# Social factors determining prevalence of obesity

Zuzana Derflerová Brázdová Masaryk University, Brno brazdova@muni.cz

#### Incidence of obesity

in EU in men 10-20%, in women 15-30% (IOTF 2005)



#### WHO/IOTF Report, 1998

#### **GLOBAL EPIDEMICS OF OBESITY**



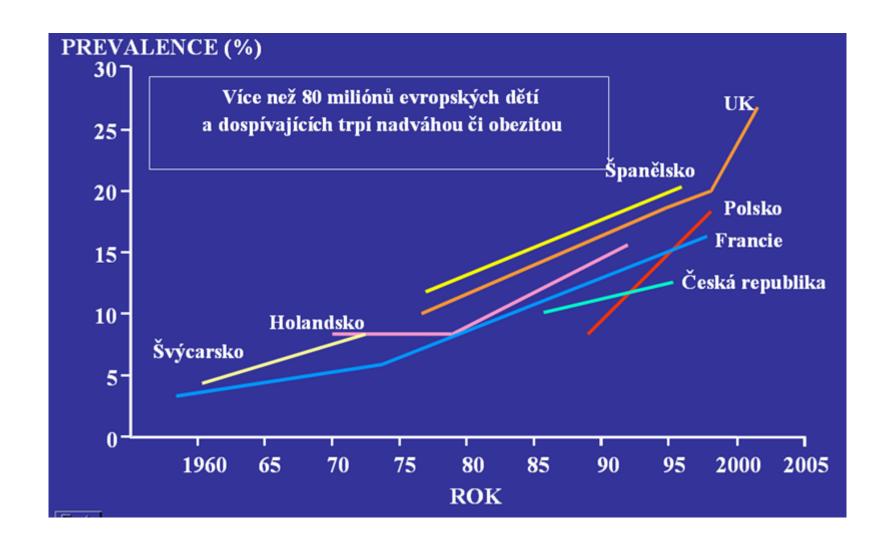
 $312.10^6 \, \text{BMI} \ge 30$ 

1,1 .  $10^9$  BMI  $\geq 25$ 

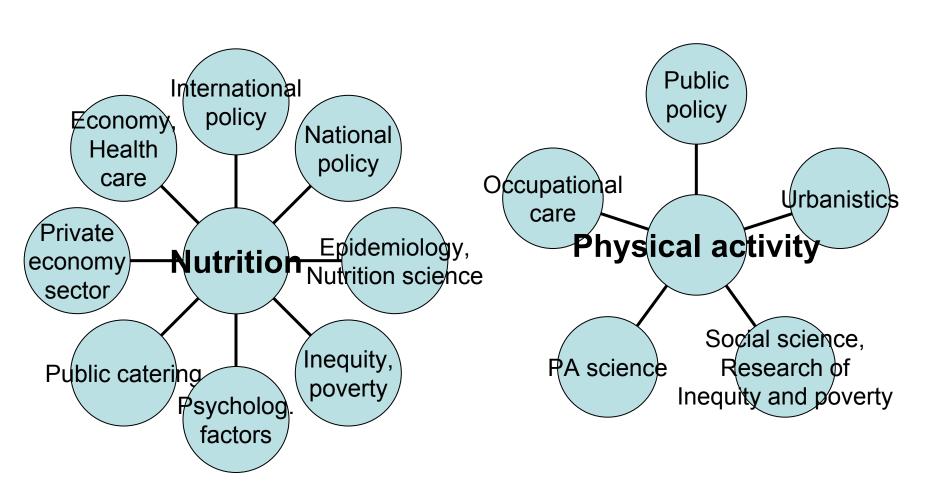
155 . 106 overweighed children

**Report WHO Consultation on Obesity** WHO/NUT/NCD, Geneva, 1998

### Incidence of overweight in children and adolescents is increasing IOTF/EASO Obesity in Europe Report 2002; IOTF 2004



## Conceptul frame of key determinants of obesity



### **Politics**

#### International

- EU regulations
  - import rules
  - agricultural politics
    - - state subsidize
  - food labels
  - food safety and quality •
- WTO agreements

#### **National**

- regulations (food labelling, ...)
- taxes food prices
- agriculture
- Food marketing
- Health care
- Food safety and quality

school catering

• Education < education on healthy eating

### Determinants of obesity – material

High atractivity of products



## Determinants of obezity – real world I.

- Too much food and "cheap calory"
- No profit from healthy food
- Food price does not reflect environmental circumstances
- Fossil resources take precedence over human energy

## Serving sizes...



## ...gender difference of servings



### Materialistic – real world

Indicators e.g.

- Mortality of cyclists
- Security of pedestrians and runners during nights
- No. of swimming pools per inhabitant
- Lenght of cyclist's paths
- Another relevant indicators (specific for region, population group etc.)

## Atractivity of built environment for PA of children?



### Psychological factors

Valid social theories in general

Cultural and social norms

Perception of body image in general

### Determinants of obesity – material II.

- Atractivity of children's activities in parks cannot beat pc games and tv
- Parking lots are preferred to physical activity space
- Active transport to school and work is nor supported sufficiently
- Safety during physical activity

## Determinants of obesity - sociofysiological

- Price signals influencing like-attitude in fruit and vegetable
- Food shopping as a hobby, per se
- Food shopping in single dose, big amount and using external energy (cars)
- Consumption of bigger portions (increasing trend)
- Proportion of production => consumption fat/sugar/meat/milk products

### Determinants of obesity – social

- No activ support of "quality" products for all income population groups
- Success of companies is not directly conneted with consumer's health
- Little restrictions and limits of improper foods for defined population groups
- Healthy diet is not used as affirmative social instrument
- Low food and nutrition literacy

## Determinants of obesity – social cognitiv

- Advertisment and marketink aimed to children
- Wending machines at schools
- Overeating pleasure is socially accepted
- No education for delicate taste discrimination (salty / sweet)
- Parents are not supported in long/term responsibility => they often prefer quiet and tranquility ........

### Social world

Re-definition of what is acceptable and desirable

Eg. need of environmental changes to enable changes of:

- body signals perception,
- portion sizes,
- physical activity

### Situation in EU

 Diffrent "social gradient of obesity" in wealthier countries in Western Europe

Children / adults (Latvia vs. France)

### Conflict of index?

Obesitogenic index

X

HD index (Human Development Index)

## Macro and microeconomic determinants influencing physical activity I.

Most of every-day environments, eg.

- -living
- -work
- -school and after-school activities

stopped to support PA and as a consequence started to be obesitogenic.

## Psychological factors

Generally accepted social theories

Cultural and social norms

General understanding of body image

## Social perception of obesity

 During phylogenesis – desirable phenotype – in women (no in men), in Homo sapiens, hunters– gatherers

More safe regarding healthy pregnancy

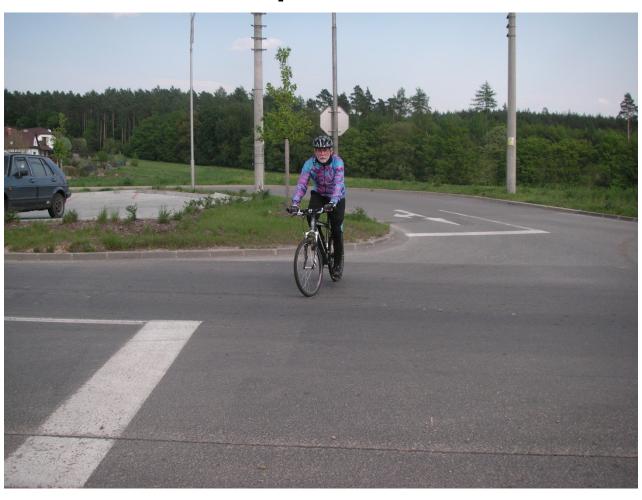
More safe regarding survival



## Crossing for pedestrians



# No more cycling line... Disapeared?



## Example of cycling line



## Cycling path – safety?



## Pedestrian's safety



