Excess in Food and Life

Introduction

- Excess
  - Lifestyles of invisible systems driving personal outcomes:
    - Ill-health and personal financial instability
  - Driving global outcomes
    - Environmental destruction
    - Social disparities
- Voluntary Simplicity and Sustainable materialism as a response
- CSAs as a case study (if time)

The Message

- Radicalize Excess
- Be Offended

Premise

- We start with:
  - Food environment:
    - Built to support overconsumption
    - Overconsumption of certain foods
  - Built to normalize excess

Food Systems

Food System Elements

Food Systems Case Studies

Processed foods and Meat

Environment: Processed foods

- Food production and supply: 15% of all energy used in US
- Processed foods: 82-92% of all food purchases
- Energy use in the food system:
  - 16% in processing, 7% in packaging


Environment: Food waste

- 133 billion pounds of food wasted in 2010
- 430 billion available
- $161 billion in retail value
- Landfills: one of largest anthropogenic sources of methane
- Packaging waste: 31% of MSW
- Two-thirds is food packaging
- 1600 lbs each year
- “‘How Bad For The Environment Can Throwing Away One Plastic Bottle Be?’ 30 Million People Wonder” – The Onion


It’s a big problem

\[ \times 365 = 150,000,000,000,000 \] calories/year

Impacts within food system

- Case study: P
  - P is essential for industrial food production
  - 1-300 years left (25 years of reserves in US)


The Problem of Excess

- Have we devalued food?
Environment: Meat

- 10 billion animals slaughtered per year
- Americans consume 124 kg of meat per person per year
- 46.6 kg average worldwide

In a 72-year lifetime:
- 11 cattle
- 3 lambs and sheep
- 23 hogs
- 45 turkeys
- 1,100 chickens


Meat Supply Quantity (tonnes)

Environment: Meat

Food production in the US
- 50% of US land area; 80% of US water supply
- Livestock: 7 lb feed = 1 lb food
- 1 kg animal protein: 100x water

Corn: US produces 10 of 23 billion bushels
- Livestock consume 80% of that

25 kcal fossil energy : 1 kcal protein
- Cattle - 40:1
- Lambs and sheep - 57:1
- Hogs - 14:1
- Turkeys - 10:1
- Broiler chickens - 4:1
- Grain protein - 2.2:1


Overall GHG Picture

Agriculture
- 9% CO2
- 18% GHGE
- 65% N2O
- 35% CH4

- Enteric fermentation, manure and fertilizers (application and production), energy use, exhalation of animals, deforestation and conversion of grassland, soil decomposition

Researchers’ response

Masset and colleagues (2014):
- Realistically possible to reduce GHG emissions by 20%
- Increased intake of plant-based products with concomitant reductions in animal foods and energy density.

Machovina and colleagues (2015):
- 10% or less of calories from animal products

Dietary Patterns

Processed foods and Meat

Health: added sugars

- Added sugars
  - ~47% from sugary beverages
  - 13% of calories

Health: solid fats

- Solid fats
  - 19% of calories
  - Processed foods and animal products

Health: saturated fat

- Saturated fat
  - 52.3% animal sources
  - 11% of calories

Health: sodium

- Sodium
  - ~3400 mg daily
  - UL: 2300 mg
  - Goal: 1500 mg
Is excess really life-wide?

- Cars
- Cable
- Coffee
- Lunch
- Toilet paper

Excess: It’s a lifestyle

- We watch ~35 hrs per week

The actual value of Cable TV

- $24 \times 7 \times 100 = 16,800$ hours of programming
- $35 \text{ hours/16,800 hours} = .002 (0.2\%)$
- $.002 \times $65 = $0.135
- Go buy $65$ of groceries, go home and eat 1 slice of bread, then throw the rest away

Saturation of Excess

- Coffee:
  - 1 cup =
    - 37 gal water (compared to 9 for tea)
    - $1.00/yr
- Lunch:
  - $10/occasion out and $1000/yr
  - Spend more away from the home for the first time
- Toilet paper:
  - 1 roll =
    - 37 gal water, 1.5 lbs virgin wood, 1.3 KWh energy

What we do to ourselves (via society)

- Food:
  - Maximize poor health outcomes and negative environmental impact
  - Throwing out $2,500$ food/yr
- Sedentary behavior:
  - TV ~5 hrs per day
  - Commuting ~46 minutes per day
  - Impact: CVD risk, cancer risk, decreased function
- What we spend for the privilege:
  - Add it up: $53K$ (cable TV) + $2.5K$ (food waste) + $2K$ (unnecessary foods away from home)
  - Thought experiment:
    - $10000/yr$ over 10 yrs at 6\% interest
    - $157,624$
- Indebtedness:
  - Credit card: $7,281$ (actually $15K$)
  - Student debt: $32,656$
Debt and health

- High financial debt:
  - Higher perceived stress
  - Depression
  - Worse self-reported general health
  - Higher diastolic blood pressure

Outcomes

- Health is not just about health
- Eating and moving
- Ethics, finances, transportation and entertainment choices
- Accepted behaviors that seem normal but are excessive
- Recognizing that we live in a Matrix of Excess
- If we care about sustainable improvements in health, we must consider food and lifestyle from a systems perspective

Future Research

- My sabbatical
  - An exploration into voluntary simplicity and sustainable materialism
  - The impact of ‘layered ethics’ in consumer messaging
  - The extent to which health can be impacted by one’s budget

Voluntary Simplicity

- An approach to life in which individuals and households seek to consume less
- Or find alternative methods of consumption
- Also seeking fulfillment in non-consumptive ways

Sustainable materialism

- “…innovative collective responses to, and critiques of, a range of problems with the production, supply, and circulation of everyday material needs.”
- "Many food, energy and making movement groups recognize those flows, and attempt to reconfigure flows that currently undermine the capacities of ecosystems, bodies, and human communities, into ones that enliven, support, or minimize the negative impacts on them.”

Sustainable materialism

- Sustainable materialism representing collective institutions concerned with material flows
- Resistance to standard consumer flows – a reconstruction
- Realignment with systems from which flows begin and end
- Environment and ecosystem services
Opportunities for research

- Can behavior change interventions be made more effective?
  - Place-based and community-connected
  - Counter-culture
  - ‘Layered’ ethics of health, environment, community, connection

- Can multiple positive outcomes be derived?
  - Improved health behaviors
  - Decreased waste
  - Stronger social ties
  - Contribution to mitigating climate change

References:

Thank you

www.middlepathlife.com