

# The State of Obesity 2021: Better Policies for a Healthier America

November 10, 2021 1:00 – 2:30 PM Eastern



@HealthyAmerica1
#StateOfObesity

The State of Obesity:

BETTER POLICIES FOR 2021
A HEALTHIER AMERICA

Special Feature: COVID-19, Social Determinants of Health, and Obesity



PTEMBER 9091





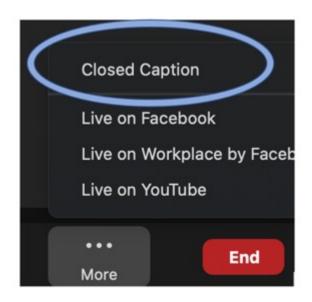


## **Closed Captioning**

To see real time captioning:

- 1. At the bottom of your screen, click to open **More**
- 2. Click Closed Caption

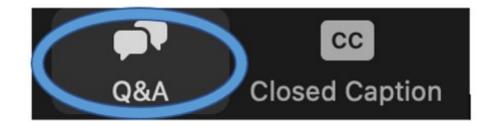






### **Q&A Feature**

- 1. At the bottom of your screen, click to open the Q&A panel
- Type your question in the Q&Abox



3. Hit Enter



### Moderator



J. Nadine Gracia, MD, MSCE
President and CEO
Trust for America's Health

tfah.org



## **Agenda**

Welcome and overview of State of Obesity Report

Fireside chat with Chef José Andrés

Presentations from panelist

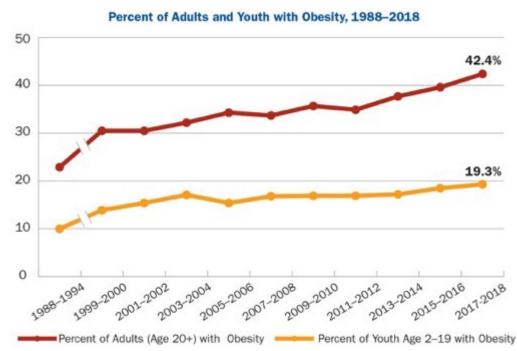
**Questions and Answers** 

Closing





## **Adult Obesity Still Increasing**



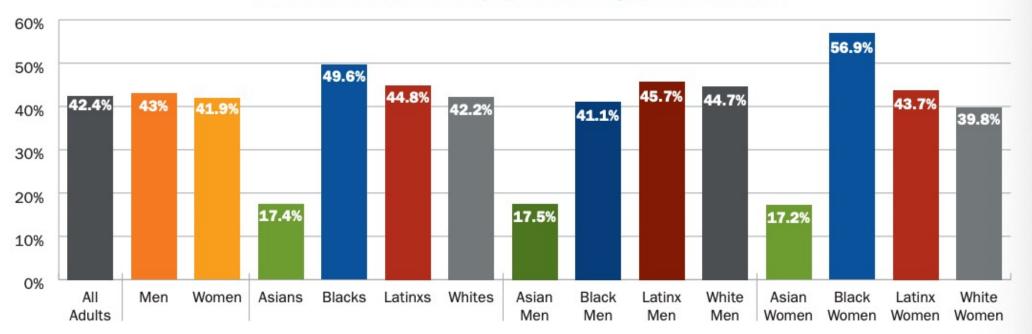






## Obesity Varies Substantially By Race and Ethnicity





SOURCE: NHANES

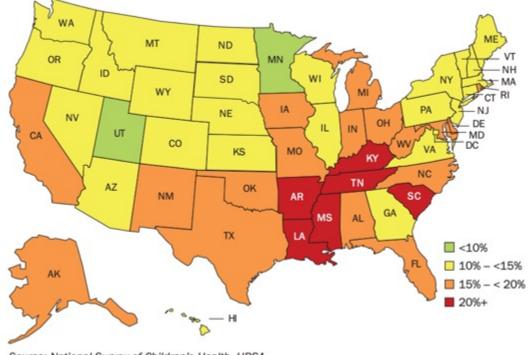




## **Trends in Childhood Obesity**

- Obesity rate in children more than tripled between 1976 and 2018
- Children who are overweight or have obesity are more likely to have obesity as adults
- Investing in nutrition assistance and education programs (e.g., SNAP, WIC) are beneficial in lowering childhood obesity rate





Source: National Survey of Children's Health, HRSA

Tirust (cas Health

Special Feature: COVID-19, Social Determinants of Health, and Obesity

Historical, social, economic, physical, and policy contexts



Systematic effects on daily life and choices



Weight control and related contextual outcomes and effects on individuals





# Special Feature: COVID-19, Obesity, and Social Determinants of Health

- Obesity is a risk factor for more severe disease and complications among individuals infected with COVID-19. An estimated 30% of the adult COVID-19 hospitalizations through November 2020 were attributable to obesity.
- The rates are high for hospitalizations and mortality for COVID-19 patients with underlying medical conditions.
- Consequences of the COVID-19 pandemic, such as job loss and food insecurity, disproportionately impacted Black and Latino households. These factors are also linked to increased risk of obesity.



# **Shifting Conditions: COVID-19 Pandemic and Obesity**

42% of U.S. adults reported undesired weight gain since the start of the pandemic that could be attributed to:

- Reduction in physical activity
- Changes in eating habits
- Economic hardship
- Food insecurity
- Increase in sedentary behaviors
- Mental distress
- School closures



Photo credit: Massimo Giachetti



# Pandemic-Related Policy Changes and Trends

March 17–29, 2021 time period showed a decrease in food insecurity to 18% for all households.

The American Rescue Plan Act continued and expanded many social safety-net programs, including:

- extending emergency increase in SNAP benefits
- continuing unemployment benefits
- providing a third economic impact payment of up to \$1,400 per person





### **More Needs To Be Done**

### Report recommendation themes:

Policies need to make the healthy choice the easy choice

Funding is important for expanding successful strategies

Focus on long-term meaningful partnerships involving multiple sectors

Focus first on communities facing health disparities and disproportionate risk for obesity





## **Key Federal Policy Recommendations**

### Increase health equity and reduce obesity-related disparities

Expand CDC Programs such as Chronic Center, SPAN and REACH

Fund CDC's Social Determinants of Health program

### Decrease food insecurity while improving nutritional quality

Healthy school meals for all

Strengthen and protect SNAP and school nutrition standards

Expand WIC access up to age 6 and fruit and vegetable benefit

## Change marketing and pricing strategies that lead to health disparities

Close tax loopholes to end unhealthy marketing to kids

Increase the price of sugar-sweetened beverages through an excise tax







## Key Federal Policy Recommendations, cont.

## Make physical activity and built environment safer and more accessible for all

Boost funding for active transportation such as pedestrian and biking infrastructure and Safe Routes to School

Support physical education

### Strengthen obesity prevention throughout healthcare system

Eliminate barriers to healthcare coverage for underserved populations

Cover evidence-based programs



### For More Information

The State of Obesity 2021 report:
 <u>www.tfah.org/report-details/state-of-obesity-2021/</u>

Contact Dara Lieberman, TFAH Director of Government Relations:

DLieberman@tfah.org



### **Welcome to Our Panelists**



Chef José Andrés
Founder
World Central Kitchen
Chef/Owner
ThinkFoodGroup



Ruth Petersen, MD, MPH
Director, Division of
Nutrition, Physical Activity,
and Obesity (DNPAO)
Centers for Disease Control
and Prevention

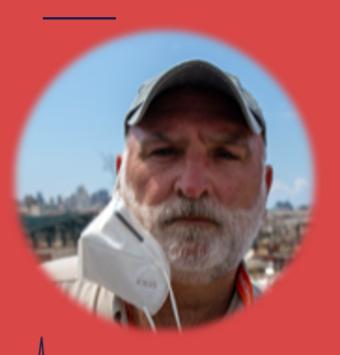


Karol Fink, MS, RDN
Section Chief, Chronic
Disease Prevention and
Health Promotion
Alaska Division of Public
Health



Dariush Mozaffarian, MD,
DrPH

Dean, Friedman School of
Nutrition Science and
Policy
Tufts University



## Chef José Andrés

Founder

World Central Kitchen

Chef/Owner

ThinkFoodGroup

wck.org



### Ruth Petersen, MD, MPH

Director, Division of Nutrition, Physical Activity, and Obesity (DNPAO)

Centers for Disease Control and Prevention

cdc.gov

# CDC EFFORTS TO ADDRESS OBESITY AND ADVANCE HEALTH EQUITY

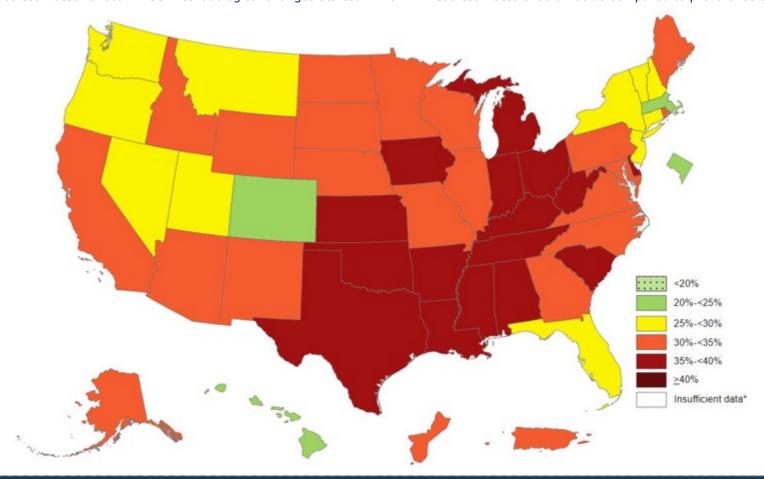
Dr. Ruth Petersen, Director

Division of Nutrition, Physical Activity, and Obesity



#### PREVALENCE<sup>®</sup> OF SELF-REPORTED OBESITY AMONG U.S. ADULTS BY STATE AND TERRITORY, BRFSS, 2020

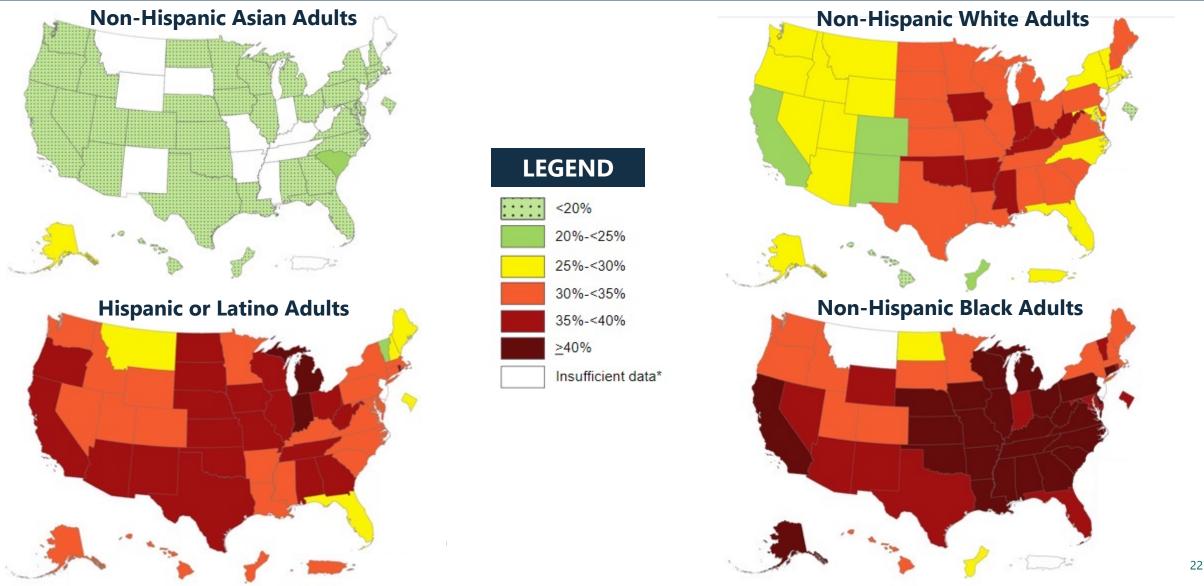
<sup>¶</sup> Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.



### ADULT OBESITY PREVALENCE CONTINUES TO RISE ACROSS THE U.S.

21

### PREVALENCE OF SELF-REPORTED OBESITY AMONG U.S. ADULTS



BY RACE/ETHNICITY, STATE AND TERRITORY, BRFSS, 2018-2020

## CHILDHOOD OBESITY AND THE COVID-19 PANDEMIC

- Among children and adolescents with COVID-19, underlying medical conditions (including obesity) increased the likelihood for hospitalization and severe COVID-19 illness
- Among children and adolescents, the average rate of body mass index (BMI) increase approximately doubled during the pandemic

Obesity is a risk factor for both hospitalization & severe COVID-19 illness among children and adolescents

Rates of BMI change doubled among children and adolescents during the COVID-19 pandemic

Worse health outcomes

# OUR VISION: OPTIMAL NUTRITION ACROSS THE LIFESPAN

DNPAO works at multiple levels to establish healthier food environments for all











Maternal Nutrition Breastfeeding

**Early Child Nutrition** 

**Early Care and Education**Farm to Education
Healthy Weight Programs

Food Service Guidelines
Healthy Food Systems
Food and Nutrition Security

**Health Equity** 

### FOOD AND NUTRITION SECURITY

Food and nutrition security exists when all people, at all times, have physical, social and economic access to food which is safe and consumed in sufficient quantity and quality to meet their dietary needs and food preferences, and is supported by an environment of adequate sanitation, health services and care, allowing for a healthy and active life







## THE COVID-19 PANDEMIC HAS INCREASED FOOD AND NUTRITION INSECURITY IN THE UNITED STATES

- Significant racial disparities in food insecurity already existed before COVID-19.
   In 2019:
  - 23.5% of Native American individuals (**1 in 4**)
  - 19.3% of Black, non-Hispanic individuals (1 in 5)
  - 15.8% of Latino individuals (1 in 6)
  - 8.1% of white, non-Hispanic individuals (1 in 12)... lived in food-insecure households
- The pandemic has increased food insecurity
- Food and nutrition insecurity is a risk factor for obesity

HEALTH EQUITY IS
WHEN **EVERYONE** HAS
THE OPPORTUNITY
TO BE AS HEALTHY AS
POSSIBLE

ACHIEVING
HEALTH EQUITY IS
FOUNDATIONAL TO
OUR WORK

We work with partners, state, local, tribal and territorial health agencies, and organizations to remove environmental and systemic barriers to

health and advance

health equity.



For more information, visit: <a href="https://www.cdc.gov/nccdphp/dnpao/health-equity/index.html">https://www.cdc.gov/nccdphp/dnpao/health-equity/index.html</a>

#### Fiscal Year 2021



#### State Physical Activity and Nutrition Program (SPAN)

 16 state and local recipients strengthening efforts to implement interventions that support healthy nutrition, safe and accessible physical activity, and breastfeeding

### **Program High Obesity Program HOP**

 15 land grant universities leveraging community extension services to increase access to healthier foods and opportunities for physical activity in counties that have more than 40% of adults with obesity

### Racial and Ethnic Approaches to Community Health (REACH) Program

 40 organizations improving health, preventing chronic diseases, and reducing health disparities among racial and ethnic populations with the highest risk, or burden, of chronic disease

### DNPAO'S FUNDED PROGRAM RECIPIENTS

# NUTRITION STRATEGIES ACROSS SPAN, HOP, REACH

- Implement interventions to support breastfeeding
- Implement nutrition standards in key institutions, such as Early Care and Education (ECE)
- Accelerate, adopt, or expand Farm-to-ECE
- Implement Food Service Guidelines (FSG) in worksites and community settings to increase availability of healthy foods
- Work with food vendors, distributors and producers to enhance healthier food procurement and sales



Systems Change

**ECE Standards** 

A national initiative led by CDC to help

### **27 million Americans**

become more physically active by 2027. Increased physical activity can improve health, quality of life, and reduce healthcare costs.



27 Million by 2027

FIND OUT MORE ABOUT ACTIVE PEOPLE, HEALTHY NATION<sup>SM</sup>: www.cdc.gov/activepeoplehealthynation

# CDC IS DEVELOPING SUSTAINABLE HEALTHY WEIGHT PROGRAMS FOR CHILDREN

### **Benefits:**

- Focus on children 6-13 years old to intervene early
- Uses education and counseling to help families establish healthy eating patterns
- Shows BMI reduction for participating children as well as parents
- Can be reimbursable through Medicaid
- Can be implemented in multiple settings, including Federally Qualified Health Centers

### **Future Directions:**

- Increase reimbursement mechanisms
- Use innovative tools to measure and evaluate success
- Spread and scale

### THANK YOU!

For more information, contact Jennifer Greaser at CDC Washington

Email: cbx5@cdc.gov Phone: 202-245-0600 cdc.gov/washington

Help us keep America healthy and strong. See how at: cdc.gov/nccdphp/dnpao

**Centers for Disease Control and Prevention** 

**National Center for Chronic Disease Prevention and Health Promotion** 

Division of Nutrition, Physical Activity, and Obesity (DNPAO)

The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.





## Karol Fink, MS, RDN

Section Chief, Chronic Disease Prevention and Health Promotion

Alaska Division of Public Health

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### Addressing obesity in Alaska –

Trust for America's Health Virtual Congressional Briefing State of Obesity 2021: Better Policies for a Healthier America



Karol Fink, MS, RDN

Alaska Department of Health and Social Services, Division of Public Health
November 10, 2021









**Utqiagvik – the northernmost community in the United States** 







Sitka – a Southeast community in the rain forest







Denali National Park, Alaska







Grandma teaching her granddaughter to fillet salmon – Bethel, Alaska









Utqiagvik, a rural village in late April







**Utqiagvik – playing outside in late April** 





50 cents

## **Final Edition** Anchorage Daily News

Tuesday, November 16, 2004

ALASKA'S NEWSPAPER

www.adn.com

## Third of city's students at risky weight, study finds



■ OVERWEIGHT: For the study and Mayo

www.adn.com/ much.

■ ANCHORAGE: Most of them are heavy before the first grade.

By ANN POTEMPA

A new study shows that more than onethird of Anchorage School District students

Further, the study shows that almost one

first grade are overweight or headed that cal problems, like diabetes, high blood presdoctors must address children's weights be- they're psychological or social in nature. fore they enter school.

us," said Dr. John Middaugh, a medical epi- chronic health conditions during his three dedemiologist in Alaska.

"Until we looked at the data, I think most problem at such a young age."

Children who weigh too much are at risk activity among Alaska students. in three children entering kindergarten or for other health problems. Some are physi-

way - a strong indicator that parents and sure and high cholesterol, while other times

Family practitioner Peter Mjos said he's "I think this is a major eye-opener for all of watched more and more children develop cades of work.

"So much of it is simply related to the fact are overweight or at risk for weighing too of us didn't have a clue of the scope of the that we've become inactive and obese," said Mjos, who has long advocated more physical

The study was made public at Monday's

The new research was a joint project between the Anchorage School District, which collected heights and weights for 41,261 students, and the state Division of Public Health, which analyzed the information.

Erin Peterson, manager for the state's Obesity Prevention and Control Program, said school nurses from all schools in the district took height and weight measurements

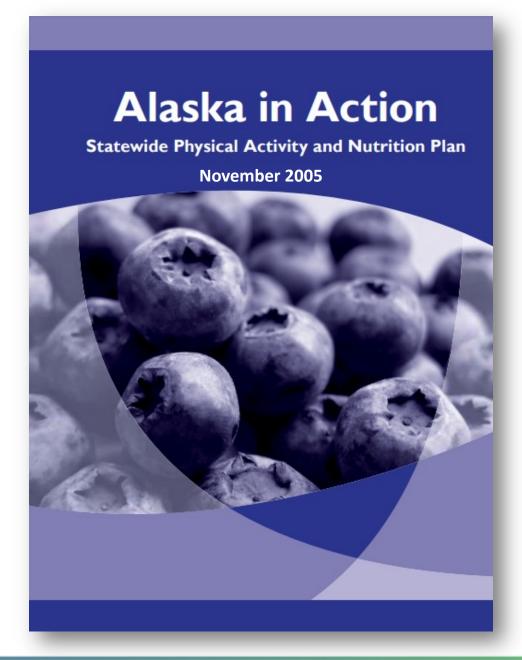
See Back Page, KIDS

November 2004















Children playing outdoors at an Anchorage preschool



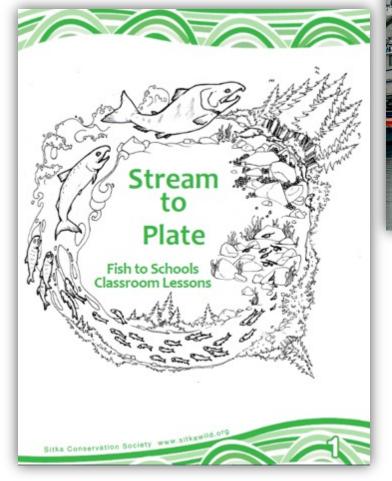




Children at an Anchorage Head Start program eating reindeer stew

- "We no longer use any juice in our meals. We do not serve French fries, taters tots, or chicken nuggets as part of our meals. We make sure to serve a variety of fruits and vegetables every day."
- -- said Erika Copeland with My Chickadees FUNtastic Nest Bilingual Daycare in Fairbanks.







Salmon hanging to dry









Schools promote water instead of sugary drinks





## Morbidity and Mortality Weekly Report (MMWR)

Obesity in K-7 Students — Anchorage, Alaska, 2003-04 to 2010-11 School Years

Weekly May 31, 2013 / 62(21);426-430

#### **Successes:**

"The findings in this report indicate that, from 2003–04 to 2010–11, the prevalence of obesity among public school students in grades K–7 in the Anchorage metropolitan area decreased overall and within certain demographic subgroups."

### **Ongoing challenges:**

"This report underscores the persistent differences in the prevalence of obesity among children of different race/ethnicities."





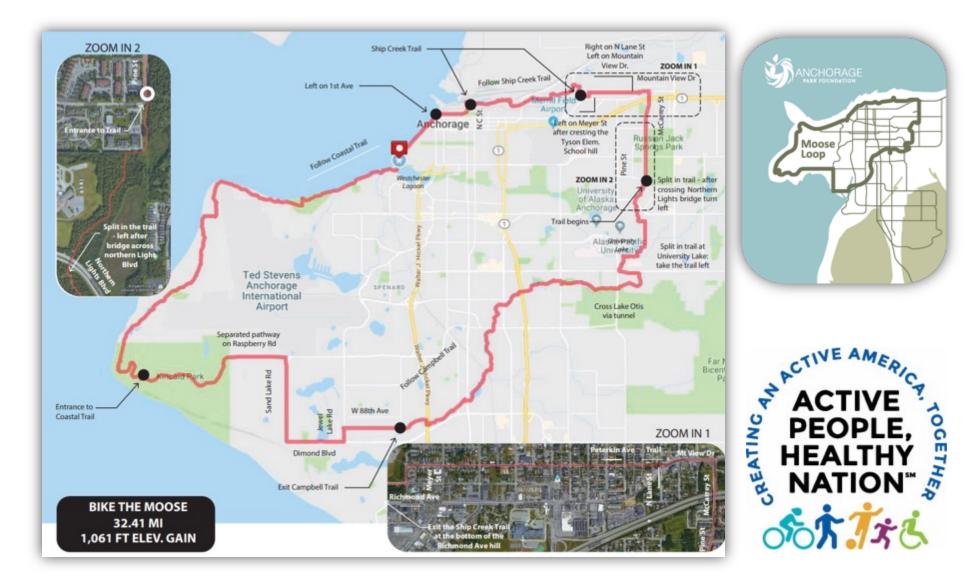




health. self-reliance. prosperity.







Materials courtesy of Anchorage Park Foundation partnership







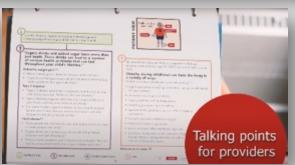
http://www.playeveryday.alaska.gov/



















Alaska's original short video about the health harms of serving sugary drinks

Jamaica's adapted short video





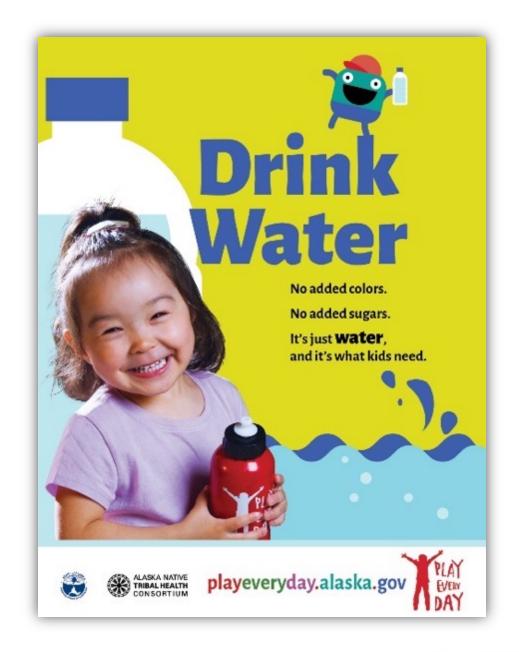




Serve milk or water to your family.













Alaska's Gift Public Service Announcement November 2020 www.youtube.com/playeverydayak

Staying active during the pandemic









# Alaska Department of Health and Social Services Division of Public Health Section of Chronic Disease Prevention and Health Promotion

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## Dariush Mozaffarian, MD, DrPH

Dean, Friedman School of Nutrition Science and Policy

**Tufts University** 

nutrition.tufts.edu



## Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy

# Our Nation's Nutrition Crisis – and How to Fix It

Dariush Mozaffarian, MD, DrPH

Dean

Jean Mayer Professor of Nutrition & Medicine

Trust For America's Health Congressional Briefing November 10, 2021

### Our Food: The #1 Cause of Poor Health





Tobacco use

High systolic blood pressure

High body mass index

High fasting plasma glucose

High total cholesterol

Impaired kidney function

Alcohol and drug use

Air pollution

Low physical activity

Occupational risks

Low bone mineral density

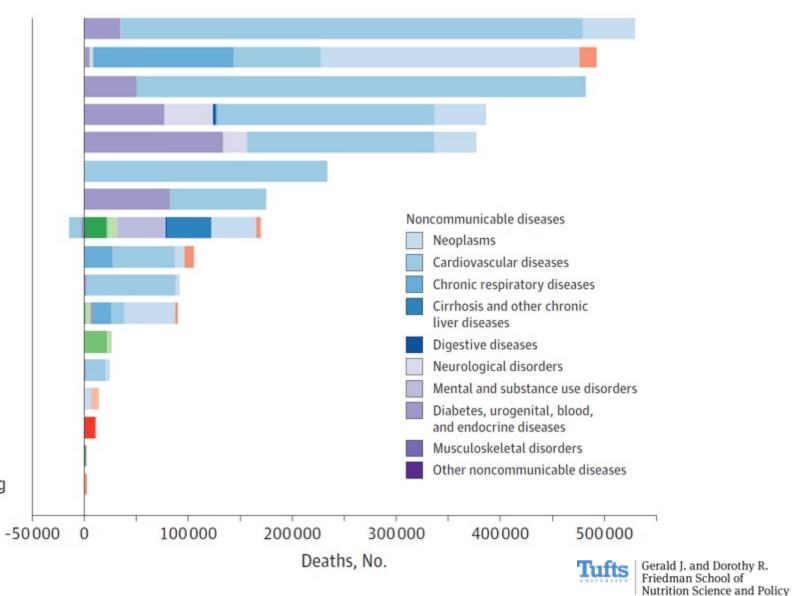
Residential radon and lead exposure

Unsafe sex

Child and maternal malnutrition

Sexual abuse and violence

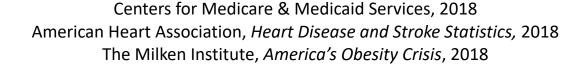
Unsafe water, sanitation, and handwashing



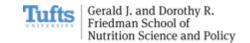
US Burden of Disease Collaborators, JAMA 2018

### Diet-Related Disease in the U.S.

- More American adults are sick than are healthy:
  - 1 in 2 have diabetes or prediabetes
  - 3 in 4 have overweight or obesity
  - Only 1 in 10 are metabolically healthy
- Among American teenagers:
  - 1 in 4 have prediabetes
  - 1 in 4 have overweight or obesity
  - 1 in 6 have fatty liver disease





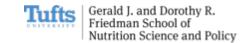


## **Crushing Economic Costs**

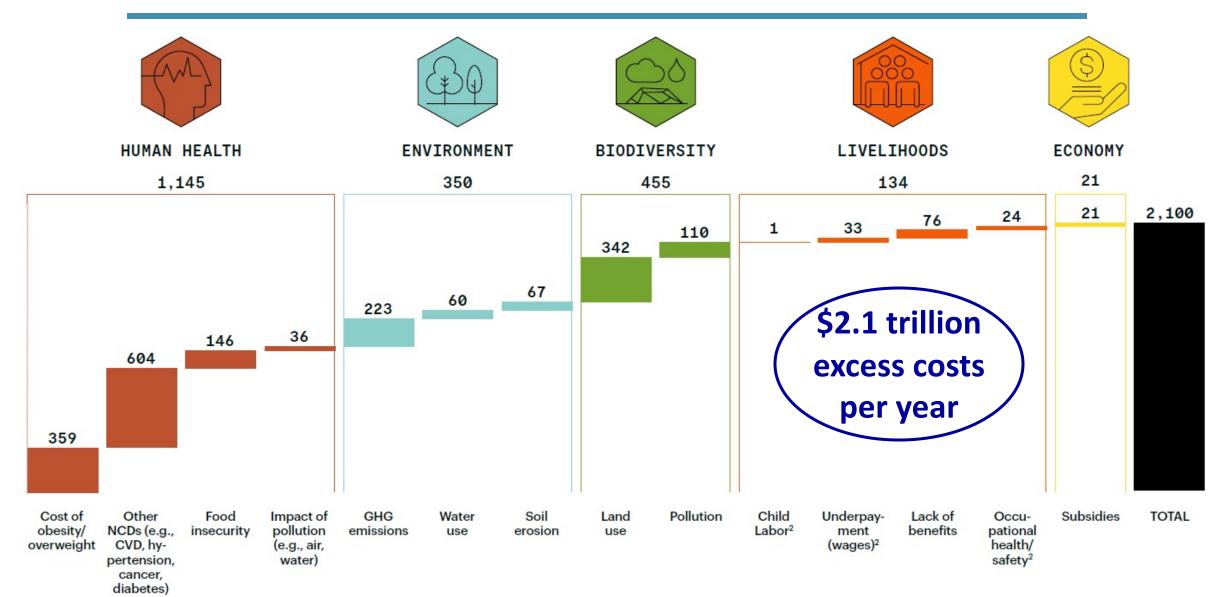
- In 50 years, healthcare costs have skyrocketed from:
  - 7% to 18% of U.S. Gross Domestic Product (GDP)
  - 1 in 20 to nearly 1 in 3 dollars in the federal budget and average state budgets
  - \$80 billion to \$1.2 trillion for US businesses
  - >11,000/year per man, woman, and child in the US
- 80% of healthcare dollars are spent on preventable chronic diseases
- The US government spends \$160 billion on direct medical costs for diabetes alone



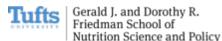




## True Cost of Food in the United States (\$B/year)







## Improving Nutrition & Obesity: "Best Buy" Policies

Research & Science	Healthcare	Nutrition Programs	Business Innovation	Education & Public Health	Federal Coordination
<ul> <li>NIH: National Institute of Nutrition (NIN)</li> <li>USDA: nexus of production, health, sustainability</li> <li>Public-private partnerships</li> <li>NIH: Office of Nutrition Research (ONR)</li> </ul>	<ul> <li>Produce Rx programs</li> <li>Medically tailored meals</li> <li>RD coverage</li> <li>Nutrition education for doctors</li> <li>Nutrition in the EHR</li> <li>Billing &amp; quality metrics</li> </ul>	<ul> <li>Leverage nutrition in SNAP, WIC</li> <li>School meal standards</li> <li>Summer meals</li> <li>Fresh F&amp;V programs</li> <li>School garden programs</li> </ul>	<ul> <li>Market expansion</li> <li>Tax policy for food/nutrition innovation</li> <li>ESG investor metrics</li> <li>BIPOC food entrepreneurs</li> <li>B Corp status</li> <li>Opportunity zones</li> </ul>	<ul> <li>Limits on salt, sugar</li> <li>FOP, menu, and warning labels</li> <li>DGAs, DRIs</li> <li>Marketing to children</li> <li>Qualified health claims</li> <li>CDC DNPAO</li> <li>Surveillance</li> </ul>	<ul> <li>National Director of Food &amp; Nutrition (ONDFN)</li> <li>White House Conference</li> <li>National strategy (e.g. NEPA)</li> <li>Interagency task force</li> <li>OSTP</li> </ul>



## **Achieving Nutrition Security: Health Care Systems**





## Food is Medicine: Medically Tailored Meals (MTMs)



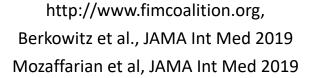






- Providing home MTMs to chronically ill, food insecure patients reduces hospitalizations, ER visits, nursing home admits, and costs.
- Using the 2011-2015 Massachusetts All Payers Database, MTMs:
  - Hospital admissions: ↓ by 49%
  - Nursing home admits: ↓ by 72%
  - Net savings: \$9,036/year per patient
  - Number needed to treat (NNT):
    - **2.0** per saved hospital admission
    - 1.1 per saved nursing home admit







## Food is Medicine: Produce Prescriptions

### **Meta-analysis of 13 Produce Rx interventions:**

- Vouchers, subsidized food boxes, cash-back rebates
- Some targeted food insecurity, most did not
- Most targeted patients with diabetes
- Most lasted 3-6 months, a few up to 18 months
- Nearly all in USA, also in UK and France

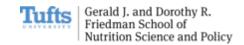
#### **Outcomes:**

- F&V intake: ↑ 0.8 servings/day
- Body mass index (BMI): ↓ 0.6 kg/m²
- Hemoglobin A1c: ↓ 0.8 %









### Food as Medicine: SNAP Plus

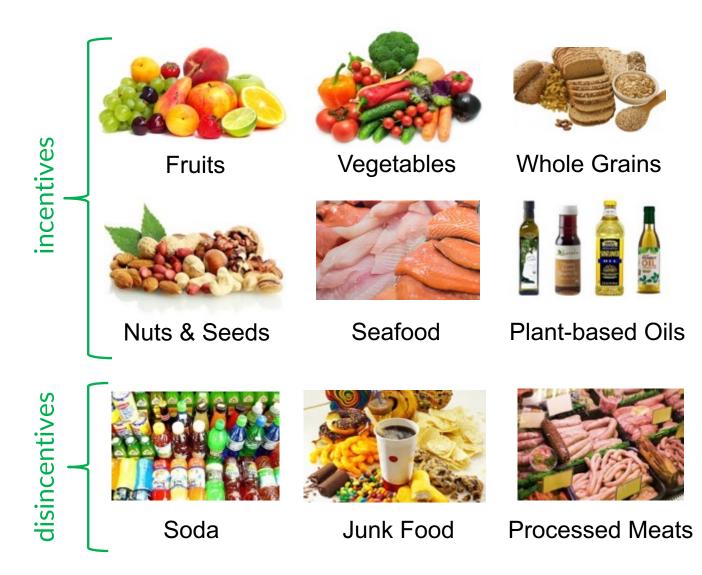
SNAP Plus
Healthy foods (30% subsidy)
Unhealthy foods (30% disincentive)

Prevent 940,000 lifetime CVD events

**Cost-savings** 

**\$10B** at 5 yrs

\$63B lifetime



# Accelerating Nutrition Science

Sheila Fleischhacker, Cathie Woteki,
Paul Coates, Van Hubbard, Grace Flaherty,
Dan Glickman, Tom Harkin, David Kessler,
William Li, Joe Loscalzo, Anand Parekh,
Sylvia Rowe, Patrick Stover, Angie Tagtow,
Joon Yun, Dariush Mozaffarian

Fleischhacker et al. AJCN 2020

sites.tufts.edu/nutritionadvisory

## NEW NATIONAL INSTITUTE OF NUTRITION (NIN)

#### KEY CHARACTERISTICS

- Leads research, coordination, training, outreach on foundational and cross-cutting topics in nutrition and health
- Additive funding and focus areas to existing NIH and other federal nutrition research efforts
- Harmonizes and leverages other nutrition and related research at NIH and other agencies and departments
- Strong partner to inform, collaborate on, and help address joint research needs of other agencies and departments
- Promotes and supports training of a diverse 21st century nutrition research workforce
- Guides and supports training of healthcare professionals for clinical care and basic and translational science in nutrition
- Translates and disseminates sound nutrition science findings to the public
- Fosters innovative external collaborations and partnerships

#### ADVANTAGES

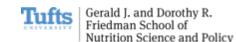
- Strong leadership, robust infrastructure, and investment
- Can better address nutrition science that is cross-cutting rather than disease specific
- Includes extramural and intramural research, training, and outreach activities
- Long-term, leading to unforeseeable positive returns and evolving appropriately with changing science and needs of the population
- Meaningful external advisory mechanism to solicit diverse relevant insights and input
- Strong return on investment, in line with or exceeding other NIH research investments











## **Federal Policy Coordination**

## U.S. Government Accountability Office (GAO) report Chronic Health Conditions: Federal Strategy Needed to Coordinate Diet-Related Efforts

- Chronic diet-related health conditions are costly, deadly, and preventable
- **200 different federal efforts, spread across 21 agencies**, to improve Americans' diets. But, these efforts are **fragmented**, keeping the government from meeting its goals.
- Conclusion: "A federal strategy for diet-related efforts could provide sustained leadership and result in improved, cost-effective outcomes for reducing Americans' risk of diet related chronic health conditions."
- Recommendation: "Congress should consider identifying and directing a federal entity
  to lead development and implementation of a federal strategy for diet-related efforts
  aimed at reducing Americans' risk of chronic health conditions."





## **Federal Policy Coordination**

## NEW OFFICE OF THE NATIONAL DIRECTOR OF FOOD AND NUTRITION (ONDFN)

#### KEY CHARACTERISTICS

- President-appointed, Senate-confirmed Director of National Nutrition, serving as the Principal Nutrition Advisor to the White House, heads of executive branch departments and agencies, senior military, and Congress
- Modeled after the Office of the Director of National Intelligence, created after September 11 to coordinate fragmented national intelligence efforts
- Coordinate and harmonize the work of the 10+ US departments and agencies that comprise the federal food and nutrition community, including NIH, USDA, USAID, DoD, VA, CDC, FDA, DoE, CMS, CMMI, NASA, and more
- Assess and improve effectiveness and synergies of federal food and nutrition research and policy
- Ensure that timely and objective national nutrition information is provided to the White House, federal agency leaders, military commanders, and Congress

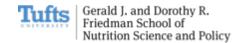
#### ADVANTAGES

- Tested, effective model
- Dedicated leadership, staff, and funding
- Builds on the ICHNR, with much stronger coordination and synergies across departments and agencies and a stronger dissemination platform
- Can be mobilized to advise on urgent situations (e.g., COVID-19) which require pre-existing robust leadership and coordination across agencies and departments
- Broader than solely nutrition research, intersects with food assistance

Fleischhacker et al. AJCN 2020

sites.tufts.edu/nutritionadvisory

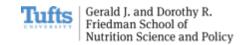




## A Reimagined Food System

- Leverage Federal Nutrition Programs: Schools, SNAP, WIC
- Food as Medicine in Healthcare: Produce Rx, medically tailored meals (MTMs), leverage RDs, nutrition education
- Science and Innovation: National Institute of Nutrition (NIN),
   USDA research on nexus of production, health, sustainability
- Catalyze Private Business and Jobs: ESG investing, tax policy, B corp status, BIPOC food entrepreneurship
- Education and Public Health: FDA (salt, sugar, FOP labels), CDC (DNPAO, NHANES), USDA (DGA, DRIs), FTC (marketing to children)
- Federal Food Policy Coordination: National Director of Food and Nutrition (ONDFN), White House Conference, national food and nutrition strategy





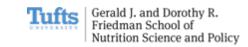
## U.S. Senate Hearing: the State of Nutrition in America



"We have a legacy food system – built for 20th century goals, but with 21st century problems."

"It's time to fix food. And we can only do this if we have a plan: a harmonized national strategy."





## **Nutrition Priorities – Healthy Foods**

## **Benefit**

**Protective Foods** 

Fruits, Nuts, Fish
Vegetables, Plant Oils
Whole Grains, Beans, Yogurt

Eat in Moderation

Cheese Poultry, Milk

Eggs, Butter

**Unprocessed Red Meats** 

**Minimize** 

Refined Grains, Starches, Sugars
Processed Meats, High Sodium Foods
Industrial Trans Fat

### **Emerging Science:**

**Gut Microbiome** 

Personalized Nutrition

Phenolics/Bioactives

**Food Processing** 

Additives

Timing of Meals

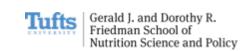
Performance

**Brain Health** 

Immunity, Allergies

Cancer

Mozaffarian D, Circulation 2016

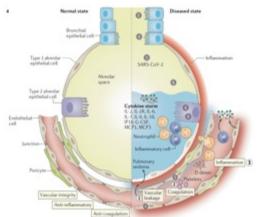


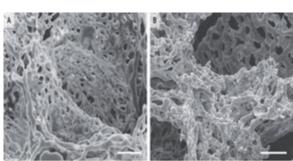




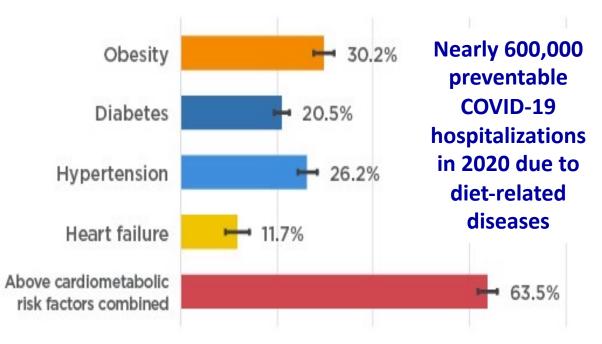
### **COVID-19: A Fast Pandemic on a Slow Pandemic**

- Diabetes, obesity, HTN: diet-related diseases with vascular dysfunction, systemic inflammation – the top risk factors for severe COVID
- COVID: vascular, inflammatory virus
- ~64% of hospitalizations could have been prevented if we had a metabolically healthy population



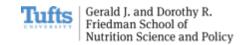


## U.S. COVID-19 hospitalizations estimated to be due to cardiometabolic risk factors



Values do not sum due to proportional risks.







## **Submit Questions for Our Panelists**



J. Nadine Gracia, MD, MSCE
President and CEO
Trust for America's Health

Moderator



Ruth Petersen, MD, MPH
Director, Division of
Nutrition, Physical Activity,
and Obesity (DNPAO)
Centers for Disease Control
and Prevention



Karol Fink, MS, RDN
Section Chief, Chronic
Disease Prevention and
Health Promotion
Alaska Division of Public
Health



Dariush Mozaffarian, MD,
DrPH

Dean, Friedman School of
Nutrition Science and
Policy
Tufts University

## Trust or Merica's Health

## Thank You to Our Moderator and Panelists



Chef José Andrés
Founder
World Central Kitchen
Chef/Owner
ThinkFoodGroup



Ruth Petersen, MD, MPH
Director, Division of
Nutrition, Physical Activity,
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Nutrition Science and
Policy
Tufts University



J. Nadine Gracia, MD, MSCE
President and CEO
Trust for America's Health

Moderator



## Thank you!

@HealthyAmerica1

The recording and slides will be available at www.tfah.org