Meals 2.3: Nutrition & Aging

Of all diseases that can affect how we age; you probably don't think of malnutrition. But researchers say more and more older adults are malnourished, even though they look healthy, or can even be overweight.

It's not always because of poor eating habits. As we age, our bodies simply do not process foods and nutrients the same way. Some functions like swallowing and digestion change as we grow older. And medications can affect how nutrients are absorbed by the body. In addition, many older adults face practical challenges to good nutrition. They can't get around easily or can't afford health foods.

Malnutrition, or under nutrition, is now considered a hidden epidemic among older adults in the United States.

How do you know if you're malnourished if you can't tell by looking? Can we change our diet to improve our health as we age? What resources are available to help older people get access to quality foods and nutrients?

I'm Kathy Mattea. Join me for this addition of Aging Matters, as we learn how to identify who's at risk of malnutrition, and strategies for using food and nutrients to help with healthy aging.

I believe in nutrition. I try to eat balanced diets. I have had some nutritional issues in the past, so maybe I'm just more attuned to it than some people are.

- [Narrator] As she nears age 70, Patti Henegar is focusing more than ever on what she eats and drinks as key to healthy aging.

I would say it should be your top priority. Like the old expression, what would you do to a new car but put the best fuel in it? The body is aging, and we need to offset that, if at all possible, through nutrition. Should it be ranked as high as exercise? That's almost comparing apples and oranges, but it is very important because, without the fuel, your body is not going to stay healthy. You're not going to be able to function up to your maximum.

- [Narrator] It sounds so simple, basic, that nutrition can affect how well our bodies function as we age. But the concept is more complex than many people realized before the current wave of Baby Boomers began to age and cause a spike in nutrition-related diseases and disabilities. The connection is redefining how health professionals think of malnutrition.

25% of community dwelling older adults have malnutrition. That means one out of every four older adults in our nation, at minimum, have some form of malnutrition. And so, this is not just a problem that occurs in hospitals, or in nursing home facilities, or in assisted living. This is our older adults in our nation in general that have a condition that puts them at greater risk.

- [Narrator] Dr. Heidi Silver is a Vanderbilt University professor and nutritionist who studies malnutrition and aging health. Most often when we think about malnutrition, we're thinking about it occurring more often in less developed, less resource-rich countries where we see starvation, extreme weight loss, extreme hunger, and chronic inadequate food intake. But that's only one form of malnutrition, and the malnutrition we see here in the United States takes a different form. And it's less obvious in its physical signs, and it's easily masked by other conditions like illness or injury or inflammation or even higher body weight.

I have to tell you that you can be overweight and malnourished at the same time. In the aging population, it requires even additional effort to understand if that excess weight is a problem or not.

- [Narrator] Dr. Nadia Pietrzykowska sees people who are malnourished every day in her New Jersey clinic, as a specialist in obesity medicine.

There is many, many reasons, and there's a lot of things we know and a lot of things we don't know. Genes, our genes are changing. The environment is changing our genes. The way we eat, society has been affecting what we're doing. Stress, individuals work more hours, longer hours. We travel by car, we don't walk as much, we don't have a lot of energy expenditure.

What we eat also matters. A lot of foods are processed. There are areas in the United States when it's very hard to find a store with healthy foods.

- [Narrator] Food deserts are parts of the country without access to fresh fruits, vegetables, and other healthy foods, mainly due to a lack of grocery stores and farmers' markets. The USDA has mapped the nation's food deserts. This one of Nashville-Davidson County shows low-income urban areas that are more than a mile away from grocery stores; rural areas that are 10 miles away; and areas where residents don't have access to cars.

At the same these areas often have quickie marts that sell mostly processed, sugar and fat-laden foods, contributing to obesity and malnutrition.

Malnutrition isn't marked by low weight. It's not marked by these normal things that we would associate with malnutrition. Malnutrition is not getting proper dietary requirements met by the foods that you're eating. I think that doctors and healthcare professionals are going to start to encounter a lot more people who are malnourished that don't necessarily fit the normal definition of malnutrition, or the normal look of what malnutrition would look like.

- [Woman] If you can have a seat right up here.

- [Narrator] Healthcare professionals often overlook or ignore key signs of malnutrition, in part due to lack of training, according to Dr. Silver.

I think there's just less emphasis on nutrition as a component of medical school and nursing school curriculums than other factors that are part of the curriculum like pharmacology or cardiology or endocrinology. And there has been a consensus statement recently from the Academy of Nutrition and Dietetics and the American Society for Parenteral and Enteral Nutrition who have identified six prominent clinical characteristics of malnutrition in today's patient.

- [Narrator] Those six characteristics are: weight loss, energy intake, fat loss, muscle loss, fluid accumulation, handgrip strength.

So, is that malnutrition? Or is that normal aging? It's a fine line, isn't it?

It's a fine line between what's normal aging and when it becomes malnutrition, and it's really how severe. So, one of the things we start with is your hair. Is it coming out easily? Is there a larger amount coming out easily? Is it becoming brittle and breaking off?

At the sides of the head, the temporalis muscle, we look at is it becoming indented, is there a depression there, which tells us that you might be losing muscle mass as you get older.

So, muscle is built by eating protein, correct?

Eating protein and by exercising, particularly resistance exercising.

As in weights? As in weights.

We often see something called pitting edema when there's malnutrition and dehydration.

So, if you press either on the foot or the ankle, so we expect to see a little bit of indentation like that. But when the indentation stays there, that shows that there's not enough fluid and fat mass behind there to recoil back up.

- [Narrator] Identifying malnutrition is important to healthy aging- especially when it comes to certain conditions associated with growing old that might result from poor nutrition. For example, falls, fractures, infections, even minor memory loss can be linked to nutrition-related issues.

You can also have other types of malnutrition, for example, you can be deficient in vitamins or minerals and have a micronutrient type of malnutrition. You can have inflammation-related malnutrition. And so, there are multiple forms, and they should be treated differently in order to be able to resolve the problem and then promote growth and repair.

There is often social isolation that promotes inadequate food intake or less enjoyment for consuming.

- [Woman] Hey, sweetie.

- [Woman] Hey, Mary, where have you been?

- [Woman] I'm 96, soon be 97.

- [Narrator] Madeline Jeans is proud of her age and that still lives in her own home, eating her own food, even if it's not the pleasurable experience it once was. It don't taste as good as it used to. When you get older, everything changes. So, you to accept it, and be happy, be happy what you got.

- [Narrator] Like many older adults, Jeans finds eating more of a chore-due to natural changes in her aging body. For example, the sense of taste and smell may weaken; digestive systems may slow; chewing and swallowing problems can develop; mobility can make it hard to shop, cook and eat; and medications to treat certain conditions can reduce appetite. Despite the challenges, Jeans tries to eat a healthy meal each day.

I'm a farm girl. I know what a good meals are. (chuckles) I feel like it's necessary. My children tell me, if I don’t eat, I'll get back in the hospital. I think I eat good but sometimes when you get old, it don't do you no good maybe.

- [Narrator] Her observation is backed by growing evidence that aging influences how nutrients are absorbed by the body. For example, Vitamin D may be low in an older person because aging skin is less able to change sunlight into the vitamin. Same for vitamin B-12, which is harder for our bodies to absorb after age 50.

While dietary guidelines established by the USDA still apply to older adults, recommended daily caloric intake decreases with age as the metabolism slows down. High fiber, high protein diets become more important as does calcium.

The takeaway here is really that food is medicine, and the provision of food should be central to provision of healthcare. It should be a routine part of healthcare.

- [Narrator] Sarah Downer is with the Harvard Law School Center for Health, Law, and Policy Innovation. She led a study on the impact of medically tailored meals for patients with chronic diseases.

And they compared people that were receiving the meals, and people who were medically similar had the same medical profile, so they were also very ill that weren't receiving the meals, and what they found was that hospitalizations decreased by half for the population that was receiving the intervention, and that when those patients were hospitalized, the length of the hospitalizations were shorter by about 37%. They were more likely than the comparison group to be able to return to their homes rather than going to another acute long-term care facility. And so, there were savings on that end as well, and especially if they're challenged by not being able to travel to the source of healthy food.

- [Narrator] Never has healthy food been so available, yet so unattainable for many seniors in Tennessee. National reports consistently show this state is among the worst when it comes to percentage of adults aged 60 and older who face the threat of hunger, what is known as food insecurity.

Food insecurity is not simply hunger. Food insecurity is actually the thoughts and the feelings of not knowing where your next meal is going to come from, not knowing how you're going to get to that next meal, which can be very overwhelming.

- [Narrator] The Nutrition program of the Tennessee to make sure older residents receive at least one nutritionally balanced hot meal each day for at least five days a week.

- [Lacy] We wanted to know what the specific barriers were for our older adults in Tennessee.

- [Narrator] To get that information, the department launched a statewide study on food access among residents aged 60 and older with household incomes of $35,000 or less. The findings were stunning even to the researchers.

About 30% of them are either marginally or very low access to food. And so I think we can say there is a considerable vulnerability among this age group.

- [Narrator] Dr. Ron Aday is a gerontology professor and former director of the Aging Studies program at Middle Tennessee State University.

As we discovered, people have access to food. They may have food in their cabinets, but they may not be able to prepare it. They may have money, but they may not be able to get to the grocery store, or walk around the grocery store, or have transportation. So, it's very complicated in terms of narrowing those factors down. Some people may have several factors that they're dealing with, and other people may have one or two.

- [Narrator] The study found that among older Tennesseans who are food insecure, 22% didn't eat because they didn't want to eat alone; 47% couldn't get food due to health; 39% teeth or mouth problems that made it hard to eat; 63% had to choose between medicine or food; 58% had to choose between utilities or food.

More revealing were the personal interviews conducted confidentially with more than 400 seniors across the state.

You see something that looks so good and other people are snatching it up, but it's too expensive, you know? And I can't. And you run out of bread, coffee, sugar, and you just don't have the money to get it. Girl, for years, I would run out of money, and all I would have to eat for, say, seven or eight days in a row for lunch and dinner would be pinto beans--

Back in '04 when my wife passed away, I would go a day without eating, and I had plenty of food in the house.

We were kind of surprised, I think, in terms of looking at that, by both the psychological issues as well as sometimes the social issues of just the lack of desire or motivation really to eat healthy food choices.

- [Narrator] At senior centers like this one in Fayetteville, Tennessee, lunch time is more than a social outing. It can be key to nutritional health.

- [Woman] They're all the same, Mr. Hues.

All the same? Okay. All the same.

If this person didn't have this hot meal, they would probably live on snacks or cereal or something very, you know, maybe at times healthy, but for the most part not.

And how that can help not just their own personal nutrition, but keeping them out of the hospital, keeping them in their homes, and it just goes so much further than the hot meal.

- [Narrator] This center is funded by the state nutrition program as a congregant meal site for seniors. If they're over 60, they show up and can eat for free or offer a donation.

- [Woman] Appreciate that.

- [Narrator] Many seniors face barriers in getting to the meal sites, especially in rural areas like Lincoln County.

(knocking) Ms. Harris I have your lunch.

- [Narrator] Home-delivered meals through this same state-funded program is one solution, but participants must meet medical and income criteria, and there is a long waiting list throughout the state.

I've already delivered six, so I've got about eight more. I like to meet the people, be nice to 'em. I'm the only person they see sometimes. So, I just love doing it.

It's true that we often think of different types or forms of malnutrition occurring in the oldest old, in people who are in their late 70s, in their 80s, and in their 90s. But what's really interesting in today's hospital patients, we found that 40% to 50% of our hospital patients had sarcopenic obesity. Sarcopenia really has two key components. One is the loss of the muscle mass, and the other is the loss of the physical strength from having less muscle mass.

We are in the middle of an aging boom. Our older adult population is living longer, and more and more of them do have overweight and obesity. And so, we have a wider prevalence of illness related to malnutrition and injury related to malnutrition.

- [Narrator] The paradox of obesity and malnutrition in aging has prompted medical experts to revise how obesity is determined. Basically, the most common measurement used is called the Body Mass Index.

The Body Mass Index is a formula that takes into account height and weight and gives us a number that can classify us whether we're normal weight, underweight, overweight, obese, et cetera.

It doesn't take into account body composition. So, we don't know if that weight is muscle mass or if that weight is fat tissue. We know that as we age, we have a natural tendency to lose muscle mass and gain fat tissue. We found that it's very important to also determine the location of the fat. When fat is located in the abdominal cavity, and it's called the visceral adiposity, it tends to be more harmful. So, measuring waist circumference, and there are criteria saying what the waist circumference should be for men and women. That, in addition to the BMI, help us determine if somebody's at a healthy weight.

- [Liza Gundell] I was a really healthy fat person. I was. Other than the falls and the injuries I've had, I don't have a whole lot of medical conditions.

- [Narrator] Liza Gundell could barely walk and was headed for knee-replacement surgery at age 53 maybe changing her diet would improve her joint deterioration and pain?

Never did my primary care physician, the orthopedist or the pain management doctor raise the issue of weight in terms of my health. I was surprised.

Hi, Liza, how are you? Good, how are you?

- [Narrator] Liza sought help from Dr. Pietryzkowska and has since lost 54 pounds.

- [Dr. Nadia] So basically, with her weight loss, she put herself in a better place for healthier aging.

- [Narrator] Unless more Baby Boomers follow Liza's example, the American healthcare system will be unprepared for the consequences of aging overweight seniors who are also malnourished. It seems that about maybe 20 to 30 years ago, the rates of obesity started increasing. So, patients that were young adults at that time now are in that 50, 60 years old range, and started gaining weight at that time and now might be overweight or obese.

We have an aging population that's not healthy, that's sicker, that cannot take care of itself, with more disability, with problems with cognition. So that will have a huge toll, I think, on just our health system.

Mr. Mason? Yeah?

- [Narrator] When medical providers pay close attention to the triggers of malnutrition in older patients, it makes a difference, according to Dr. Silver. She's on a mission to develop training and tools to help doctors and nurses intervene earlier and faster.

We're working with a group of computer engineering faculty here to develop a mobile phone-based software, or application, that we hope could be implemented in healthcare systems that would help providers make diagnosis for malnutrition.

- [Narrator] Silver hopes that diagnostic tools like the app will lead providers to ask important questions that go beyond the doctor's office visit.

They also need to be asking the questions of, are you able to fix your meals at home? Are you able to make it to the grocery store? Do you need some assistance? Because we can't make the assumption that people are just going to leave the doctor's office and go buy healthy groceries and go home and fix their own meals; it's not as simple as that.

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- [Narrator] That's one reason food is the real attraction at many senior centers.

- [Bingo Announcer] You got it, get your prize.

- [Narrator] From bingo prizes to take-home goodies.

I eat here every day. I love it! The food, bingo.

- [Narrator] Even for those who have the resources and awareness, eating well and achieving nutritional health while aging is work.

I think there's a lot of factors that go into that. Monetary, the cost of food continues to go up. Time, we all have good intentions, but can we put it on table?

I'm working at it. It's a work in progress every single day. Do I have it down? No, not necessarily. I'm not putting myself up as any kind of, someone to emulate, but I try.

We only live life once, so I want to make sure that as I'm entering my sixth decade and my seventh decade, that I'm able to do that as healthfully as I possibly can.

I want to be able to enjoy retirement when I get there. Who wants to be ill or incapacitated at the time when they're going to be able to do whatever they want?

Americans spend a lot of time and money on food and diet in our quest to be healthy. Science is now helping us better understand why and how that changes as we age. It means re-thinking the role of food and nutrition in healthcare and what resources and services are most effective in providing good nutrition for healthy aging.

To learn more about Aging Matters, visit our website.