



# **EMERGING LEARNING ABOUT NUTRITION STATUS, COVID-19 AND NUTRITION EDUCATION IN OLDER ADULTS**

December 10, 2020



**The National  
Resource Center on  
Nutrition & Aging**

# **WELCOME & INTRODUCTIONS**

# INTRODUCTION

- This summer, we fielded the NRCNA Technical Assistance and Training Needs evaluation to determine the educational needs of senior nutrition program staff across the country.
- To learn more/see results, please visit:  
<https://nutritionandaging.org/tatnsurvey/>
- NRCNA staff set out to offer a series of virtual learning and networking events this Fall to delve into some of the training need areas highlighted.
- Answer: Meeting the training need... Understanding more about the nutrition status of older adults
- Question: What COVID-19 have to do with it?

*Let's find out!*





**SARAH BOOTH, PH.D.**

Center Director, Lead Scientist

Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University

**Nutrition and COVID-19 affecting Older Adults**



# Nutrition advice for adults during COVID-19

Eat a well-balanced diet every day to get the vitamins, minerals, dietary fibre, protein and antioxidants your body needs to be healthier with a stronger immune system and to lower your risk of chronic illnesses and infectious diseases.

COVID-19: INFECTIOUS DISEASE

## Vitamins vs. COVID-19? These 3, and Zinc, Will Reinforce Your Immune System

April 20, 2020 | Health/Steve Hux

## Vitamin K found in some cheeses could help fight Covid-19, study suggests

Scientists in Netherlands explore possible link between deficiency and Covid-19 deaths

- [Coronavirus - latest updates](#)
- [See all our coronavirus coverage](#)



▲ Medical staff attend to a Covid-19 patient in the intensive care unit of a hospital in The Hague. Photograph: Remko de Waaij/WANP/AFP via Getty Images

# TREATING COVID-19 WITH VITAMIN D

though very  
are COVID-19,  
yourself against  
keep at least 1  
and to wash  
thoroughly.

**FACT:**  
Adding pepper to your  
soup or other meals  
**DOES NOT** prevent or  
cure COVID-19.



It is also beneficial for your general health to maintain a balanced diet, stay well hydrated, exercise regularly and sleep well.



#Coronavirus

#COVID19

11 April 2020

## NUTRITIOUS DIET FOR ADULTS DURING COVID-19

### DAILY MUST-HAVES



2 cups of fruits



2.5 cups of vegetables



180 grams of grains



Not more than 5 grams of salt

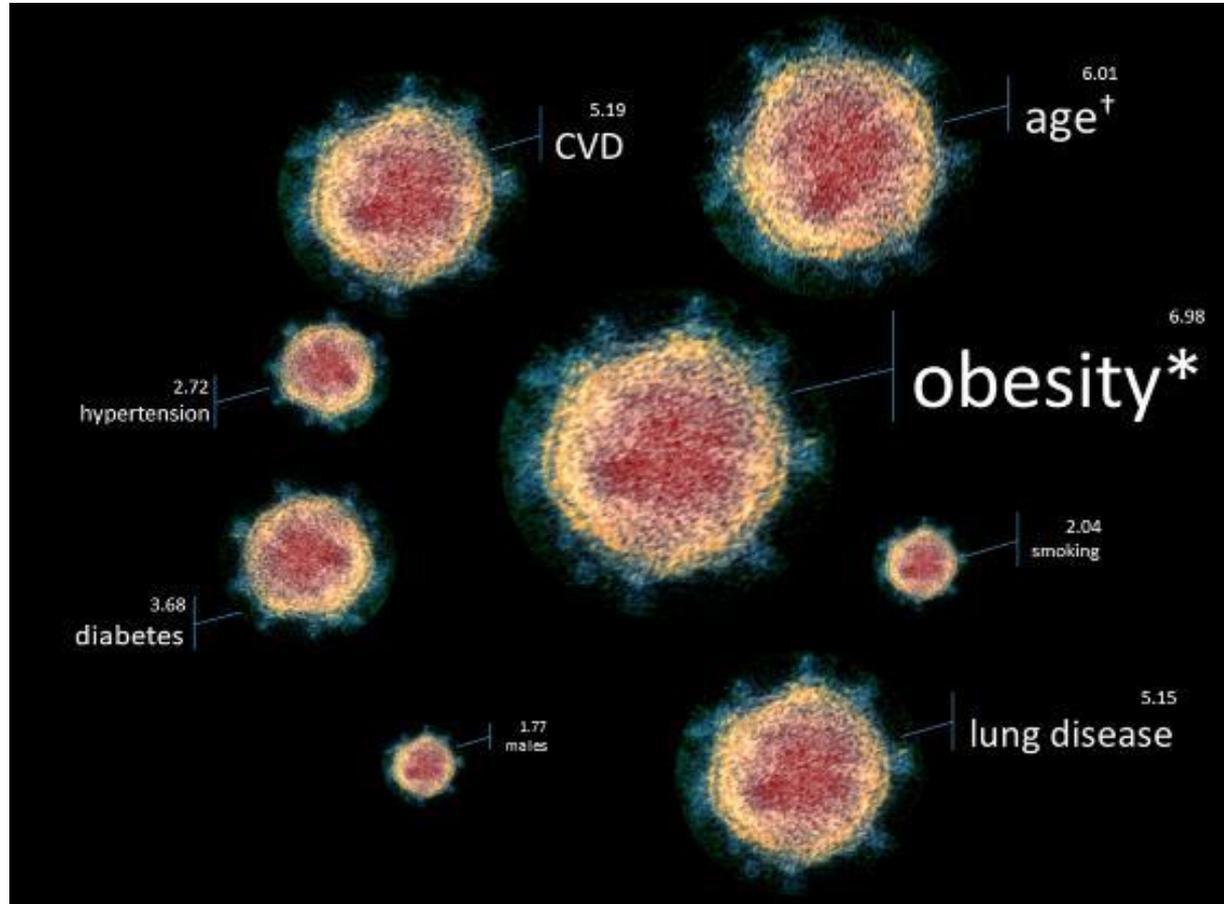


Unsaturated Fats

## Is vitamin C effective in preventing or treating COVID-19?



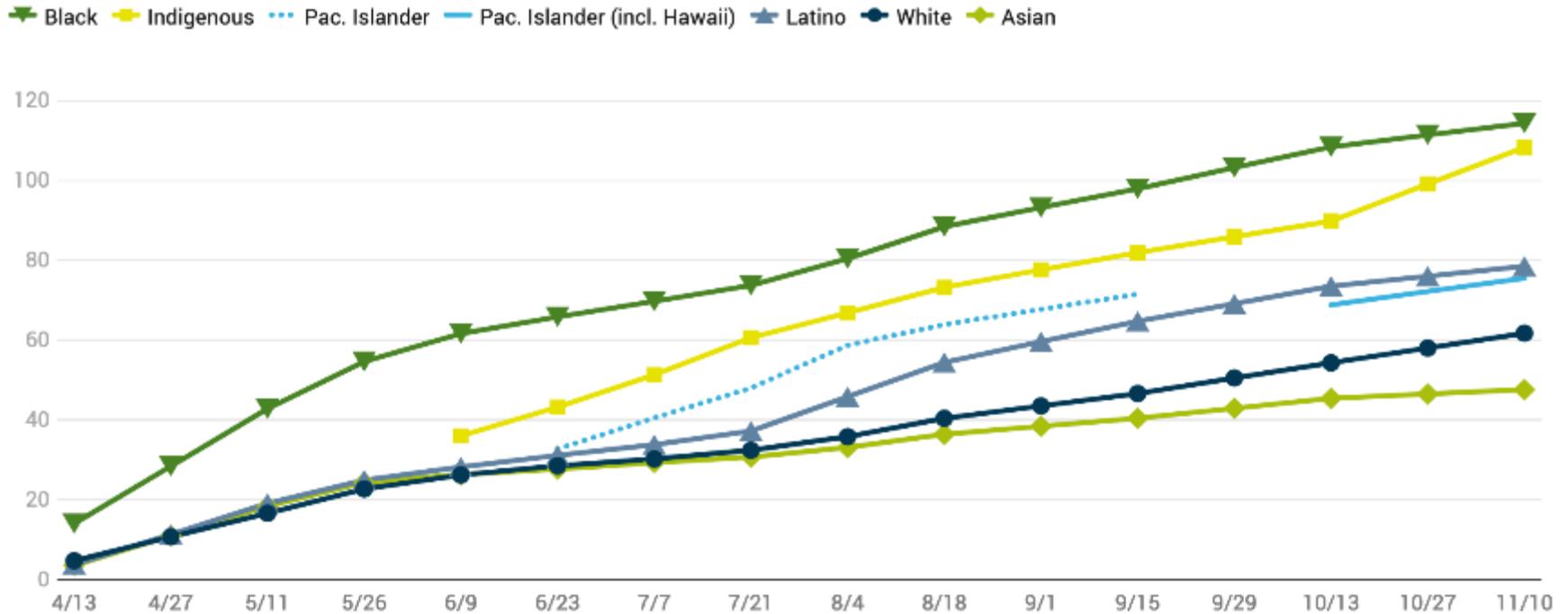
# MAJOR RISK FACTORS FOR CRITICAL ILLNESS IN COVID-19



Clinical Obesity, First published: 28 August 2020, DOI: (10.1111/cob.12403)



# BLACK & INDIGENOUS AMERICANS EXPERIENCE HIGHEST DEATH TOLLS FROM COVID-19



AMP Research Lab

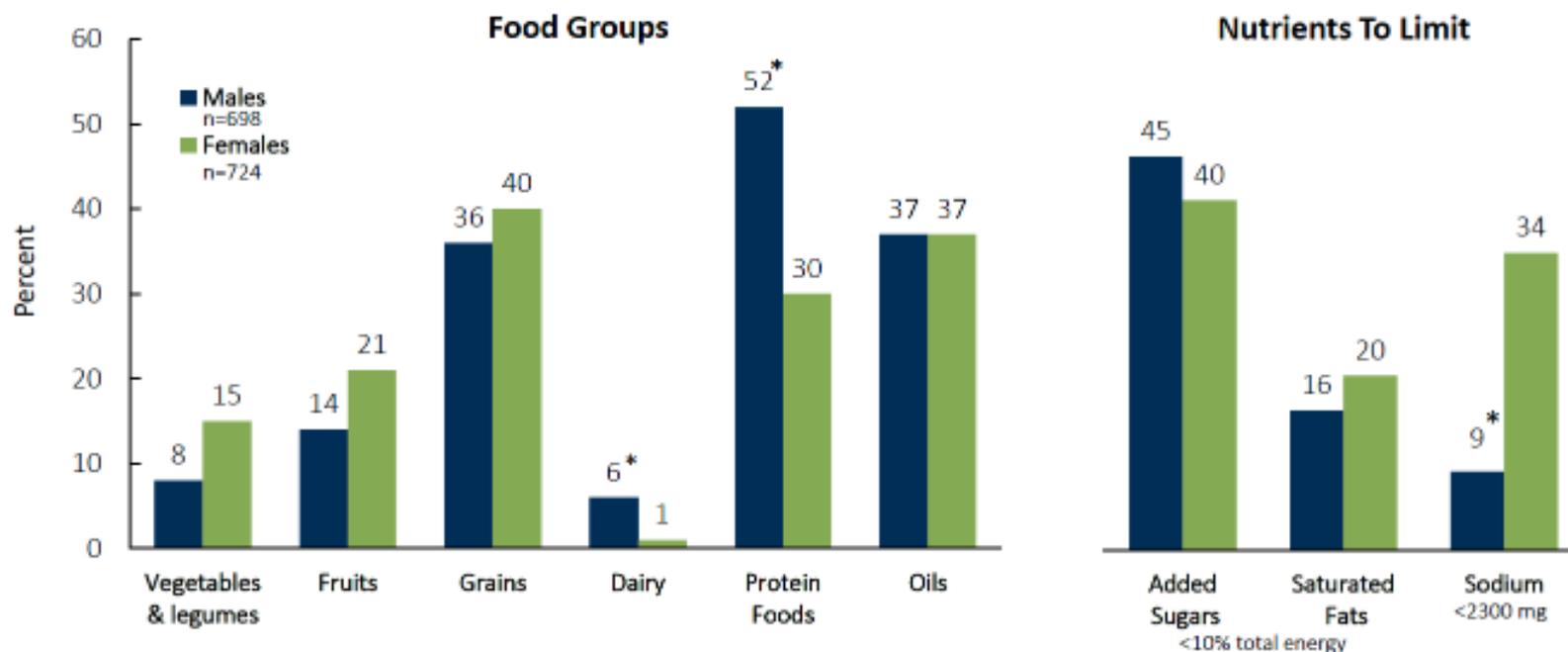
# AGING IS MULTIFACTORIAL



# NUTRIENT REQUIREMENTS OF OLDER ADULTS

## Percent Meeting 2015-2020 Dietary Guidelines Recommendations<sup>†</sup>

2013 – 2016 WWEIA, NHANES, 2 days, adults 71+ yrs



<sup>†</sup>Energy-specific recommendations based on age, sex, and physical activity level

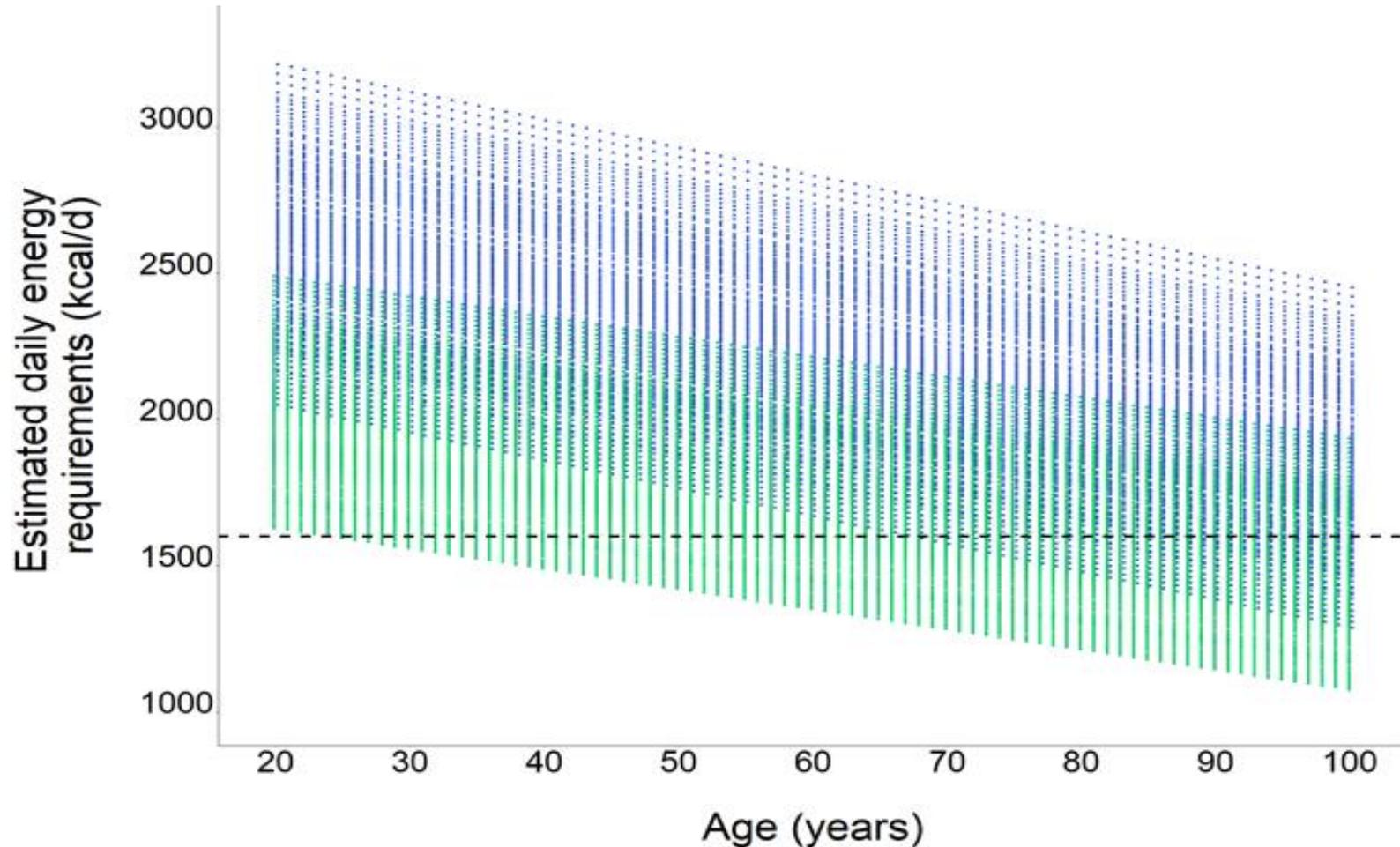
\*Significantly different from females (p<0.001)

Source: Steinfeldt LC, Martin CL, Goldman JD, Moshfegh AJ. Meeting Dietary Guidelines Recommendations: Older Adults WWEIA, NHANES 2013-2016. Food Surveys Research Group Dietary Data Brief No. 28. July 2020. [www.ars.usda.gov/nea/bhnrc/fsrg](http://www.ars.usda.gov/nea/bhnrc/fsrg)



# NUTRIENT REQUIREMENTS OF OLDER ADULTS

Under recognized challenge for some older adults: Difficulty consuming enough nutrient-dense calories.

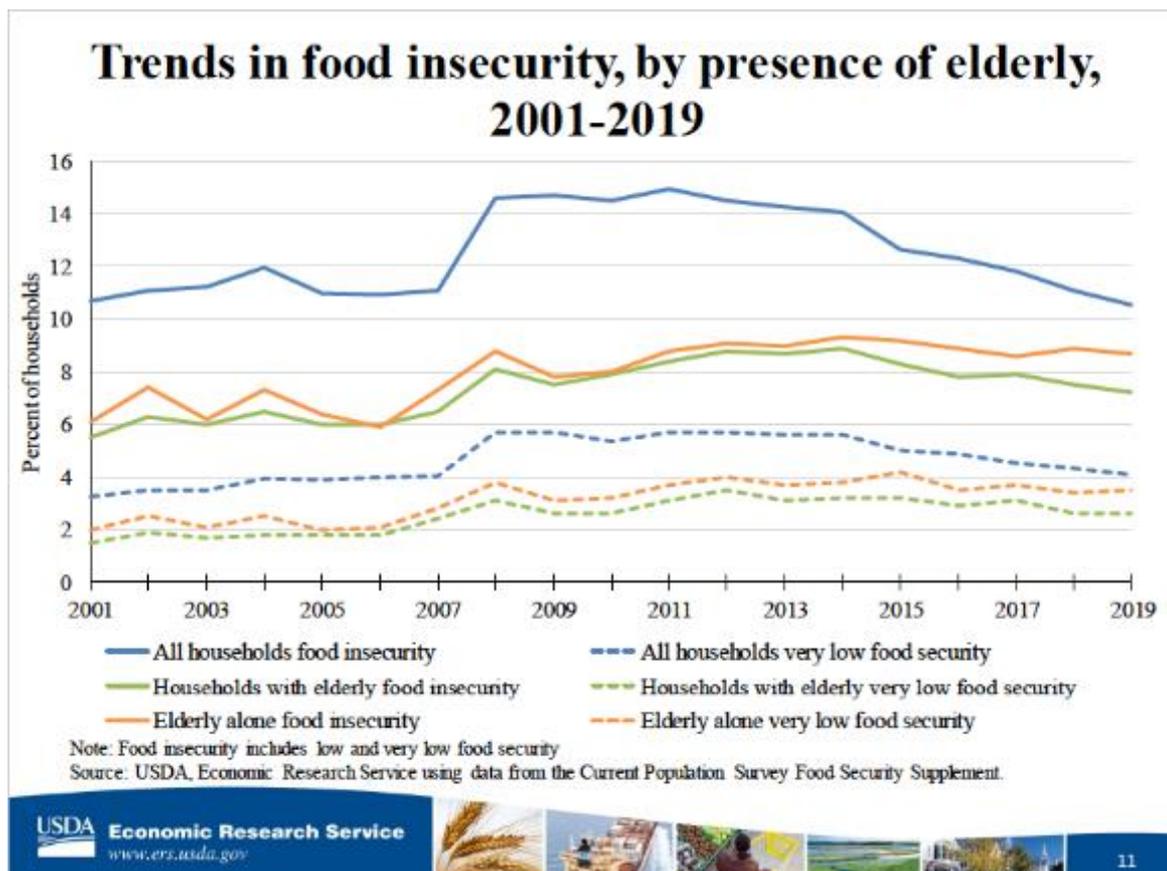


# FOOD INSECURITY AMONG OLDER ADULTS

9% of the seniors in the US are living in poverty.



Pre COVID



Source: Economic Research Service. Annual Food Security Survey Data

# REDUCED FOOD INSECURITY AMONG OLDER ADULTS PRE-COVID-19

## Federal programs that address food security\*\*

### 4 of 15 of USDA's domestic programs cater to older adults :

- 1) USDA-SNAP -- 4.7 million households with adult over 60;
- 2) The Child and Adult Care Food Program 120,000 (older + disabled)
- 3) The Commodity Supplemental Food Program (CSFP) 604,000 (2016)
- 4) The Senior Farmers' Market Nutrition Program (SFMNP) 811,809 (2017)

### HHS-OAA funded nutrition programs:

- 1) Home-delivered 145.2M meals delivered to 850,000+ (2016)
- 2) Congregate: 79.2 million congregate meals served to nearly 1.6 million (2016)

\*\*2019 GAO investigation found meals supported by federal nutrition programs for older adults were typically higher in sodium and saturated fat than recommended; recommended HHS & USDA improve oversight of meal programs for older adults.



# AREA AGENCIES ON AGING (AAAS) RESPONSES TO COVID-19

**98%** reported increase in demand for immediate (and ongoing) need for food, whether in the form of a meal or help with groceries

**90%** reported a transition of congregate meal clients to the home-delivered meals program

**61%** reported working with non-contracted community groups (e.g., YMCAs, food banks, faith-based groups)

**52%** reported working with non-traditional partners to deliver services (e.g., restaurants, other vendors)

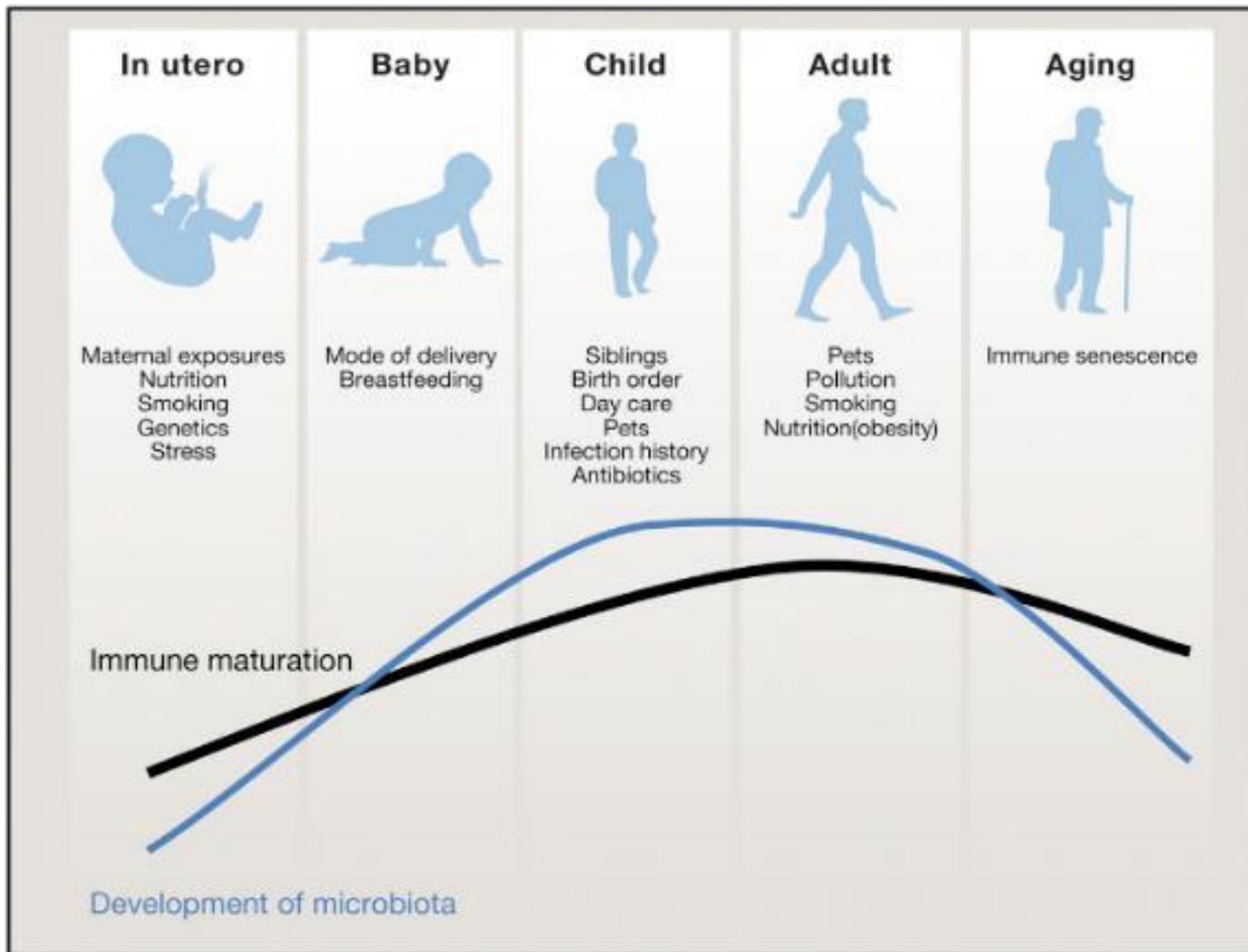
Source: #AAAsAtWork for Older Adults: A Snapshot of Area Agency on Aging Responses to COVID-19  
<https://www.n4a.org/covid19report>



A microscopic view of various immune cells against a dark background. The cells are illuminated with different colors: red, purple, and blue. Some cells are spherical, while others are more elongated or irregular in shape. The red cells have a bumpy, textured surface, while the purple cells have a smoother, more uniform appearance. The blue cells are smaller and more numerous, scattered throughout the field of view.

# IMMUNE RESPONSE

# INFLUENCE OF AGE ON THE IMMUNE SYSTEM



Lloyd CM, Marsland BJ. Immunity. 2017 Apr 18.

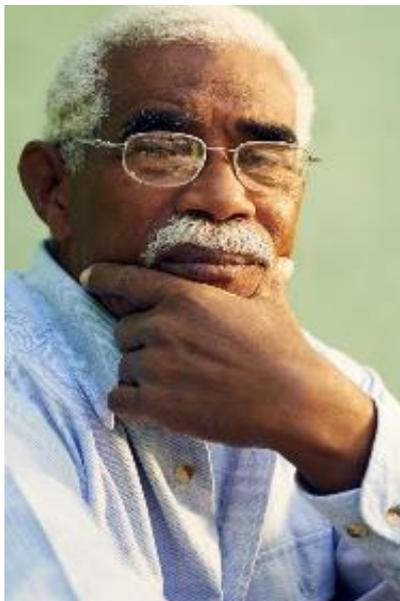


# VACCINE EFFICACY





**SINGLE SUPPLEMENTS**





**“If you want to maximize the impact of food on your immune system, you'll need to dramatically increase the amount of fruits and vegetables you eat each day.”**



## MyPlate for Older Adults

### Fruits & Vegetables

Whole fruits and vegetables are rich in important nutrients and fiber. Choose fruits and vegetables with deeply colored flesh. Choose canned varieties that are packed in their own juices or low-sodium.

### Healthy Oils

Liquid vegetable oils and soft margarines provide important fatty acids and some fat-soluble vitamins.

### Herbs & Spices

Use a variety of herbs and spices to enhance flavor of foods and reduce the need to add salt.



### Fluids

Drink plenty of fluids. Fluids can come from water, tea, coffee, soups, and fruits and vegetables.

### Grains

Whole grain and fortified foods are good sources of fiber and B vitamins.

### Dairy

Far-free and low-fat milk, cheeses and yogurts provide protein, calcium and other important nutrients.

### Protein

Protein rich foods provide many important nutrients. Choose a variety including nuts, beans, fish, lean meat and poultry.



Remember to Stay Active!

Tufts  
UNIVERSITY

DEPARTMENT OF  
GERIATRICS  
NUTRITION  
RESEARCH  
CENTERS

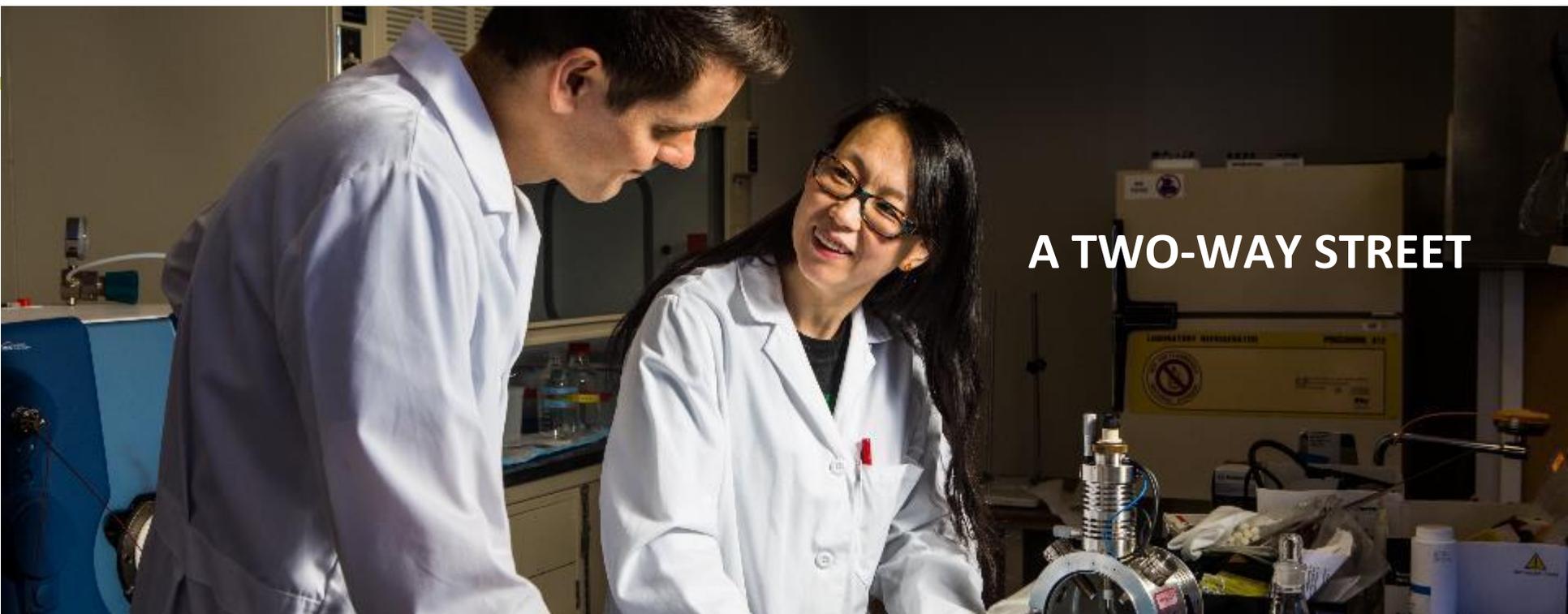
HNRCA

AARP Foundation

Available at: <https://hnrca.tufts.edu/myplate/>





A photograph of two scientists, a man and a woman, both wearing white lab coats, looking at something together in a laboratory setting. The woman is wearing glasses and has a red pen in her lab coat pocket. The background shows various pieces of laboratory equipment, including a yellow machine labeled 'LABORATORY REFRIGERATOR'.

## A TWO-WAY STREET

What can we as researchers do to support your efforts to promote healthy aging through nutrition?



**THANK YOU**

**QUESTIONS?**

**[HNRCA-COMMUNICATIONS@TUFTS.EDU](mailto:HNRCA-COMMUNICATIONS@TUFTS.EDU)**



**The National  
Resource Center on  
Nutrition & Aging**

**Q & A**



**EMERGING LEARNINGS ABOUT NUTRITION STATUS, COVID-19,  
AND NUTRITION EDUCATION IN OLDER ADULTS**

**Susan Saffel-Shrier, MS, RDN, CD, Cert. Gerontologist  
Professor, Department of Family and Preventive  
Medicine**

**University of Utah School of Medicine**

**[Susan.Saffel-Shrier@hsc.utah.edu](mailto:Susan.Saffel-Shrier@hsc.utah.edu)**



# IMPLEMENTATION OF A COLLABORATIVE MALNUTRITION-FOCUSED TRANSITIONS OF CARE AND REFERRAL PROCESS

- Background
  - Administration for Community Living grant funding
  - 1 in 2 older adults are at risk or malnourished
  - 20-50% older adults are at risk or malnourished on hospital admission
  - 50% higher rate of re-hospitalization
- Project goals
  - Identify and track malnourished older adults from hospital to home
  - Primary: reduce re-hospitalization
  - Secondary: Improve quality of life, functionality, nutritional status, mental health, coordination of services
- Utilize multiple research partners to track “transitions”
  - Hospital discharge data
  - AAA/MOW/Senior Services
  - Home health agencies



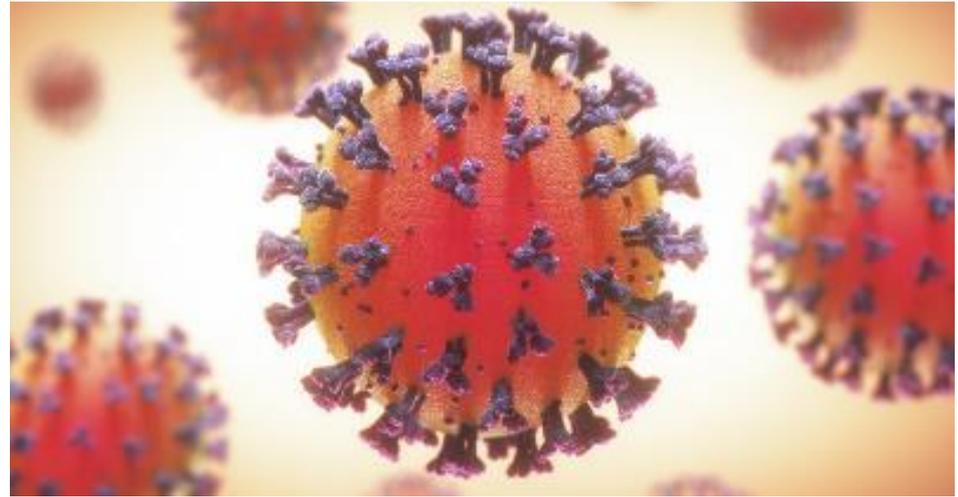
# MALNUTRITION AND TRANSITIONS OF CARE

- Qualified older adults
  - Recently hospital discharge
  - Receive MOW
  - 6 month home visitations and telehealth
- RDN comprehensive malnutrition assessment
  - Biological/psychological/social (holistic) approach
  - Nutrition-Focused Physical Exam
  - Tailored nutrition care plans



# AND THEN THERE WAS COVID-19: CONSTRUCTING THE SITUATION

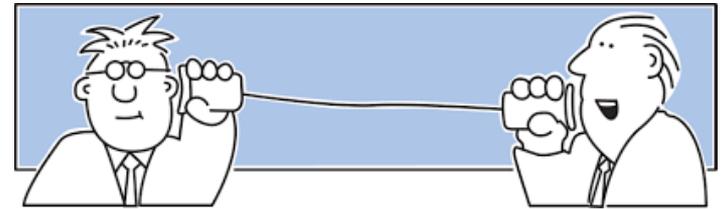
- How will we respond?
  - Surges
  - Quarantines
  - Isolations
  - Work from home
  - Politics
  - High risk population
  - Fear & confusion
- Research suspension
  - No client/patient direct contact
  - Telehealth protocol -IRB
  - Safety protocols



# ADDRESSING OUR PARTNERS

How can we:

- *Maintain communication with our research partners and clients/patients.*
- Avoid out of sight-out of mind.
- Leverage strategic pauses
- *Address all aspects of health and nutrition.*
- Biological-Psychological-Social (holistic)
- *Demonstrate concern and eagerness to assist ALL persons connected to our project.*



# BUT, WE ARE STILL HERE!



**Improvise:** the activity of making or doing something not planned beforehand, using whatever can be found.



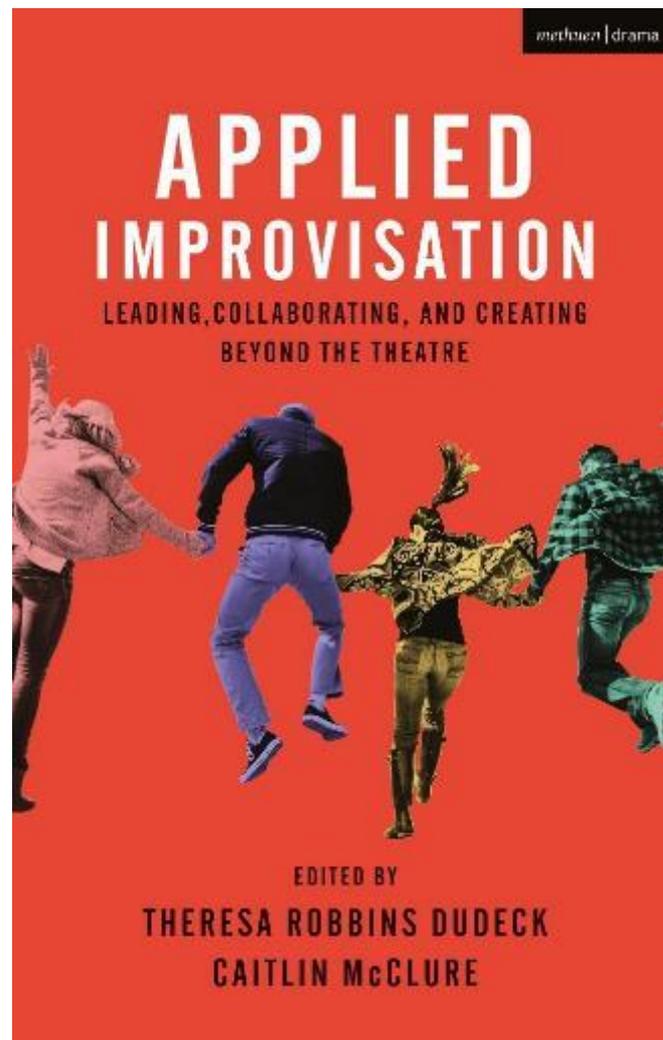


Applies improvisational methods to inspire the mindsets and behaviors that lead to rapid innovation and incomparable content. These methods can drive personal growth and organizational improvement.

...This technique creates confidence to take on the network's biggest challenges and most promising opportunities. (MOW 2019)



# FAST FORWARD: COVID-19 & CHANGE



# APPLIED IMPROVISATION: CONCEPTS

- Adopting an improvisation mindset means intentionally choosing to accept everything as an OFFER, even curveballs.....
- We should treat these times as “an offer” and ask ourselves how we would construct the situation.....
- That begins with shifting our attitude from fighting the current constraints to taking inspiration from them....

-Theresa Dudeck



# IMPROVISATION: HOLISTIC HEALTH HACKS

- Maintain contact
- COVID-19 nutrition education
- Develop positive relationships
  - Combating our good intentions
  - Avoid these foods
  - Every food fits
  - No judgement
- Recognize and acknowledge COVID-19 bio/psycho/social impact



# DISCUSSION QUESTION #1

---

In what ways have you improvised?

What have the biggest barriers and/or opportunities been to offering nutrition education to the seniors you serve this year?

- Please let us know in the chat box on your screen.



# HOLISTIC HEALTH HACKS

AMY COVINGTON AND SUSAN SAFFEL-SHRIER

## Supermarket Survival: Produce Part 1

- *The U.S. Department of Agriculture is not aware of any reports at this time of human illnesses that suggest COVID-19 can be transmitted by food or food packaging.*

## Supermarket Survival: Produce Part 2

- *Food nourishes the mind, body and soul. With the tips below, we hope you will continue to shop for produce you and your family enjoy!*





# HOLISTIC HEALTH HACKS

Benefits of fiber for weight loss:

Makes you feel full more quickly

Can eat more food for fewer calories

Slows digestion so you feel full longer

Helps balance hormones and blood sugar

Contains more micronutrients which can lead to fewer cravings

Improves gut health and digestion

25 grams per day/ increase slowly to avoid digestive problems/ drink ~2 liters of water.

**Your**  
“Flatten ~~the~~ Curve”  
**With Fiber**

## **\*\*How to avoid the “Quarantine 15”\*\***



Many of our lives have drastically changed during this time. Some are working fewer hours or not at all. Most of us are spending more time at home than usual. This can cause boredom which can lead to over consumption of calories. Add to this that the situation we are facing can be stressful, and that can create a recipe for unintentional weight gain.



# HOLISTIC HEALTH HACKS

## Just Put an Egg on it!

So you just don't feel like cooking and you don't want to go to the grocery store. So be it. But you're also looking for something healthy. It's time to discover all the potential meal ingredients hiding in your refrigerator, cupboards or pantry. The question is: How can I make a nutritious combination that is delicious as well? Just put an egg on it! Drop an egg into a broth-based soup. Find some leftover rice or pasta, add some veggies and put a poached egg on it. Create a ham fried rice dish with an egg added. Don't forget your favorite herbs, spices or sauces to round out your new found meal.



## Simple Meal Ideas : Breakfast, Lunch, Dinner & Snacks



**Salmon wrap.** Place canned salmon on a whole grain wrap or tortilla. Add chopped avocado, tomatoes, greens (celery or bok choy sliced in ribbons, spinach, romaine lettuce) and plain yogurt or hummus. Wrap tightly, cut in half and serve. (can sub salmon with tuna or beans)

## Meal Planning Tips for Caregivers

Weekly meal prep can easily provide healthy foods that are readily available for your loved one to mix and match to make a meal.



# HOLISTIC HEALTH HACKS

## Boost Your Immune System in Challenging Times



Good nutrition and a healthy lifestyle that includes managing stress, physical activity, and adequate sleep help to boost your immune system and help you fight illness.

Immune boosting nutrients are best from food sources. The following are great ways to bump up your immune system every time you eat.

## Cabin Fever: Gardening 101

Ahhhh Spring in Utah! Have you noticed the spring bulbs are blooming? Daffodils, tulips, and my favorite, hyacinths.... Even with the dramatic temperature swings of late, these lovely flowers are there to make us grin. It is also time to think about our gardens. There is no better way to practice social distancing than announcing to your family that it is time to clean up the yard, vegetable or flower garden. OK, so you think you cannot commit a lot of time to this outdoor adventure. Re-think this one! You probably have some time on your hands right now and just need to do some minor planning.



# HOLISTIC HEALTH HACKS

## Cooking for *One*



Many older adults live alone and can struggle to make small balanced meals. Here are some tips for making small meals from the Academy of Nutrition and Dietetics.

## Hydration Situation



With the summer heat upon us it is important to keep our hydration in check. The hydration status of our bodies can lead to positive or negative health situations. Water helps to digest food, absorb [nutrients](#), and then remove unused waste. Dehydration can be serious and may lead to constipation, falls, confusion, weakness, and even hospitalization. Urine color can predict dehydration. The first urine in the morning should be straw or lemonade in color. If it is darker, like apple juice, you may be dehydrated.



# HOLISTIC HEALTH HACKS

## Simple Pantry Essentials for Challenging Times

Shelf-stable pantry items that can be put together to make a balanced meal.



## Eating Your Way to a Good Night's Sleep



Studies show that 1 in 3 Americans are chronically sleep deprived.

“When we sleep, our brains act like a road crew that comes out at night to fill in potholes and repave roads before the morning rush hour.”<sup>(1)</sup>

Sleep deprivation has been tied to [obesity](#), [elevated blood pressure](#), and [Alzheimer's disease](#). Certain foods can positively affect our sleep. (Lasagna is not one of them 😊)



## DISCUSSION QUESTION #2

---

In what ways have you pivoted your nutrition education activities, so they are more COVID-19 focused?

- Please let us know in the chat box on your screen.





**THANK YOU**

**SUSAN SAFFEL-SHRIER  
SUSAN.SAFFEL-SHRIER@HSC.UTAH.EDU**



**The National  
Resource Center on  
Nutrition & Aging**

**Q & A**



**The National  
Resource Center on  
Nutrition & Aging**

**Connect and  
Converse with Us:  
December 16, 2020**



**The National  
Resource Center on  
Nutrition & Aging**

**Thank You!**