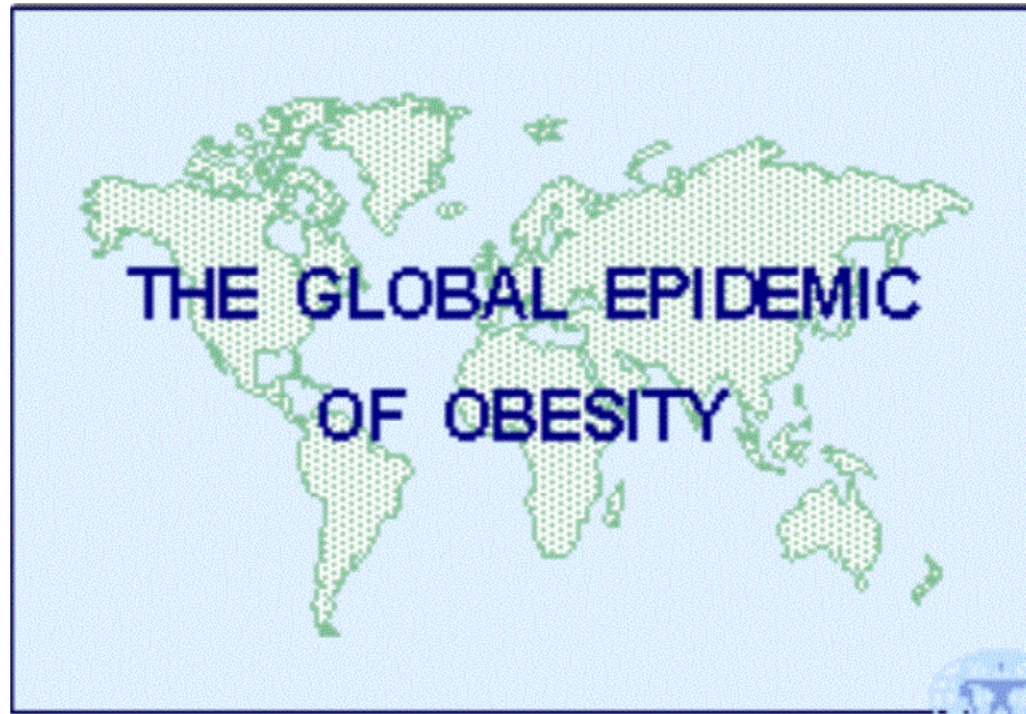


GLOBESITY



As well in “developed countries” as in “developing” countries

WHO - World Health Organisation

Ever increasing obesity

Health problems and social cost (health insurance)
Cfr. documentary “*Supersize Me*”



Is it an Epidemic ?



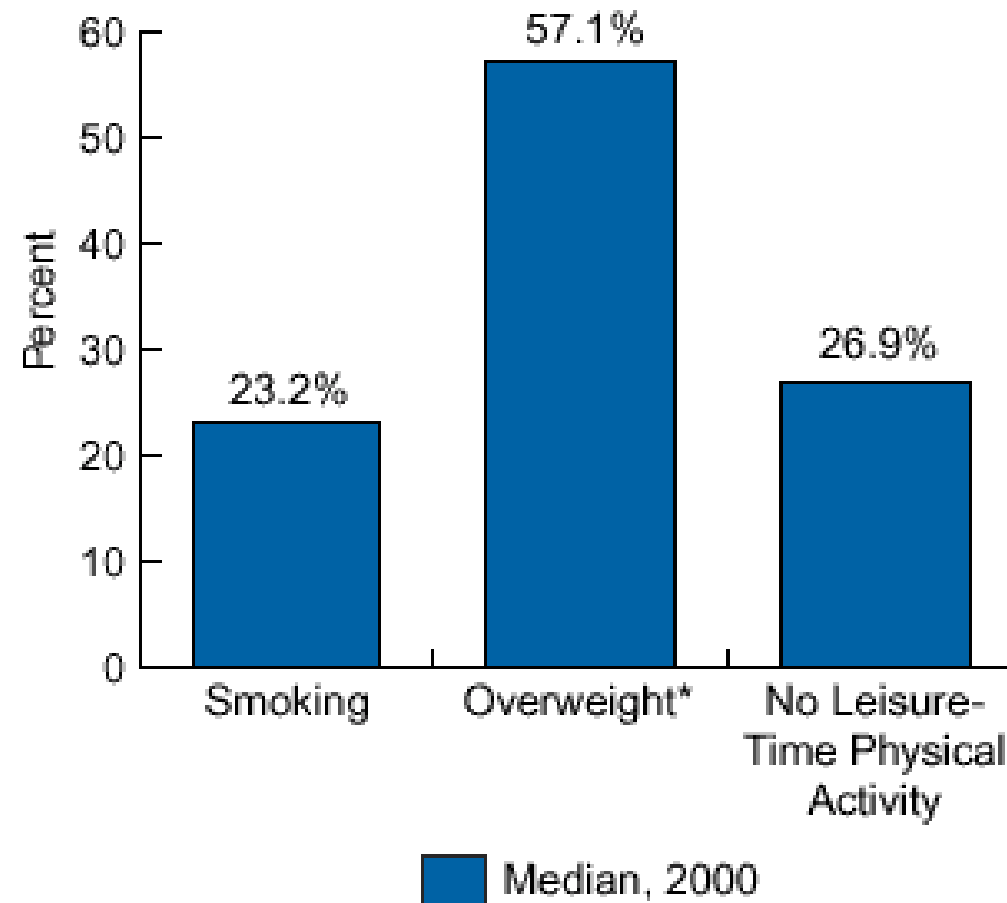
- Signals :
 - An ever increasing part of the world population becomes **overweight** and **obese**.
 - Certain **health problems** (cardiovascular problems, diabetes, ...) that used to be more typical for **elderly** overweight people are more frequent with **obese younger** populations.
 - Nowadays we have worse **eating habits** despite the increased knowledge and availability of **healthy** food.
 - Dramatic **decrease** of volume and intensity of **physical activity**.

It is an Epidemic !



- Since april 2002 the United States Tax service has labeled obesity (BMI > 32) as a **disease**. This means that the cost for losing weight can be **deductable** from income taxes.
- In many countries health insurance organisations give a **financial compensation** for individuals who attend sport or fitness clubs
- **U.S. Government now considers overweight as a greater risk factor to CV-diseases than smoking**
(➡ this is NOT an excuse for smoking !!!)

Behavioral Risk Factors for Cardiovascular Disease Among U.S. Adults



*Body mass index 25.0 kg/m^2 .

Source: CDC, Behavioral Risk Factor Surveillance System, 2000.

<http://www.cdc.gov/nccdphp/cvd/cvdaag.htm#3>

Body Mass Index - categories (WHO)

$[\text{weight in kg}] : [\text{height in meter}]^2$.

< 18.5	Underweight (anorexia)
18.5 tot 24.9	healthy
25 tot 29.9	overweight, moderate risc
30 to 34.9	obesitas type I, high risc
35 to 39.9	obesitas type II, very high risc
40 and over	(morbide) obesitas type III, extreme high risc



Emanuel YARBROUGH

New Jersey, USA

Height: 204 cm

Weight: 321 kg



$$\text{BMI} = 321 : (2.04 * 2.04)$$

$$= 77.1$$

FACT: The average middle-aged business man has a worse body fat ratio (% fat >< muscle tissue) than the average Sumo wrestler

Waist Hip Ratio

= **Waist-circumference : Hip-circumference**

< 0,8 ♀ of < 0,95 ♂



May 2010



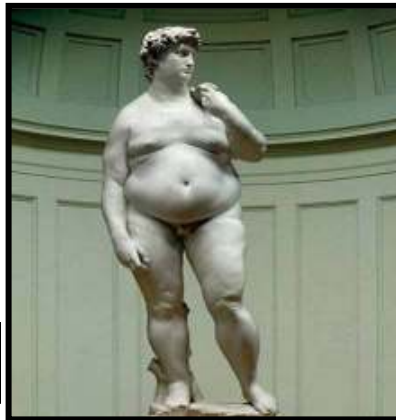
2010 - Nurcan Köse - Globesity

Evolution (USA 1985-2008)

Overweight and Obesity :

- ⇒ **60%** of Amerikan adults are considered **“overweight”** BMI $\square$ 25
- ⇒ **25%** of American population is considered **“obese”** BMI $\square$ 30
- ⇒ In 1999 more than **25% of the children** (6 -17yrs) were considered **“overweight”** compared to **5%** around 1970
- ⇒ **Biggest increase in obesity** is found with adolescents **18 => 29 yrs**

USA 2010

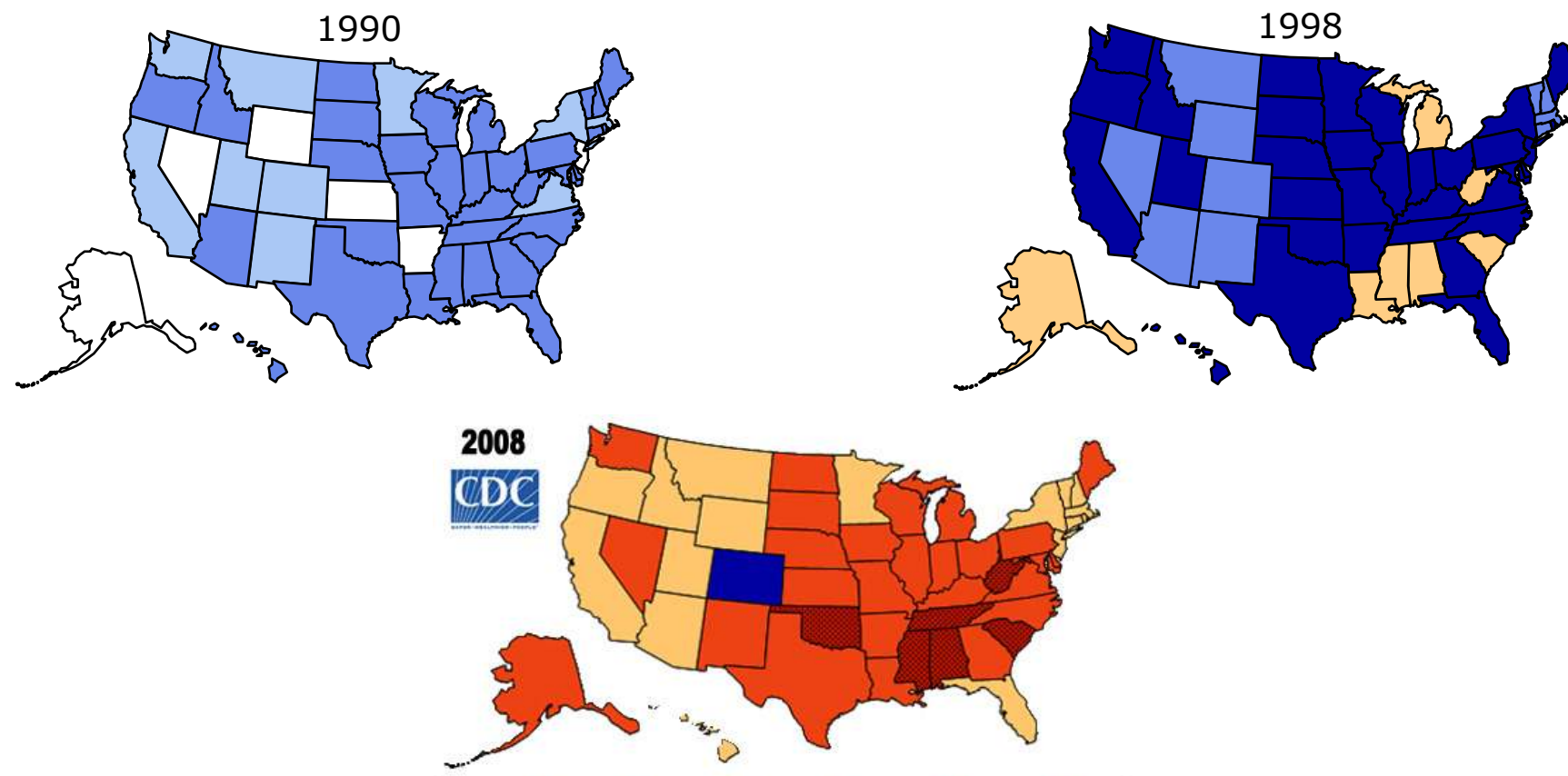


Italy 1504



Obesity Trends* Among U.S. Adults **BRFSS, 1990, 1998, 2008**

(*BMI ≥ 30 , or about 30 lbs. overweight for 5'4" person)

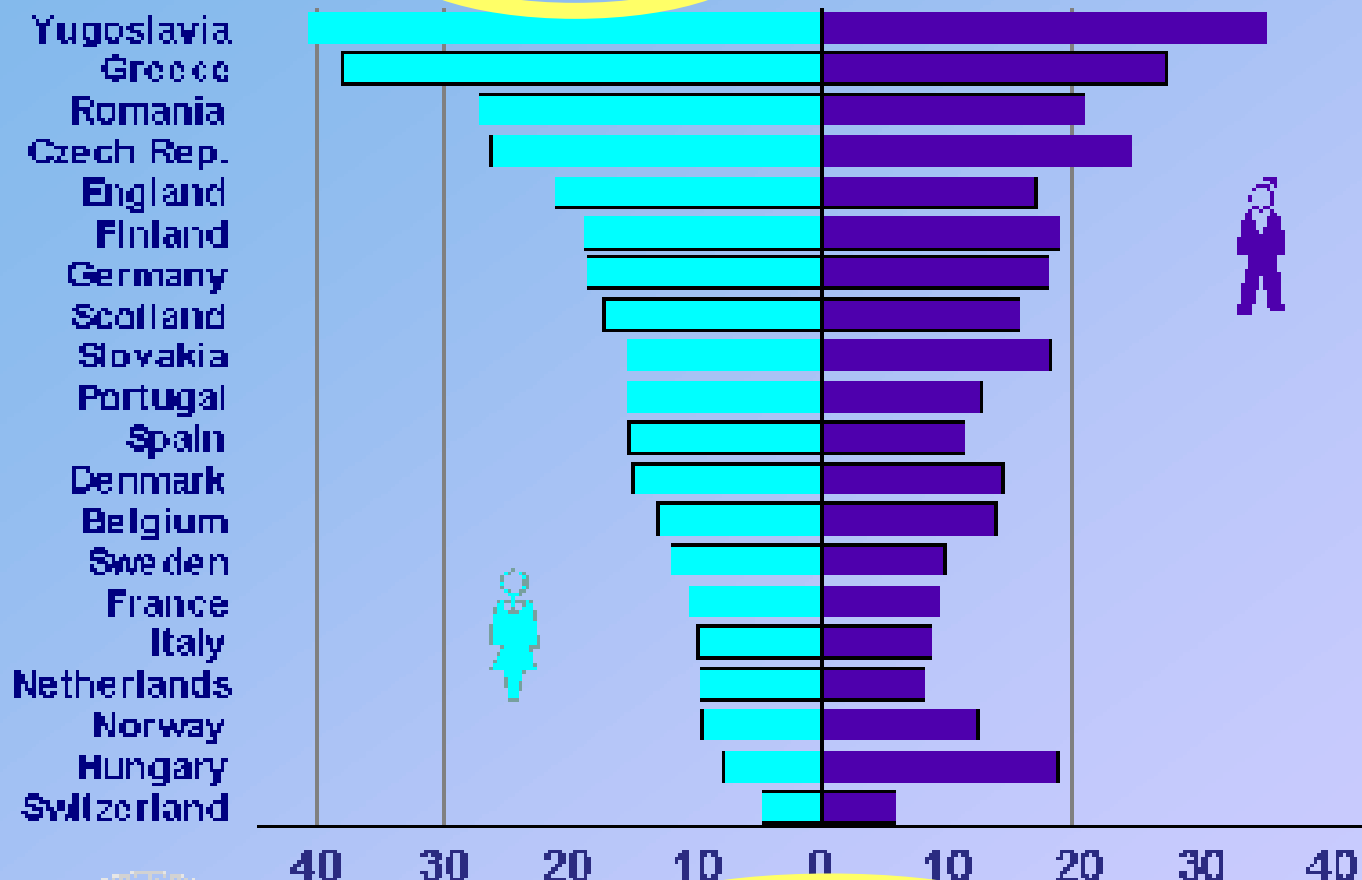


World - Europe



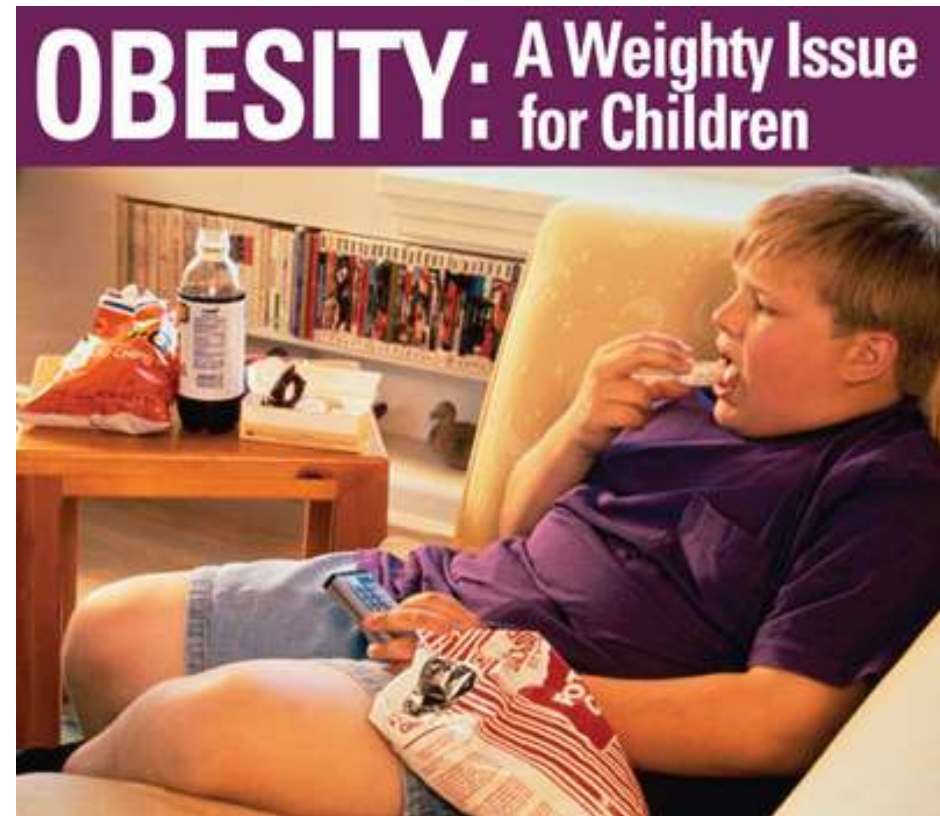
- **Samoa** : **77%** overweight
- **Europe** : during the last 10 years **Obesity** increased with **10-50%** in most European countries (WHO)

Male and female obesity levels in selected European countries



Collated by the IOTF from recent surveys

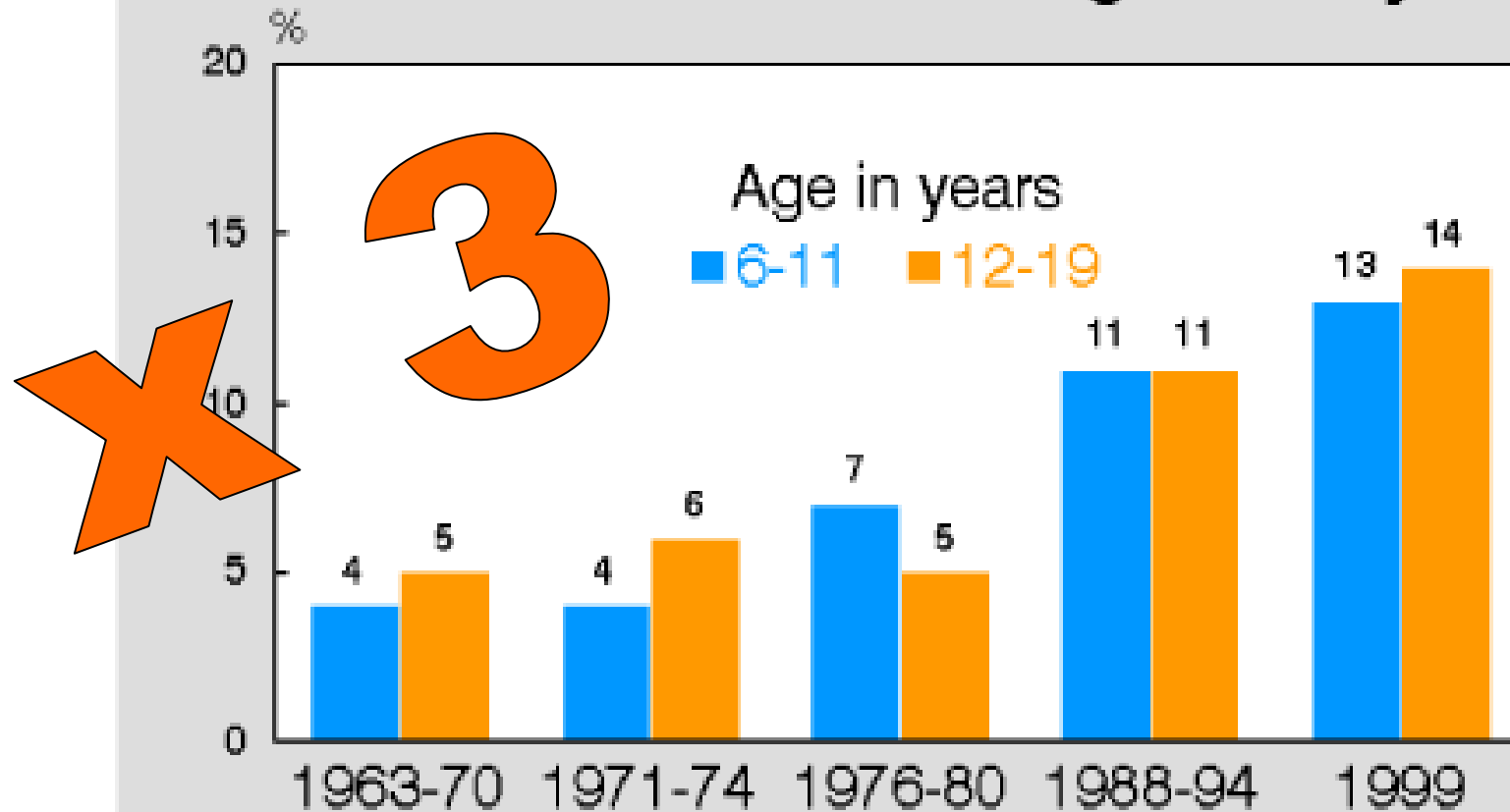
% BMI ≥ 30



Obesity and children

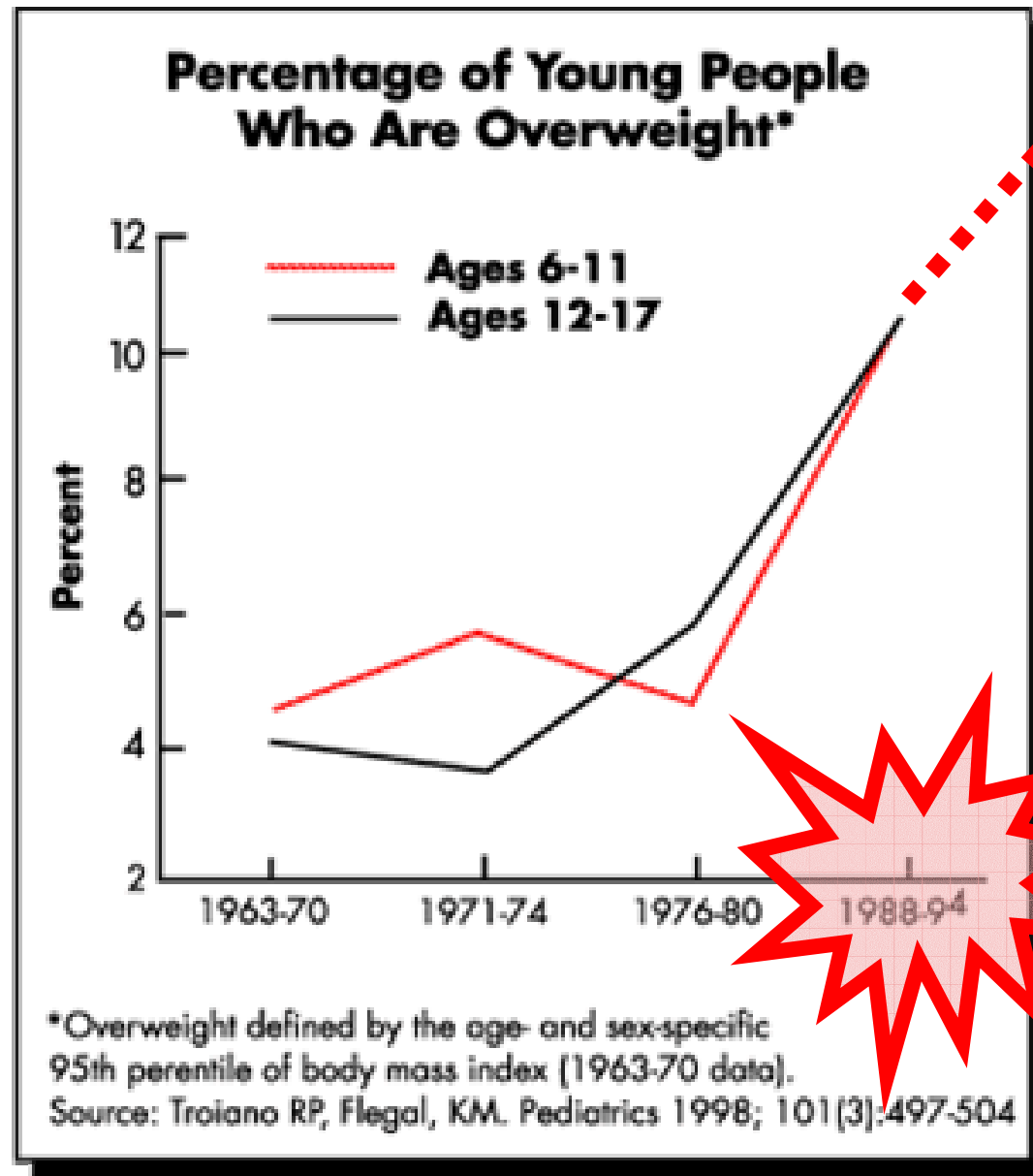
- Some young obese **teenagers** suffer from cardiovascular diseases, diabetes type II and other **illnesses**.
- 80% of obese children grow to be obese **adults**.
- Only **1 out of 3** children are eating **healthy** (healthy fat, fruit, vegetables, to much sugar, salt, ...) .
- Only **1 out of 5** girls have enough intake of **Calcium**.
- There is scientific evidence about the bad consequences of not eating a healthy **breakfast** (with for instance emotional-, behavioural- and intellectual problems, ...).

Figure 1. Prevalence of overweight among children and adolescents ages 6-19 years



NOTES: Excludes pregnant women starting with 1971-74. Pregnancy status not available for 1963-65 and 1966-70. Data for 1963-65 are for children 6-11 years of age; data for 1966-70 are for adolescents 12-17 years of age, not 12-19 years.

SOURCE: CDC/NCHS, NHES and NHANES.



DANGERS overweight

Proven risks :

- Diabetes (type II)
- Cardiovascular diseases
- Stroke
- High Blood pressure
- Gall diseases
- Osteoarthritis
- Sleeping problems
- Pulmonar diseases
- Some cases of cancer (breast-, kalın bağırsak-, kidney-, prostate-, womb-, gallbladder-, ...).

DANGERS overweight

Potential risks :

- To high cholesterol-ratio (dislipidemia)
 - ❖ $[H(\text{ealthy})DL > < L(\text{ousy})DL]$
- Complications during pregnancy
- Menstrual disorders
- Hirsutisme (hairgrow)
- Stress incontinence
- Psychological disorders like depression
- Higher risk with operations.

Our world has a problem

