

# Ethics, Health, Environment

[Michiel.korthals@wur.nl](mailto:Michiel.korthals@wur.nl)

# complex interaction between food and environment

Impact on environment: meat, eating fatty fish (which is strongly advised by food agencies for health reasons) can cause depletion of fish resources.

Impact of (Obesogenic) environment. Obesogenic: with exclusive attention to car driving and fast food

Four ethical issues:

1. **Identification** of what type of problem obesity is. Are fast food and environmental factors causing the problem?
2. **Responsibility**: what should producers do to prevent negative impacts on the health of consumers and what are they permitted to do?
3. Doing **research** into the factors that produce environmental hazards. Research paid by the fast food industry is often not done in an integer way.
4. **Right to intervene** to reduce unhealthy factors and the type of intervention in the behaviour of consumers and producers

# Obesity as environmental health problem



Obesity: what differences does genomics make?

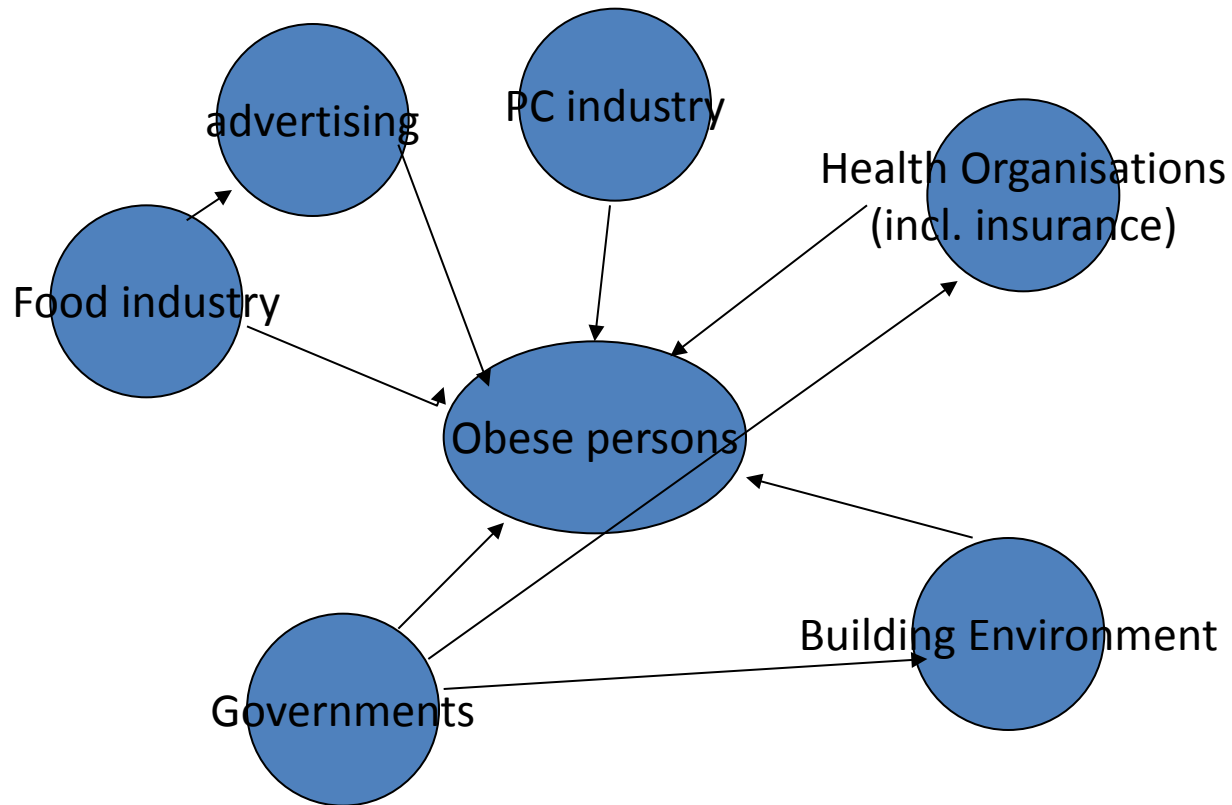
# Example: overweight / obesitas

- Common definition: unbalance between too much energy (food) input and not enough energy output
- Mass Body Index: overweight higher than 25, obese: higher than 30
  - Dutch script of this definition:
    - Reduce your intake : be sober, eat healthy and eat less!!
    - Numbers (calory etc) are obligations!
      - Man 2500; women: 2000
    - Qualitative, not quantitative (don't pay attention to your own bodily feelings, and taste etc!)

# Obesity

- Societal and personal problem
- Causes:
  - Environment: unhealthy food: easily available, cheap, convenient (sugar, fat, salt), food deserts
    - Satiety retarding
    - Seducing, addictive (?)
  - Built environment: not enough exercise, easy access to fastfood

# Main Actors and their relationships



Obesity: what differences does genomics make?

# Three causal complexes

- Behaviour
- Environment
- Body/genes/nature

# Genetics, environment, body

Levels of genetic susceptibility	Body in Non-obesegenic environment	Body in obesegenic environment
Strong disposition	Non-obese/ overweight	Massively obese
Slight disposition	Non-obese	Non-obese/overweight/obese
Resistant	Non-obese	Non-obese



# identification of adverse effects of environmental factors on health

- Exposure to potentially hazardous substances and processes is often difficult to identify and document, not only because of the complexity of their interactions and their long-term risks
- Individuals can experience differing susceptibilities to their harmful effects (Sharp, 2001; Paulson, 2006).
- This complexity shows that research into all these interwoven factors is quite expensive and often controversial. Is society willing to pay for this and to prioritize this problem rather than others (Resnik and Roman, 2007)?

# research into and policy measures with respect to environmental factors

- Researchers identify environmental toxicants like dioxin in waste locations or obesogenic factors
- research can interfere with power relations: cooperation with industry needs integrity
- people's concerns about safety and other expectations differ often from experts'.

# responsibilities different people and organizations

- Adverse effects of the environment on human health are at stake (Minkler, 2000; FEC, 2005).
- How far are the people / market parties involved accountable?
- Do they feel responsible?
- Can they, from an ethical point of view, be prevented in one way or another from repeating similar actions that contribute to those adverse effects?
- Role of governments: better labelling, making the healthy food choice easy, law regulation

# Type of interventions

- Personal types of intervention and collective social regulations
- Expert or community based intervention (Sharp, 2001; Paulson, 2006).
- Estimates of cost on the basis of value perspectives do play an important role here
- Identification of susceptible sub-populations can lead to a discrimination when ineffective precautions are taken
- Responsibility: justice and respect for autonomy

# Types of governmental intervention

Laws	Taxes	Information	Facilitating	Nudging
Obligatory	Free by paying	Free choice (labelling) (persuasion)	Free choice	Choice architecture
levels of safety, health	Access and affordability	Requires knowledge	Soft / strong community ties	Discrimination?

# Prevention: behavior, context, body

1. Information, moralisms
2. Change of social context : more exercise
3. Products: tax on unhealthy choice
4. Products: healthy choice cheaper
5. Products: healthy products default **Nudging**
6. Products: less unhealthy ingredients (gene diet interactions) **Nudging**
  1. Negative health: strategy of fear; disease oriented
  2. Positive health: combined with taste; good life oriented
7. Personalizing products (gene diet interactions) **Nudging**
8. Personalizing nutrition/choice: social or personal coach
  - [Body: bariatric surgery (gastric bypass etc)]



## Volksabstimmung und Großdeutscher Reichstag

### Stimmzettel

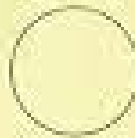
Wilt Du mit der am 13. März 1938 vollzogenen  
Wiedervereinigung Österreichs mit dem Deutschen Reich  
einstimmen und stimmst Du für die Liste unseres Führers

**Adolf Hitler?**

Ja



Nein



# definition of a nudge

- Thaler and Sunstein, Nudging (2009):
  - nudges do not allow for coercion,
  - they are in nudgee's (enlightened) interest (and improve their lives),
  - alternative options are still available, and
  - they can be useful in situations of choice context, where people are confronted by temptations, complexity and too many options for to act.



# Environmental Health and obesity

- People cannot constantly observe and monitor the effects of their choices.
- A stimulating environment that assists people in making healthy choices
- Making the healthy and good choices easy
- Choice / environmental architecture
- Responsibilities with main actors:  
government, food industry, consumers