Maura: You’ve been hearing it everywhere—these are unprecedented times. As we live through this global health pandemic, we’re learning how to adapt and respond to keep healthy people safe and help those who are infected. What we understand about this pandemic continues to deepen and adapt as new data becomes available.

Maura: But, one finding remains consistent: People of all ages can be infected by COVID-19, the novel coronavirus, and while the majority who contract the disease will experience mild symptoms, some healthy people, older people or people with pre-existing health conditions may experience severe illness.

Maura: I’m Maura Bowen, podcasting for Abbott Nutrition Health Institute. I’m talking today with Dr Nicolaas Deutz [MD, PhD], of the Center for Translational Research in Aging & Longevity, in the Department of Health & Kinesiology at Texas A&M University in the United States.

Maura: Dr Deutz is here to talk about why older adults are more vulnerable during pandemics like COVID-19, and to help us understand the preventative steps they and society can take to reduce the risk of falling ill, or to help combat the virus if they do. He’ll focus on the recommendations and best practices ESPEN—the European Society for Clinical Nutrition and Metabolism—recently published on the nutritional management of individuals with SARS-CoV-2 infection.

Maura: One thing to note: This podcast recording may sound softer than you’re used to hearing. For the sake of social distancing, Dr Deutz and I are both dialing in for today’s discussion rather than sitting in the studio.

Maura: Dr Deutz, welcome.

Dr Deutz: Thank you for having me today.

Maura: Yes, thank you for joining us. Before we start, can you tell us a little bit about yourself, your current role, and what brought you to this area of focus in your career?

Dr Deutz: Yes, so I’m an MD, [PhD], originally from the Netherlands, and I’ve done clinical research all my life, very much in the area of nutrition and metabolism. A lot of the research we’re doing at the moment is really trying to find nutritional compositions—nutritional supplements—that actually can improve the health of older adults, specifically those with chronic diseases.

Maura: We often hear older adults are more vulnerable during pandemics, like COVID-19. Can you explain whether it is just age that places them at increased risk of becoming seriously ill, or are there other factors to consider?

Dr Deutz: Yeah so I understand that people think it’s just age, but it’s not. It’s everything that happens during
becoming older. Because we know that older adults usually have also some accompanying chronic diseases or conditions, and they can range from pre-diabetes (where your glucose is a little bit higher than normal), to full diabetes, also obesity, or atherosclerosis (where your blood vessels aren’t as good anymore)—or even more severe diseases like cancer, chronic heart failure (CHF) or [chronic obstructive pulmonary disease] COPD. All of these diseases are very prevalent in older adults.

**Dr Deutz:** When these people are sick, they [can] also experience malnutrition, which means they don’t eat enough food in relation to their needs, and that [can] cause the immune system [to be] not as good as it should be.

**Dr Deutz:** And then, older adults with any of these conditions on top of that, also [can] get the burden of infection—for instance, the coronavirus—and then they are at much higher risk of deterioration or even dying. So it’s really about if you have a disease, or your body is already dealing with a disease and your immune system is agitated, then to have a second burden like an infection is really bad for your health.

**Maura:** What can older adults do to protect themselves, and how can society work to protect them?

**Dr Deutz:** In principle—and I think everybody has been made aware—it’s all about just not getting the virus. And that is, of course, mainly based on reducing or prohibiting contact with someone who is already infected, or in contact with surfaces that contain the coronavirus load. The advice now is to do a lot of hand-washing, social distancing, self-isolation, almost all over the world in this pandemic. It’s all based on not getting into contact with the virus. It’s also very clear that the overall health of the person is one of the key factors in how this person can cope with an infection with the coronavirus.

**Dr Deutz:** Now if you think about this, you know there is a lot of research available to show that when people remain active, perform their regular activities throughout the day, and consume a healthy, nutritious diet, they will remain in a good condition so they can better cope with infections like the coronavirus.

**Maura:** You mentioned it’s important to remain active throughout the day, but this could be difficult for people who are self-isolating at home. What are the possible consequences of not trying to stay active?

**Dr Deutz:** I think we know it from personal experience, especially in this time. You are at home, now we are forced to stay at home, and that will actually increase sedentary behavior. We will watch more television, and also because we are not so happy we’ll have a higher intake of unhealthy foods. If you think about it, that will cause us to lose muscle, because we don’t use our muscles that often, and because we probably consume too many calories, we will actually gain fat. That all will negatively affect our health and also the conditions we maybe already have.

**Dr Deutz:** We know that older adults are already at risk of losing muscle because we know that older adults are usually a little less active, and they already have a slow reduction of their muscle mass and strength. In other words, it’s very hard. We have to stay at home and be more active at home, which of course is very difficult.

**Dr Deutz:** If you think about all the research that summarizes that the loss of muscle mass and strength in older adults, it’s really very much related to the chance of being sick or staying sick, or for instance when admitted to the hospital, perhaps having to stay in the hospital longer, or getting any complications. That’s on the negative side. And we know also that if we’re able to keep our muscle mass and strength, we will really stay much healthier, remain independent longer, and recover sooner. Our quality of life in general is absolutely higher when we stay active.

**Maura:** What types of activities can people do to help keep themselves active at home?

**Dr Deutz:** Any activity of course is good. But think about it: Just walking around in the house, I understand sometimes that’s very difficult, because there's sometimes not a lot of space. But you can try to do stair-climbing, if you have [steps]; or just do stand-to-sit or sit-to-stand from a chair; maybe do some chair squats, or sit ups, push-
ups. If possible, if you have a nice yard, do some gardening and take care of all your plants. Some other ways to do it is thinking about the traditional exercise practices like yoga or Tai Chi—they’re also good alternatives. And even nowadays I think there are a lot of eHealth apps on mobile phones that can help us stay active. There are lots of exercise videos to assist in staying active.

Dr Deutz: So there are ways, but everybody has to find their own way to stay active at home in their confined area.

Maura: What happens when malnutrition is present? How should healthcare practitioners approach it?

Dr Deutz: We have shown—and others have shown—that when malnutrition is there (and again, it’s more prevalent in older adults if they have one or more chronic diseases) — we have to identify first whether there is a risk of malnutrition, which means we can do that by, for instance, using screening tools to do that, or think about questions, like: “Did you have a recent weight loss you were unaware of?” “Are your clothes maybe not fitting as usual—or your jewelry or rings?” “Have you had a loss of appetite, or any difficulty eating?” “Are you feeling tired or very fatigued?” They’re all signs of malnutrition.

Dr Deutz: Caregivers really need to be aware of malnutrition because it has so many consequences. If people themselves feel these signs, I would really advise them to contact their healthcare provider.

Dr Deutz: Malnutrition is caused when someone of course eats [fewer] calories, but more importantly, this person will eat less protein. Then, the protein intake can become so low, it will have an effect on muscle mass and strength, and people will feel weaker. Normally, the intake we advise is between 1-1.5g per kilogram of body weight per day, which is a substantial amount for some people, but it’s really necessary. We also show that in older adults it’s even more important. It could well be that it is too difficult to obtain this intake of protein with diet alone.

Dr Deutz: Besides that, of course, we have to think about the fact we also should have all our micronutrients, our vitamins and minerals. One of those is, for instance, Vitamin D, which relates to bone and muscle strength. When people are inside, of course, there’s not as much sunlight, and your production of Vitamin D is low. That’s why it’s more important to take it with diet.

Dr Deutz: Now if all these things do not work, which could well be sometimes the case, and you cannot use regular food intake to meet your nutritional needs, then I would advise thinking about taking an oral nutrition supplement. Because those oral nutrition supplements have all the important ingredients. We know that oral nutrition supplements really supplement on top of the diet and they will improve your overall dietary intake and bodyweight, and lower the risk of complications, maybe prevent admission to the hospital or readmission to the hospital.

Dr Deutz: In my opinion, nutrition and exercise are so key to this. We can stay healthier than usual and think about the situation of being at home as having a major effect on our activity and our food intake. So this is how we look at it.

Dr Deutz: I think, let’s come out of these times. It’s hard to see that. But it will go away, and we will see the sun again.

Maura: Thank you so much for your time today Dr. Deutz, and for these excellent insights. We’ll hear more from you in our next podcast episode on the “Nutritional Needs of COVID-19 Patients in Hospital and Post-discharge.” I’m very much looking forward to that discussion.

Maura: And to our listeners: Our website, anhi.org, has a series of resources related to this topic—for instance, infographics on nutrition and immunity, dehydration, and why maintaining muscle matters. You can find these resources on anhi.org by clicking “RESOURCES” and “PRINTABLE MATERIALS,” or by scrolling to the end of the transcript for this podcast episode.
Maura: If you’re hoping for more podcast episodes on nutrition and immunity, rest assured we’re developing a series of additional episodes to help support you. Become an anhi.org member today by clicking “REGISTER” at the top of our homepage to receive regular nutrition science news updates from our team.

Maura: Thanks everyone. Stay healthy and safe.