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

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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
The Problem
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• Health
  – High rates of chronic disease mortality, morbidity
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- **Environment**
  - Global climate change
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, 2017

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
The incidence of daily tidal flooding due to global sea level rise is accelerating in more than 25 Atlantic and Gulf Coast cities released by the federal government on Friday.

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  - Agriculture is a dominant contributor
    - Ag, livestock, forestry sector accounts for 30% of human greenhouse gas emissions (GHGE)
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• Diet important for both
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• **Diet important for both**
  – Food demand drives agricultural production
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• **Diet important for both**
  – Food demand drives agricultural production
  – Changing current diets could reduce GHGE by up to 50%
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- Most studies done at aggregated population level
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  - Examining linkages between sustainable diets, health outcomes
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  – Understanding individual differences in diet behavior, sustainability
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- 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
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• **Examine, describe a distribution of impacts**
  – of greenhouse gas emissions of U.S. diets
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• Examine, describe a distribution of impacts
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• Compare diets and impacts
  – gender differences
  – high and low carbon footprint diets
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