JB, Basu S. Supplemental Nutrition Assistance Program (SNAP) Participation and Healthcare Expenditures among Low-income Adults. *AcademyHealth Annual Research Meeting*. 2017.
34. Thomas KS, Mor V. Providing more home-delivered meals is one way to keep older adults with low care needs out of nursing homes. *Health affairs (Project Hope)*. Oct 2013;32(10):1796-1802.
35. Berkowitz SA, Terranova J, Hill C, Linksey T, Tishler L, DeWalt D. Meal Delivery Programs and Healthcare Use: A Coarsened Exact Matching Evaluation. *[In Preparation]*. 2017.

**Prepared Statement of Elizabeth Pratt, MPH, SNAP-Ed Program Manager,
University of New England, Portland, Maine**

Dear Chairman Collins, Ranking Member Casey and members of the U.S. Senate Special Committee on Aging, thank you so much for inviting me to talk about older adults in Maine, their nutrition needs, and an overview of the program I manage, Maine SNAP-Ed. My name is Elizabeth Pratt and I am the Program Manager of the Maine SNAP-Ed program.

SNAP-Ed is the USDA's nutrition education arm of the Supplemental Nutrition Assistance Program. It offers education, social marketing campaigns, and environmental support in all 50 States, the District of Columbia, and three territories. SNAP-Ed uses evidence-based, comprehensive public health approaches to improve the likelihood that low-income families will make healthier food and physical activity choices, consistent with the current Dietary Guidelines for Americans and *MyPlate.gov*. SNAP-Ed is designed to complement SNAP. SNAP gives a family a fish, while SNAP-Ed teaches a family to fish. In FY 2016, 350,000 low-income seniors across the country received direct nutrition education through SNAP-Ed.

The purpose of the Maine SNAP-Ed program is to use evidence-based approaches to provide low-income Mainers with easy ways to shop, cook, and eat healthy food on a limited budget—stretching their limited food dollars.

We have 44 highly qualified Nutrition Educators who teach low-income Mainers across the age spectrum how to make healthy food choices. They work in every Maine District and are based in local community coalitions and hospitals. They work in eligible community settings and with multiple organizations to reach children in schools, Veterans, adults with disabilities, seniors and working adults. The program follows detailed guidance by the USDA Food and Nutrition Service (FNS). This means that our educators follow the Federal guidance related to qualifying settings and providing series-based nutrition education as well as implementing policy change work.

As you may know, Maine is the “oldest State in the country.” We have the highest percentage of older adults and many of them are low-income. Food insecurity is very prevalent in our rural State and Mainers struggle with hunger, regardless of age. Roughly 203,000 Mainers face hunger every day. The rate of hunger, or food insecurity, in the United States as a whole dropped to 12.7% in 2015. In Maine, it remained elevated at 15.8%.

Four out of 10 SNAP participants in Maine (43%) are in families with members who are elderly or have disabilities (source: Maine Equal Justice Partners Fact Sheet). Thirty-five percent (35%) of Maine seniors 65 and older had incomes less than \$25,000 per year. Twenty percent (20%) of Maine seniors 65 and older were diagnosed with diabetes (Source: BRFSS).

Seventy-two percent (72%) of adults in Maine do not eat enough fruits and vegetables. Many Maine seniors have to make hard decisions related to their food choices. Anecdotally, we have heard about seniors who have to choose between their prescriptions, feeding the children who live in their households, fuel for heating in the winter, and their own nutrition needs. Often, taking care of themselves is not the priority as they struggle to care for their children and grandchildren. At a critical time in their lives when balanced diets are important, they are frequently compromising their dietary needs for the benefit of others or other needs.

Maine seniors have a reputation for being independent and proud. Maine is a very rural State and many seniors grew up on small farms or had gardens to help them meet their needs. They are reluctant to go to food pantries and are hesitant to ask for help despite their need.

However, Maine seniors are open to learning and this is part of why I think our program is successful in reaching low-income seniors. Our Nutrition Educators share concrete tips and strategies to compare unit price tags, read nutrition facts labels, buy in bulk, purchase low-cost fruits and vegetables, and cook simple, nutritious meals.

Our 44 educators are based in local coalitions so they are often from the same communities where they work. They are familiar with the community and they know where the eligible sites are and how to engage with them effectively and respectfully. All of our educators follow the USDA FNS Guidance to qualify sites and, to put it simply, that means that all of the sites must serve at least 50% low-income individuals. Essentially, they can only teach classes in schools that have at least 50% of the students on free and reduced meals. And they can only work in adult settings that serve low-income adults such as housing sites, worksites, food pantries, and federally Qualified Health Centers. In Maine, it's not difficult to find eligible sites.

In 2016, there were almost 3,000 adults 60 years or older who participated in the Maine SNAP-Ed nutrition education classes. There are three evidence-based curricula we offer for this age group: 10 Tips for Adults, Cooking Matters for Adults, and Eat Smart Live Strong. In addition, many seniors participate in our Cooking Matters at the Store tours at Hannaford grocery stores—a large supermarket chain based in Maine. Our Nutrition Educators focus on teaching them how to shop, cook and eat healthy on a budget. In Maine, Cooking Matters is implemented through a partnership between the Good Shepherd Food Bank and Maine SNAP-Ed. Share Our Strength’s Cooking Matters at the Store is a guided grocery store tour providing opportunities for adults to learn easy ways to shop for healthy foods. In FY 2016, 3,109 Mainers participated in these Cooking Matters store tours and were taught skills such as how to use unit price tags, how to read the Nutrition Facts label, and how to identify whole grains. Hannaford Supermarkets donates a \$10 gift card to all class participants.

In order to give you an example of the great work happening in Maine with seniors, I want to tell you about our Nutrition Educator in Aroostook County. Aroostook County is in northern Maine and it borders Canada. Heather McGuire is the educator based out of Houlton. She grew up in “The County”, as Mainers call northern Maine, and was raised as many children are in this special part of our State—to hunt, grow food, forage for fiddleheads, and help out during the potato harvest. Because of this upbringing, she understands the importance of growing nutritious food. Heather teaches nutrition education to children and adults in this rural part of southern Aroostook County.

In her own words, I will share her story about her project to help low-income seniors access fruits and vegetables at a low-income senior housing site.

“As a SNAP-Ed Nutrition Educator I have had the privilege of helping put a garden in at Market Square Commons. It was around the first of April when I asked them about setting up a garden and they were all on board. Soil was donated by the groundskeeper and a local carpenter built some raised beds. The cedar planks were donated by a local volunteer and Scott Farms gave a great discount on the cedar wood. The local tenants bought the seeds and seedlings with their own money or with their returnable bottle fund. Additional volunteers in the community also donated large pots for the seniors in wheelchairs or walkers who wanted to garden on the patio. Some of these donations came in because we shared our story on Facebook. To see the tenants wish for, plan, and plant a small vegetable garden in front of their downtown apartment building is something I am, and many others are, very proud of. To see tenants out of their apartments tending to the garden or making casual conversations is what our area needs. Many tenants, who grew up and tended to large gardens for most of their lives, now find themselves living in apartments with no access to garden plots. Planted raised beds and containers help bring the mini gardens to them!”

In addition to the garden project, Heather learned quickly how to respectfully help low-income seniors in her community access nutritious food. She learned from other Nutrition Educators in rural Maine communities about gleaning. Gleaning projects (the collection of leftover crops from farmers) have been successful in Maine because many proud seniors will readily take extra produce from farms to avoid waste rather than go to a food pantry. When Heather tried this strategy, she found that the seniors in her community would happily accept this free produce from the farmers. Then they would cook community meals for themselves and their friends.

SNAP-Ed is the one USDA program that brings the powerful combination of education, marketing, and policy, systems, and environmental support to low-income communities. It can be delivered in diverse settings such as schools, worksites, retail food stores and faith communities. SNAP-Ed interventions are customized for different rural, urban, age, ethnic, cultural and regional settings. Efforts expand beyond the classroom to engage residents of all ages in community changes that strive to make the healthy choice the easy choice. SNAP-Ed is invaluable to supporting healthy aging for low-income families in Maine and across the country.

Since SNAP-Ed promotes the health benefits of SNAP and focuses on making healthy choices within a limited budget, it builds on the short-term economic and nutritional value of SNAP food dollars while helping SNAP-Ed eligible Americans make better food and lifestyle choices. Empowering SNAP participants to make healthy food choices through SNAP-Ed is a win for everyone. American diets fall far short of recommendations for good health and contribute to excess rates of preventable chronic diseases. Our Nutrition Educators are not only teaching seniors the importance of balanced and nutritious diets but they are giving them concrete strategies to accomplish this on a limited food budget.

As the oldest State in the country, Maine has a responsibility to care for its seniors. According to “Feeding America”, there are an estimated 24,000 seniors in

Maine who are considered food insecure, or don't have enough food to sustain a healthy diet. Food insecurity among seniors is significantly underreported. Many seniors in Maine are reluctant to admit they struggle with hunger so they often do not reach out for help. In fact, our Nutrition Educators often find that seniors downplay their struggles and firmly believe that others are more deserving of food assistance.

The SNAP-Ed program is extremely important in Maine as we are able to empower low-income seniors by teaching them how to stretch their limited food dollars. In addition to the direct nutrition education, our experienced and highly qualified educators work hard to find creative solutions to address the dietary challenges low-income Mainers face. They are committed to finding strategies to help them access fruits and vegetables through their local expertise and partnerships with organizations throughout Maine who have a similar focus on food access.

**Prepared Statement of Patricia Ann Taylor, Retiree, Penn Hills,
Pennsylvania**

Chairman Collins, Ranking Member Casey, and Members of the Committee, thank you for inviting me to testify today. It is an honor to be here.

My name is Patricia Ann Taylor. I am 72 years old and a resident of Penn Hills, Pennsylvania.

I am married to the love of my life, James, who is 79 years old. This past April we celebrated 51 wonderful years together. We have 5 biological children, 2 of my daughters, Dawn and Toni, have joined me here today, both who are employed and volunteer at our Food Pantry. James and I also adopted 5 boys with special needs.

We have always had a full house. We are a close-knit family, I love having my 10 children, 15 grandchildren and 17 great-grandchildren around us.

My husband and I have always worked to support our large and boisterous family. James was self-employed, an owner of a beer distributor and laundromat. I have held various positions in the healthcare sector at times having to work 2 jobs. It was not always easy to put food on the table and pay our bills, but we managed somehow. My husband has always had a strong work ethic and always believed that he should be the provider for his family.

As we have gotten older, our health care costs have taken up a greater share of the bills, and we were forced to struggle because of our healthcare expenses. My husband has beaten prostate cancer, survived two heart attacks, is an insulin dependent diabetic, has blood clots in both lungs and has been fighting blindness due to diabetic neuropathy. I have beaten breast cancer, had back surgery, and total right knee replacement. I also have multiple sclerosis, which is now in remission and heart disease.

It was not easy to ask for help with our food expenses. When talking with other adults in our age bracket, we learned about a food pantry in our neighborhood, the Lincoln Park Community Center, which is run by Joyce Davis. This center serves over 600 needy families monthly, and seniors such as ourselves, receive a Senior Food Box once a month. The help that Ms. Davis provides to my husband and I has truly been a blessing.

Because of the Senior Food Box that we receive through the Lincoln Park Community Center we do not have to decide between paying for our medication and putting nutritious food on the table. Ms. Davis serves so many needy families that have come to the Lincoln Park Community Center.

She also serves over 100 people at a local Senior Center and over 75 at another food pantry. Her services, as you can see by the number of needy families that come to these centers, shows the need in just our community. She has definitely been an asset to our community by how efficient, organized and successful her food pantry is. And, she tells me that the Federal support she receives for this work is essential.

Neither my husband nor I ever dreamed that we would come to rely upon the senior food box. We were hard-working adults and we saved for our retirement. At times I even worked two jobs. Before the senior box, I noticed that I was not purchasing as much food that would help keep us healthy. It started a vicious cycle that I knew was not good for our health.

Things changed when I started receiving the senior food box. Last month, I received canned fruit and vegetables, spaghetti sauce, cereal, dry milk, cheese, pasta, peanut butter, and canned chicken.

I can supplement these items with groceries like, fish, meat, fruits, vegetables, Ensure, and Boost. With those items that I receive from the senior food box, I can make many creative dishes. Last month I was able to make chicken salad, spaghetti, grilled fish, and baked chicken. These are nutritious meals for me and my

husband. The senior food box stretches our groceries and our budget. I am especially appreciative of the senior food box because it helps my family afford Ensure and Boost, which my husband needs to drink due to his loss of appetite caused by health issues and medications.

When Senator Casey's office called me to talk about my experience with the senior food box, I said that I would do anything to help support nutrition programs that benefit seniors, and that is how I wound up in this chair.

The senior food box has been a god-send to me and James. I strongly urge you to support senior food box programs, food banks, and other programs that help people like me. I urge you to help spread the word that programs like the senior food boxes are available. And, I hope that people will be able to continue to receive the senior box.

Again, thank you for the invitation to testify before the Committee. I look forward to answering your questions.

Additional Statements for the Record

Testimony of Meals on Wheels

Chairman Collins, Ranking Member Casey and Members of the Committee:

On behalf of Meals on Wheels America, the network of more than 5,000 community-based nutrition programs and the millions of seniors they serve nationwide, we thank you for the opportunity to submit this statement for the record. We commend you for your leadership and attention to the needs of our nation's older adults and appreciate your holding this important hearing to assess the growing problem of senior hunger, and the role proper nutrition plays in improving health and overall quality of life. We offer our perspective on the risks and consequences of poor nutritional status among seniors, as well as present for your consideration policy recommendations to address these challenges. We look forward to working with you to seek solutions for a future where no senior in America is left hungry or isolated.

The Current State

Programs like Meals on Wheels are a frontline defense against senior hunger, isolation and malnutrition. For nearly five decades, in communities large and small, rural, suburban and urban, Meals on Wheels programs—with the Federal support and structure largely from the Older Americans Act (OAA)—have been effectively serving seniors in the greatest economic and social need. The nourishing meals, friendly visits and safety checks delivered each day supply an efficient and vital service for our most vulnerable seniors, our communities and our taxpayers. Both congregate and home-delivered nutrition services provided by local Meals on Wheels programs enable seniors to live healthier, safer and more independent lives longer in their own homes—where they want to be—reducing unnecessary visits to the emergency room, admissions and readmissions to hospitals and premature nursing home placement. Data from the Administration for Community Living's (ACL) *State Program Reports* and *National Survey of OAA Participants* demonstrates that the seniors receiving meals at home and in congregate settings, such as senior centers, need these services to remain in their own homes. They are primarily women, age 76 or older, who live alone. Additionally, they have multiple chronic conditions, take six or more daily medications and are functionally impaired. Further, the single meal provided through the *OAA Nutrition Program* represents half or more of their total daily food intake. Significant numbers of seniors receiving meals are impoverished, live in rural areas and belong to a minority group. In short, the individuals requesting and being provided services through the OAA nutrition network are largely high-risk and high-need—and potentially high-cost to our healthcare system, if their unique needs are not met.

Yet, while the Federal infrastructure exists to address these needs of our nation's most vulnerable seniors—through successful programs administered by the U.S. Department of Agriculture and the U.S. Department of Health and Human Services—the number of individuals struggling far outpaces the resources available to serve them. Today, 10.2 million seniors, or one in six, struggle with hunger, representing a 65 percent increase since the start of the recession in 2007 and a 119 percent increase since 2001. In 2014, funding provided through the OAA supported the provision of meals to 2.4 million seniors nationwide, while the President's Fiscal Year 2018 budget request would reduce that number to 2.3 million seniors. Underscoring this growing gap, a 2015 Government Accountability Office report found that about 83 percent of food insecure seniors and 83 percent of physically impaired seniors did not receive meals [through the OAA], but likely needed them.

To further illustrate these troubling trends, the Meals on Wheels network overall is serving 23 million fewer meals to seniors in need than it was in 2005, due in large part to Federal funding not keeping pace with inflation or demand. And, one in four Meals on Wheels programs reports having a waiting list for services, with an average of 200 seniors and growing. Quite simply, too few seniors who need meals are getting them today, and each year, the chasm widens between those struggling with hunger and those being served. This harsh reality is not only felt on a personal level by those suffering from hunger and isolation, but it is also felt on a fiscal level by taxpayers, in terms of increased Medicare and Medicaid expenditures.

The Costs of Hunger and Malnutrition

The consequences of hunger and malnutrition in older adults are profoundly more significant than with other populations. Older adults are among the most vulnerable to malnutrition, with 50 percent of all older adults at risk for malnutrition, and minority groups at a disproportionately higher risk. The *Causes, Consequences, and Future of Senior Hunger in America*—the first ever assessment of the State of senior hunger in America—found that a senior facing the threat of hunger has the same

chance of much more severe activities of daily living (ADL) limitations as someone 14 years older. This means there is a large disparity between a senior's actual chronological age and his or her "physical" age, such that a 67 year old senior struggling with hunger is likely to have the ADL limitations of an 81 year old. In addition, declines in cognitive and physical function as a result of the aging process, coupled with the onset and management of chronic disease, make older adults more physically susceptible and at-risk to hunger and malnutrition. These complications are further exacerbated for individuals living on fixed incomes and/or in poverty, with limited food access and mobility challenges.

Malnutrition has been found to further diminish an individual's ability to manage and overcome sickness and increase the likelihood of further illness, disability or injury. As a result, malnourished seniors have higher utilization rates of expensive healthcare services, higher rates of hospitalization admissions and readmissions and a greater need for long-term care services and facilities. For seniors who would otherwise be healthy with appropriate dietary intakes, this puts an added burden on the individual, as well as on our healthcare system. Annual healthcare costs attributable to malnutrition in older adults are estimated to be \$51.3 billion.

Malnourished seniors, both underweight and overweight, do not have the intake of essential nutrients needed to maintain a favorable health status. They also experience higher rates of morbidity and are at an increased risk for a myriad of health complications, including injury from falls, delayed wound healing, infection and decreased cardiac and lung function. With a diminished health status made worse by lack of adequate nutritional intake, seniors lose the ability to maintain healthy, active and independent lives. The need for interventions that prevent hunger and malnutrition from occurring, as well as large-scale implementation of cost-effective methods known to treat these problems, is paramount.

The Solution Exists

Proper nutrition is essential to one's health and well-being. As cited above, this is particularly true for seniors, whose health status may be compromised as even a slight reduction in nutritional intake can exacerbate existing health conditions, accelerate physical impairment and impede recovery from illness, injury or surgery. Seniors with chronic disease who receive adequate nutrition have improved health outcomes and are better able to support a healthy and active lifestyle. Senior nutrition programs like Meals on Wheels are already minimizing the negative impact of malnutrition in communities across the country. These public-private partnerships have been, and continue to be, exemplary as they are able to harness diverse resources from the local, State and Federal Government along with private donations, while enlisting the help of two million volunteers nationwide, to carry out much of the services the programs offer. For every Federal dollar appropriated through the OAA, states and communities are able to leverage an additional \$3 from other funding sources. Meals on Wheels is able to feed a senior nutritionally balanced, and in some cases, medically tailored, meals for one year at the same cost as one day in the hospital or 10 days in a nursing home. By improving the nutritional status and maintaining the independence of seniors who are homebound and/or have limited mobility, we are able to keep potentially expensive patients out of hospitals and long-term care facilities. As a result, Meals on Wheels generates considerable health-related savings for seniors, their families and our healthcare system, as a whole.

In addition to the cost-effectiveness made possible by the ability to prolong the physical health and self-sufficiency of seniors, Meals on Wheels programs offer more than just nutrition; the model improves the mental and emotional health of participating seniors, too. Frequent and consistent visits by a volunteer or staff member offer companionship, to which seniors can look forward, reducing social isolation and feelings of loneliness. Seniors who rely on home-delivered meals self-reported that they found a reduction in the likelihood of injuries from falls, a dangerous and expensive safety risk that affects many independent seniors and amounts to \$31 billion in annual Medicare costs. Regular check-ins by volunteers can help identify potential hazards both inside and outside the home, sudden declines in health or other troubling changes early, before they become more serious problems. For example, findings from a 2015 study entitled *More Than a Meal*—commissioned by Meals on Wheels America, underwritten by AARP Foundation and conducted by Brown University—showed that those seniors who received daily home-delivered meals (the traditional Meals on Wheels model of a daily, in-home-delivered meal, friendly visit and safety check), experienced the greatest improvements in health and quality of life. Specifically, between baseline and follow-up, seniors receiving daily home-delivered meals were more likely to exhibit improvements in physical and mental health (including reduced levels of anxiety, feelings of isolation and loneliness and worry

about being able to remain at home) and reductions in hospitalizations, falls and the fear of falling. In addition to being a preventative measure for emergency department visits and hospital admissions, investing in Meals on Wheels is also a proven way to reduce hospital readmissions and post-discharge costs. A 2012 Brown University study showed that investments in Meals on Wheels of \$25 more per senior per year could reduce the low-care nursing home population by one percent, which translates annually to millions of dollars in Medicaid savings alone. Not only are these programs providing more than just a meal to those who are fortunate enough to receive services, but they are also an essential part of the solution to our nation's fiscal and demographic challenges, helping to bend the cost curve on the mandatory side of the budget.

Policy Recommendations

In light of the immense vulnerability and array of health and mobility challenges our nation's seniors face, coupled with the high-cost, high-risk factors they pose to our healthcare system, it is imperative that proven and effective programs designed to meet their unique nutritional and social needs are further strengthened. At the same time, it is important to recognize that there is not a one-size-fits-all solution to the problem of senior hunger. Rather, there is a wide continuum of need and a variety of federally supported nutrition programs, and each program is targeted to meet the specific needs of vulnerable populations along that spectrum while promoting health and wellbeing. For those seniors who are most mobile and may struggle with hunger primarily as a result of limited income and access to affordable foods, the Supplemental Nutrition Assistance Program (SNAP) may serve as the best intervention. For those seniors who are hungry as a result of mobility and health challenges and are physically unable to cook or prepare meals, Meals on Wheels may serve as the best intervention, instead. In other cases, it may be a combination of Federal and local programs working together to address hunger in the community.

Given the magnitude of the senior hunger problem, coupled with continued demographic shifts resulting in a rapidly aging population, we urge you to consider the following policy recommendations to improve the nutritional status of at-risk and/or malnourished older adults.

1. *Modify Medicare and Medicaid to meet the nutritional needs of our most vulnerable seniors.*
 - Expand Medicare managed care plans to include coverage for home-delivered meals prepared and delivered by a private nonprofit for seniors, with physician recommendation.
 - Expand Medicaid managed care plans to include coverage, with a physician recommendation, for home-delivered meals prepared and delivered by a private nonprofit for individuals who are too young for Medicare, but who are at serious medical risk or have a disability.
 - Allow doctors to write billable Medicare and Medicaid "prescriptions" for nutritious and medically appropriate meals prepared and delivered by a private nonprofit for individuals prior to being discharged from a hospital. Seniors receiving short-term nutrition interventions post-hospital discharge, ranging from a daily hot meal to a combination of different meal types (i.e., lunch, dinner, snack, hot or frozen meals) has resulted in readmission rates of 6%–7% as compared to national 30-day readmission rates of 15%–34%.
2. *Protect and bolster funding for Older Americans Act (OAA) Nutrition Programs.*
 - Increase funding for OAA Nutrition Programs (Congregate, Home-Delivered and Nutrition Services Incentive Program) to a minimum of \$874,638,011 in FY 2018; the same level authorized and unanimously passed by Congress and signed into law last year.
 - End sequestration for FY 2018 and beyond by replacing it with a bipartisan budget plan that recognizes the significant cuts already made.
3. *Standardize nutritional assessment and screening process for seniors in healthcare settings.*
 - Implement validated malnutrition and food insecurity screening tools, including a patient's ability to access nutritious food, in hospital admission and discharge processes.
 - Include nutrition screening questions in the Centers for Medicare & Medicaid Services annual wellness and *Welcome to Medicare* physical exams.
4. *Defend and support nutritional access for seniors via the Supplemental Nutrition Assistance Program (SNAP) and the Commodity Supplemental Food Program (CSFP).*

- Strengthen policies that improve senior SNAP participation by expanding the use of simplified applications, lengthening recertification periods and utilizing a standard medical deduction.
- Protect SNAP from structural changes (e.g., block grants) that would undermine their effectiveness.
- Provide enough funding for CSFP to maintain current caseloads and expand to a completely nationwide program.

An Urgent Responsibility

The disproportionately high risk for malnutrition among older Americans, in addition to demographic shifts toward an older population, means we have an urgent responsibility to establish policies that support healthy aging. The causes and consequences of senior hunger and malnutrition are complex, so a uniform approach for all seniors will not be successful. However, there is already an existing network and Federal nutrition program infrastructure in place to address the needs of today and tomorrow's seniors, and strong evidence that demonstrates their effectiveness. Now is the time for Congress to act and support legislation that will promote the adoption of methods known to successfully prevent and treat these challenges. Ensuring that no senior in need struggles with hunger, malnutrition or isolation is not only doing right by our nation's seniors—our veterans, teachers, police officers, firemen and others who have done so much for us—but is also a solution for saving taxpayers and bending the cost curve on the mandatory side of the budget.

We ask that you please consider the recommendations outlined in this Statement and call on your colleagues to do so, as well. These are issues within our reach to solve and are among our greatest moral, social and economic imperatives. We thank you again for your continued leadership and support for senior nutrition programs and look forward to working together in the weeks and months ahead.

Submitted by Meals on Wheels America
1550 Crystal Drive, Suite 1004
Arlington, VA 22202
1-888-998-6325
www.mealsonwheelsamerica.org

Testimony of the National Association of Nutrition and Aging Services Programs

The National Association of Nutrition and Aging Services Programs (NANASP) commends the Senate Special Committee on Aging for today's hearing entitled "Nourishing our Golden Years: How Proper and Adequate Nutrition Promotes Healthy Aging and Positive Outcomes." NANASP is an 1,100-member nonpartisan, nonprofit, membership organization for senior nutrition and aging services providers.

We support the Committee's interest in working to strengthen and support the array of existing federally funded nutrition assistance programs for older adults. We see this as a three-pronged issue.

First, it is an issue of funding. The inability of key programs, including and especially the Older Americans Act (OAA) Nutrition Programs, to have Federal funding keep pace with demand leads to programs serving far fewer participants than intended. For example, a Government Accountability Office report released in 2015 found that about 83 percent of food insecure older adults and 83 percent of physically impaired older adults did not receive OAA meals but likely need them. OAA meals programs overall are serving 21 million fewer meals annually to seniors than we were in 2005 due to declining Federal and State grants, stagnant private funding, and rising food and transportation costs.

Further, we note in the President's budget that his call for the elimination of funding for the Social Services Block Grant, the Community Development Block Grant and the Community Services Block Grant, as well as a \$193 billion cut in the Supplemental Nutrition Assistance Program (SNAP) over the next 10 years, will also severely weaken our commitment to providing nutrition assistance to older adults.

Second, it is an issue of recognizing the essential link between nutrition and better health outcomes—which in turn leads to cost savings for health programs. Investing in these programs is cost-effective because many common chronic conditions such as hypertension, heart disease, diabetes, and osteoporosis can be effectively prevented and treated with proper nutrition. The Academy of Nutrition and Dietetics estimates that 87 percent of older adults have hypertension, high cholesterol, di-

abetes, or some combination of all of these. These seniors need healthy meals, access to lifestyle programs, and nutrition education and counseling to avoid serious medical care. We further see the potential cost savings related to nutrition when we examine disease-associated malnutrition. As Ranking Member Casey notes, disease-associated malnutrition costs our nation \$51.3 billion annually.

Finally, it is an issue of proper nutrition education throughout the lifespan. It is important that we support in every way possible those programs which provide needed education to help people achieve better nutrition. This includes SNAP-Ed as well as the nutrition education provisions in the OAA.

We look forward to continuing our work with the Committee on this important subject.

