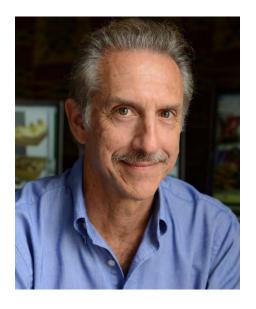
The Carbon Footprint of US Diets: New Research Linking Environmental Impacts to Food Choices and Diet Quality

Diego Rose¹ and Marty Heller²

¹School of Public Health & Tropical Medicine, Tulane University ²Center for Sustainable Systems, University of Michigan

Supported by the Wellcome Trust (grant #106854/Z/15/Z)









Outline of the Webinar

- 1. Introduction
- 2. Life cycle assessment
- 3. Approach to linking environmental impacts to US diets
- 4. US diets: a distribution of impacts
- 5. Gender differences in diets and impacts
- 6. Differences in foods & nutrients by low vs high impacts
- 7. Conclusion





Health

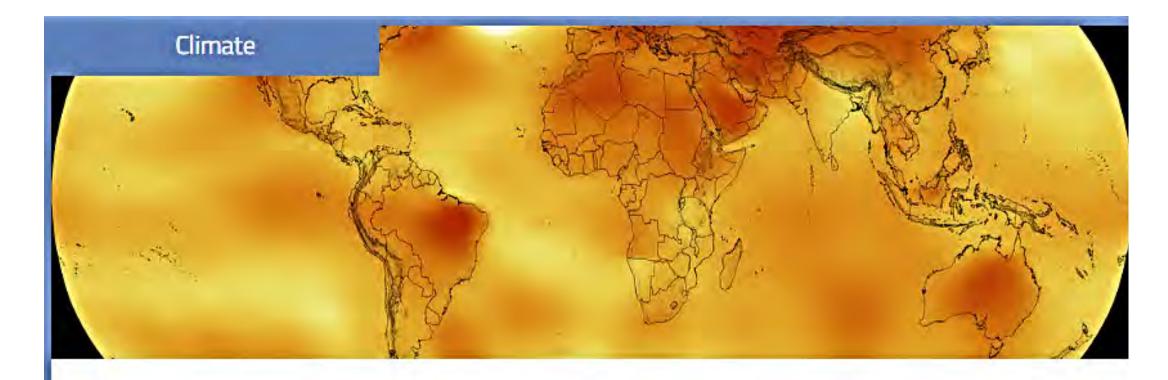
- High rates of chronic disease mortality, morbidity

Health

- High rates of chronic disease mortality, morbidity

Environment

Global climate change



Jan. 18, 2017 RELEASE 17-006

NASA, NOAA Data Show 2016 Warmest Year 🔀 💟 🚾 🔑 🔠 on Record Globally



Earth's 2016 surface temperatures were the warmest since modern recordkeeping began in 1880, according to independent analyses by NASA and the National Oceanic and Atmospheric Administration (NOAA).



Humans to blame for global warming government report says

Doyle Rice, USA TODAY

Published 2:00 p.m. ET Nov. 3, 2017 | Updated 2:49 p.m. ET Nov. 3, 201



(Photo: Jeff Peischl/NOAA-CIRES)



Climate change is real, it's here and we're the cause of it, according to the USA's most comprehensive climate science report ever produced, which was released by the federal government on Friday.

Noting that the planet is now the warmest it's been in the history of modern civilization, the new federal

School of Public Health and Tropical Medicine

Humans to blame for global warming government report says

Doyle Rice, USA TODAY

Published 2:00 p.m. ET Nov. 3, 2017 | Updated 2:49 p.m. ET Nov. 3, 201



The incidence of daily tidal flooding due to global sea level rise is accelerating in more than 25 Atlantic and Gulf Coast cities

ORE

ause

ve

S

released by the federal government on Friday.

(Photo: Jeff Peischl/NOAA-CIRES)

Noting that the planet is now the warmest it's been in the history of modern civilization, the new federal

School of Public Health and Tropical Medicine

Health

High rates of chronic disease mortality, morbidity

Environment

Global climate change

Health

- High rates of chronic disease mortality, morbidity

Environment

- Global climate change
- Agriculture is a dominant contributor
 - Ag, livestock, forestry sector accounts for 30% of human greenhouse gas emissions (GHGE)



Health

- High rates of chronic disease mortality, morbidity

Environment

- Global climate change
- Agriculture is a dominant contributor
 - Ag, livestock, forestry sector accounts for 30% of human greenhouse gas emissions (GHGE)
- Diet important for both



Health

- High rates of chronic disease mortality, morbidity

Environment

- Global climate change
- Agriculture is a dominant contributor
 - Ag, livestock, forestry sector accounts for 30% of human greenhouse gas emissions (GHGE)

Diet important for both

Food demand drives agricultural production



Health

- High rates of chronic disease mortality, morbidity

Environment

- Global climate change
- Agriculture is a dominant contributor
 - Ag, livestock, forestry sector accounts for 30% of human greenhouse gas emissions (GHGE)

Diet important for both

- Food demand drives agricultural production
- Changing current diets could reduce GHGE by up to 50%





Most studies done outside of U.S.

Most studies done at aggregated population level

Most studies done outside of U.S.

 Most studies done at aggregated population level, so doesn't allow for:

- Most studies done at aggregated population level, so doesn't allow for:
 - Examining linkages between sustainable diets, health outcomes



- Most studies done at aggregated population level, so doesn't allow for:
 - Examining linkages between sustainable diets, health outcomes
 - Understanding individual differences in diet behavior, sustainability



- Most studies done at aggregated population level, so doesn't allow for:
 - Examining linkages between sustainable diets, health outcomes
 - Understanding individual differences in diet behavior, sustainability
 - Improved policy analysis with population distributional effects



Our research objectives

- Develop, implement linking method
 - for environmental, diet, health data for individuals

Our research objectives

- Develop, implement linking method
 - for environmental, diet, health data for individuals
- Examine, describe a distribution of impacts
 - of greenhouse gas emissions of U.S. diets

Our research objectives

- Develop, implement linking method
 - for environmental, diet, health data for individuals
- Examine, describe a distribution of impacts
 - of greenhouse gas emissions of U.S. diets
- Compare diets and impacts
 - gender differences
 - high and low carbon footprint diets



Outline of the Webinar

- 1. Introduction
- 2. Life cycle assessment
- 3. Approach to linking environmental impacts to US diets
- 4. US diets: a distribution of impacts
- 5. Gender differences in diets and impacts
- 6. Differences in foods & nutrients by low vs high impacts
- 7. Conclusion

