

Obesity Pandemic in Jordan out of Control:

The Nexus Between Eating Practices & Physical Activity

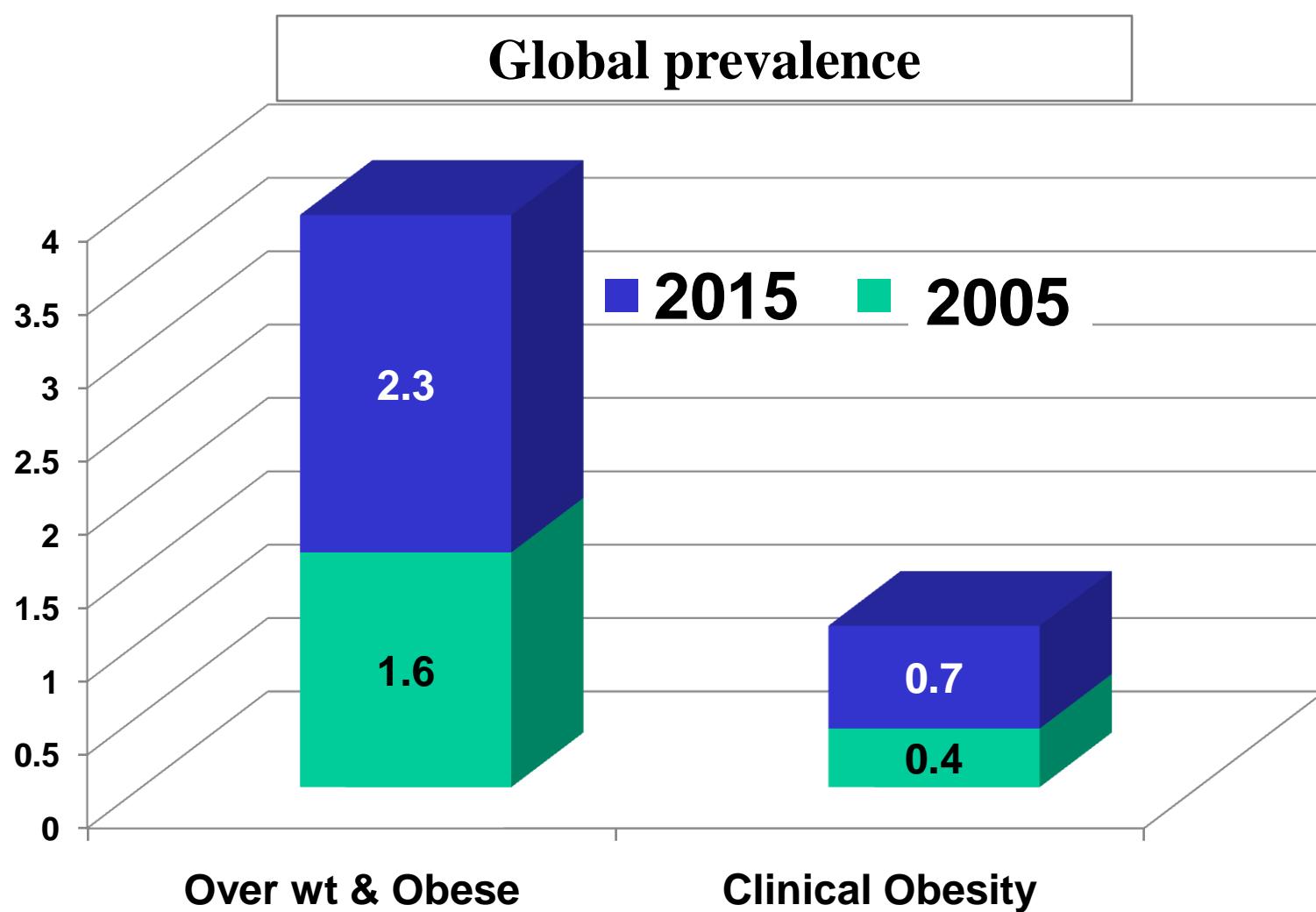
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University of Jordan , 2010

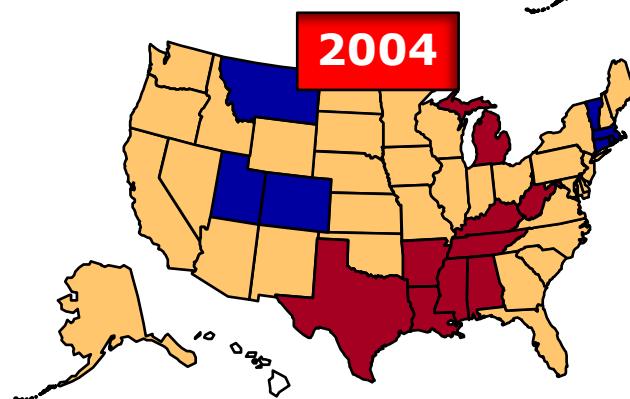
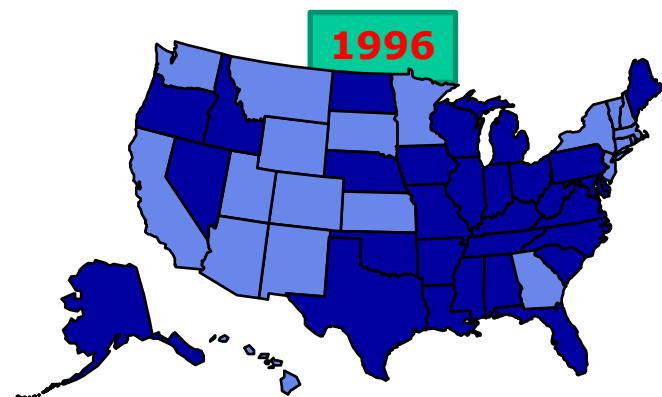
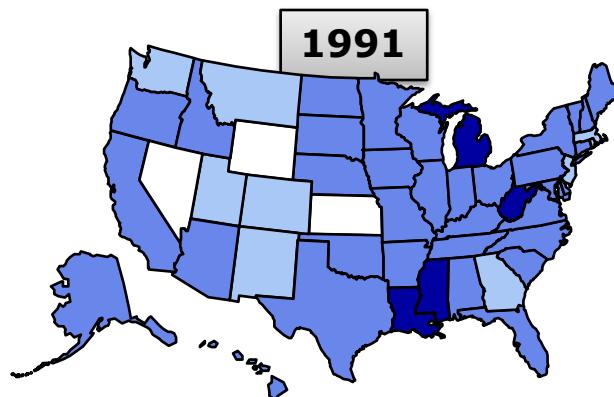
Obesity: Facts & Figures

(WHO, 2006)



Obesity: Facts & Figures

16 % of All
Children & Teens
Overweight



**U.S. Adults
(BMI ≥ 30)**

| | | | | | | | | | | | |
|---------|--------------------------|------|--------------------------|---------|--------------------------|---------|--------------------------|---------|--------------------------|------|--------------------------|
| No Data | <input type="checkbox"/> | <10% | <input type="checkbox"/> | 10%-14% | <input type="checkbox"/> | 15%-19% | <input type="checkbox"/> | 20%-24% | <input type="checkbox"/> | ≥25% | <input type="checkbox"/> |
|---------|--------------------------|------|--------------------------|---------|--------------------------|---------|--------------------------|---------|--------------------------|------|--------------------------|

Obesity: Facts & Figures

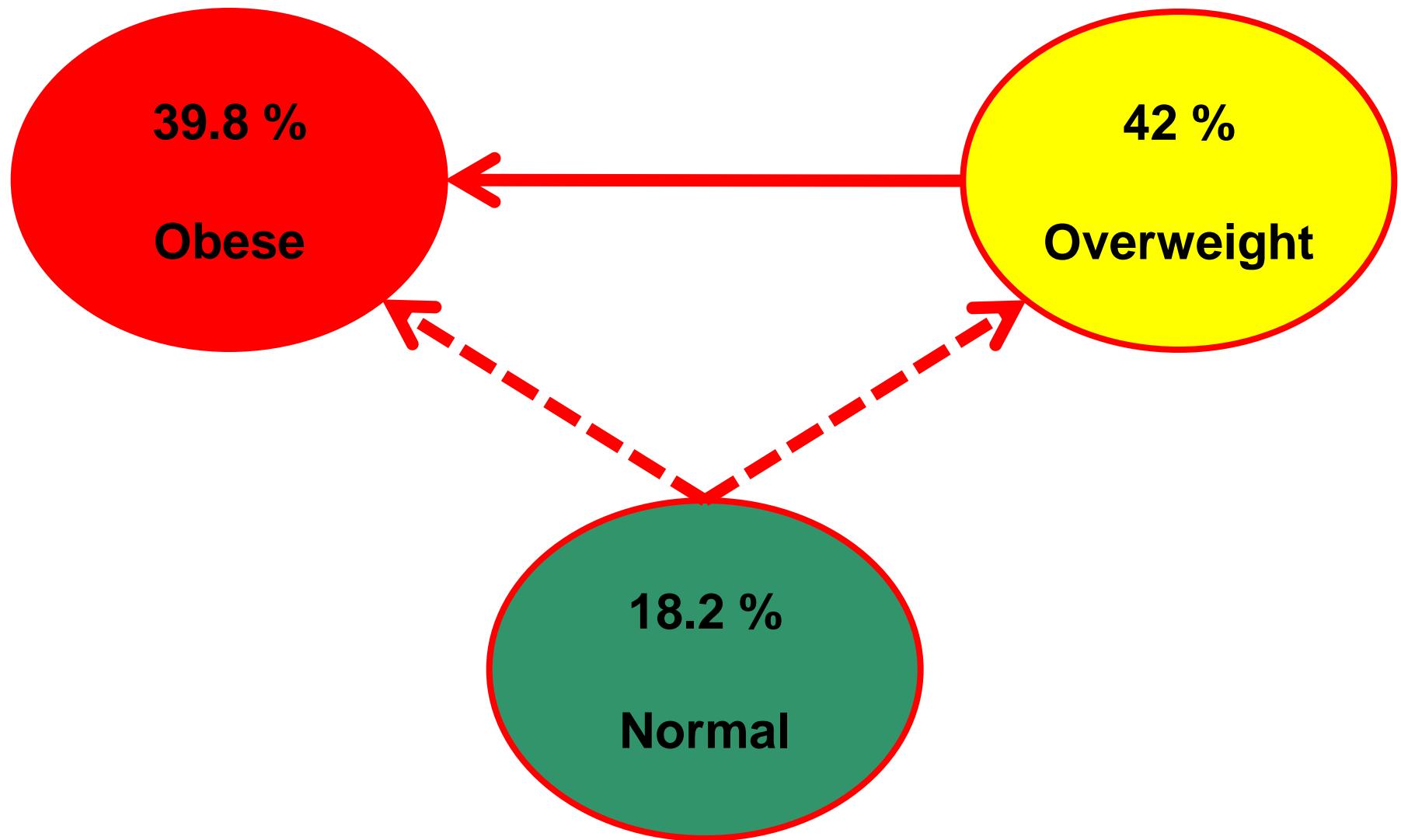
Adults - (BMI ≥ 30)

| Men (%) | Age groups (years) | | | | | Total |
|-----------|--------------------|-------|-------|-------|------|-------|
| | 20-29 | 30-39 | 40-49 | 50-59 | >60 | |
| Lebanon | 8.4 | 15.8 | 19.4 | 19.6 | 15.3 | 14.5 |
| Kuwait | 32.1 | 35.8 | 40.1 | 35.3 | 15.2 | 32.3 |
| Jordan | 17.8 | 27.9 | 36.3 | 47.5 | 33.7 | 32.7 |
| Women (%) | 20-29 | 30-39 | 40-49 | 50-59 | >60 | Total |
| Lebanon | 5.1 | 11.0 | 20.4 | 39.3 | 38.0 | 18.8 |
| Kuwait | 29.2 | 45.3 | 54.8 | 57.1 | 43.8 | 40.6 |
| Jordan | 25.9 | 56.0 | 76.1 | 73.8 | 65.8 | 59.8 |

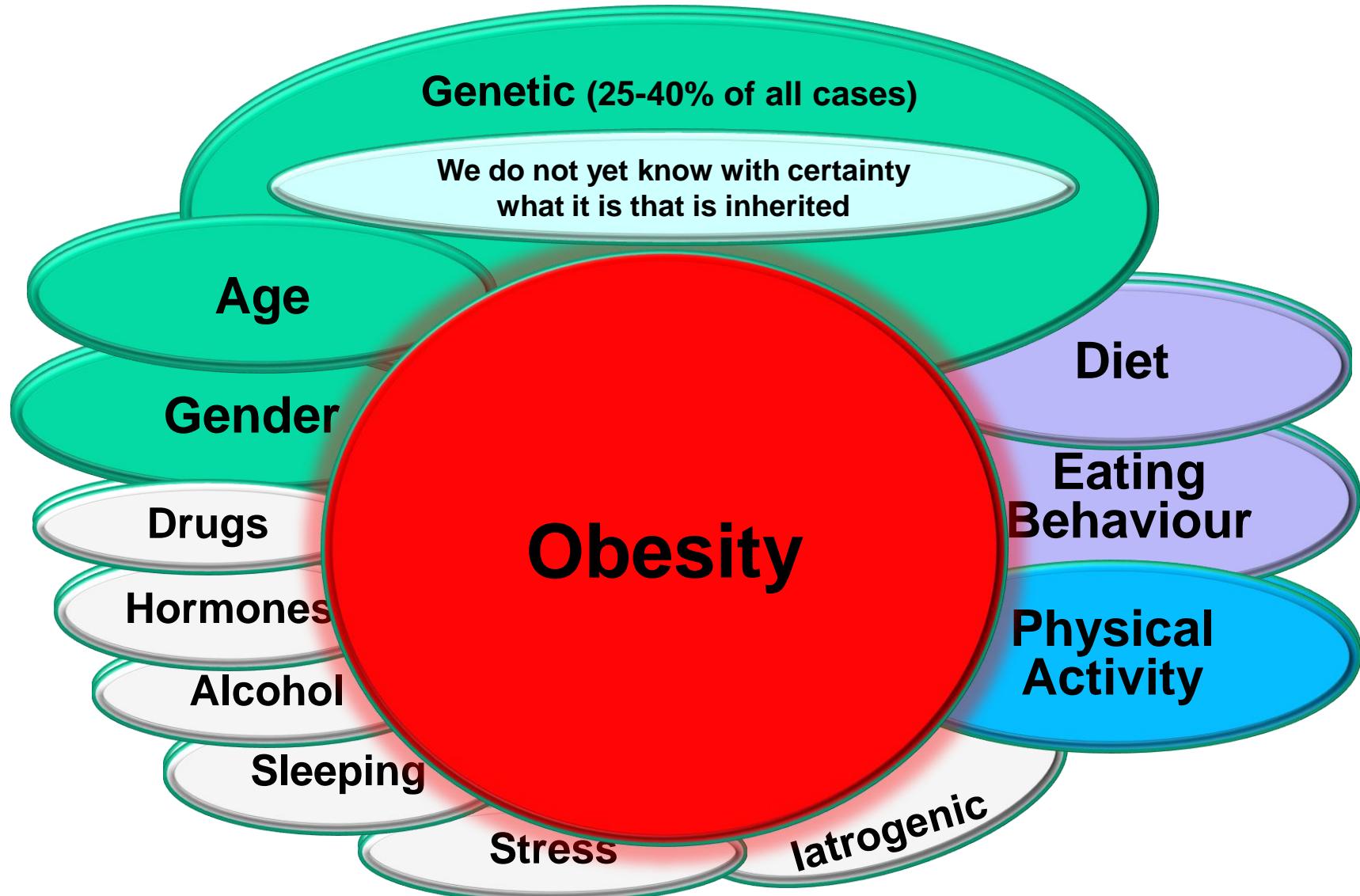
Infants <6 months = 7.1%

Obesity in Jordan: A Pandemic

Adults - (BMI ≥ 30)

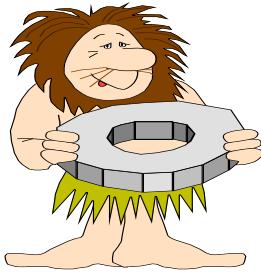


Aetiology: A Multi-factorial Complex Crossing Point



Evolution & Obesity

Hunter-gatherer



Feast & Famine



Leptin [Thin] gene



Affluent Societies



Feasts



Have
we
CHANGED



Causes of Obesity “ McDonaldization”

DOUBLE Kcal for the SAME Price



Yesterday: 210 Kcal

Today: 610 Kcal

400 Kcal Difference = Walk 2 hrs & 40 mins

Causes of Obesity “Nintendo-nisation”

↑ Ready-to-Eat Snacks / ↓ Physical Activity



Causes of Obesity “Coca-colonization”

↑ Simple CHO, Empty ↑ Kcal.



Causes of Obesity “Automation”

↑ Time saving / ↓ Energy expenditure





Is
It
the
SAME

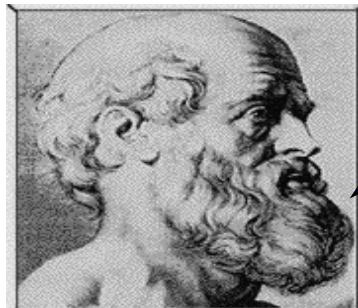


Obesity

(ما ملأ ابن آدم وعاءً شرّاً من بطنه بحسب ابن آدم لقيميات يقمن صلبها، فإن كان لا بد فاعلاً فثلاث لطعامه وثلاث لشرابه وثلاث لنفسه) [رواه الترمذى].

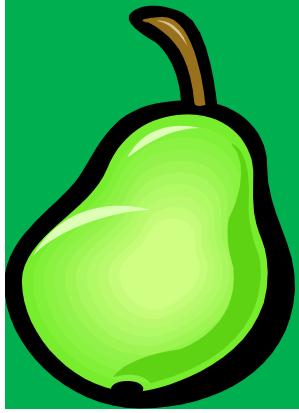
وَكُلُوا وَاشْرِبُوا وَلَا تُسْرِفُوا
[الأعراف: ٣١].

“Persons who are naturally fat are apt to die earlier than those who are slender”

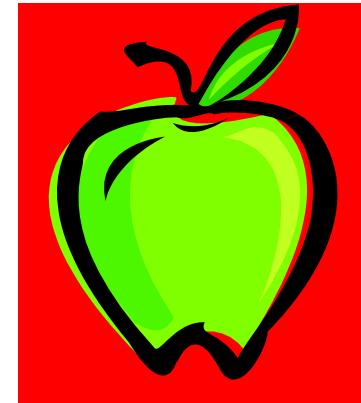
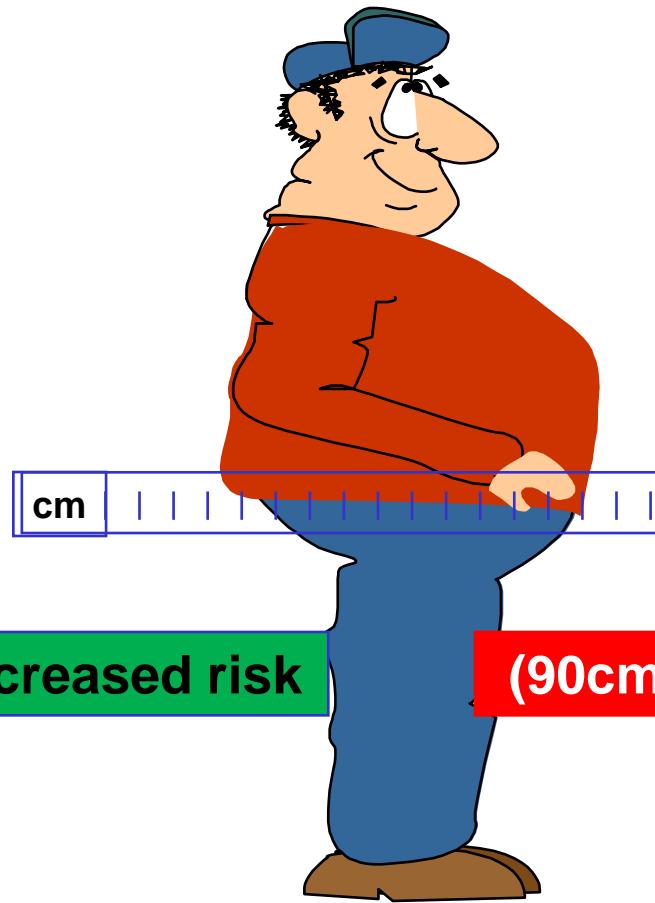


Hippocrates
Father of Medicine
(460 - 377 BC)

Body Fat Distribution: Waist Measurement



Women



Men

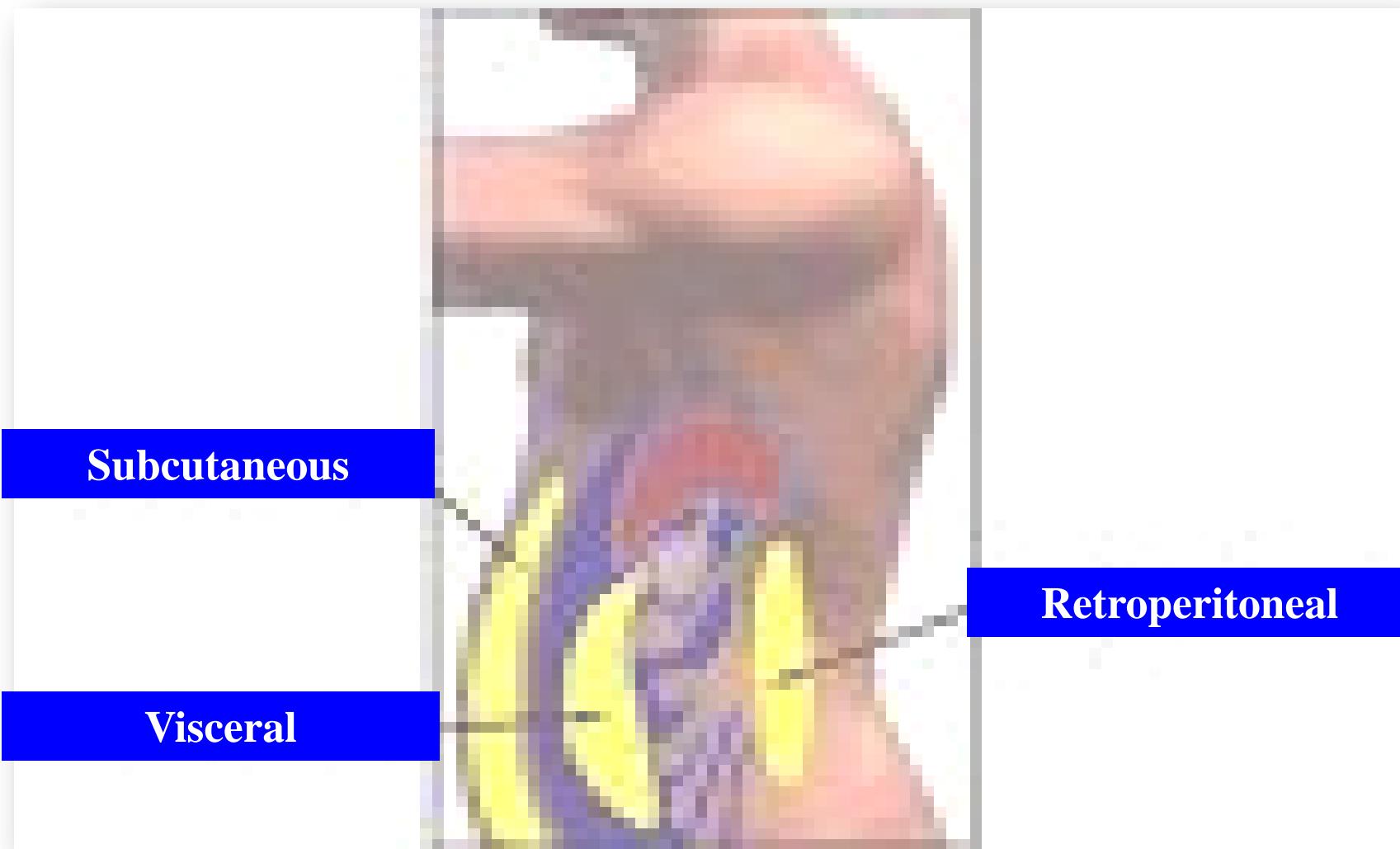
(80cm) >88 cm Increased risk

(90cm) >102 cm Increased risk

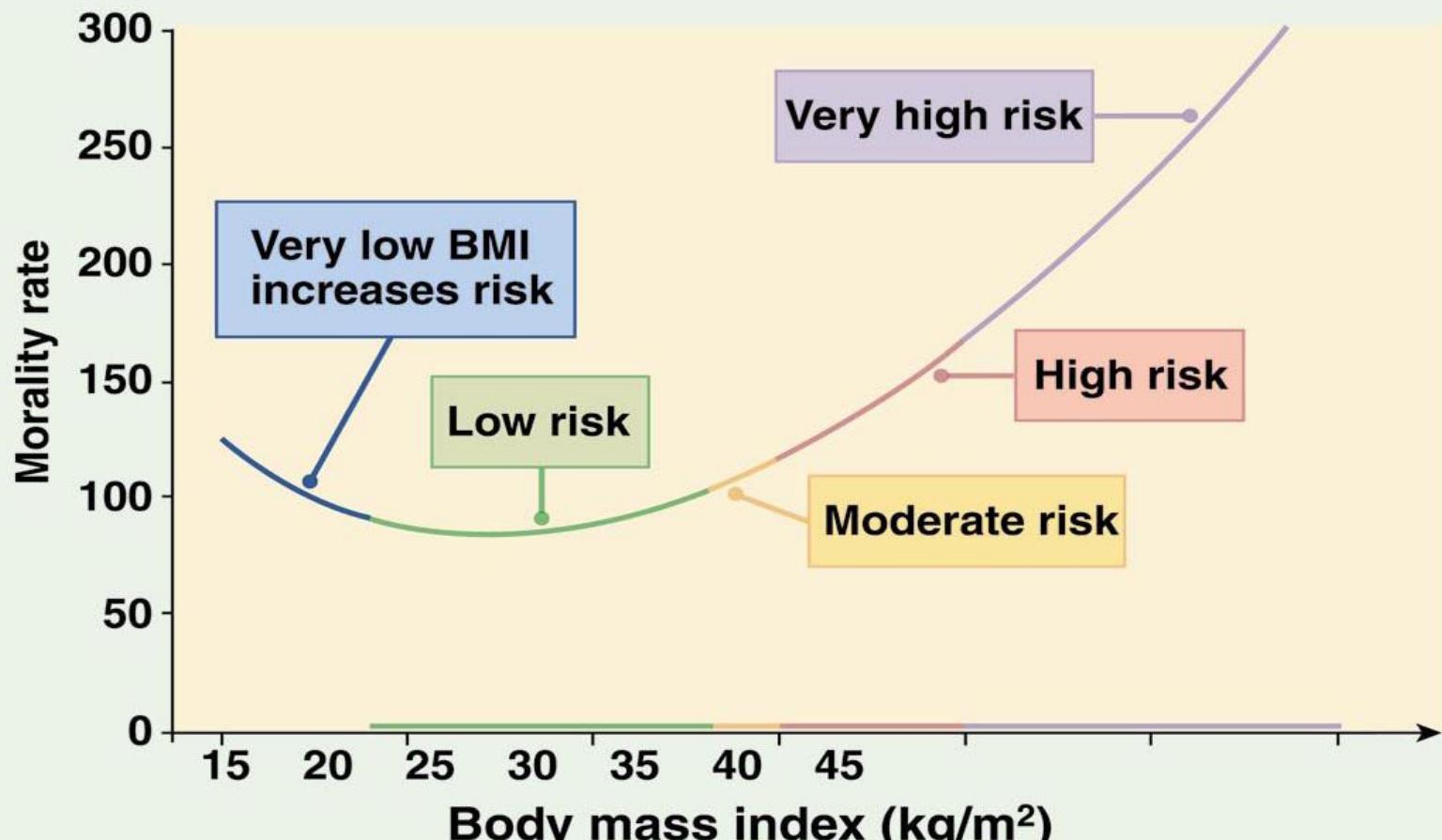
Waist Measurement OR BMI?

Lancet; 1998; 351:853-6

Visceral Obesity & Health



BMI & Health



Health Risks Associated with Obesity (WHO 1998)

**Greatly
Increased
(RR 2-3)**

**Moderately
Increased
(RR 2-3)**

**Mildly
Increased
(RR 1-2)**

Type 2 diabetes

Gallbladder disease
High blood fats
Metabolic Syndrome
Infertility
Sleep apnea

CHD

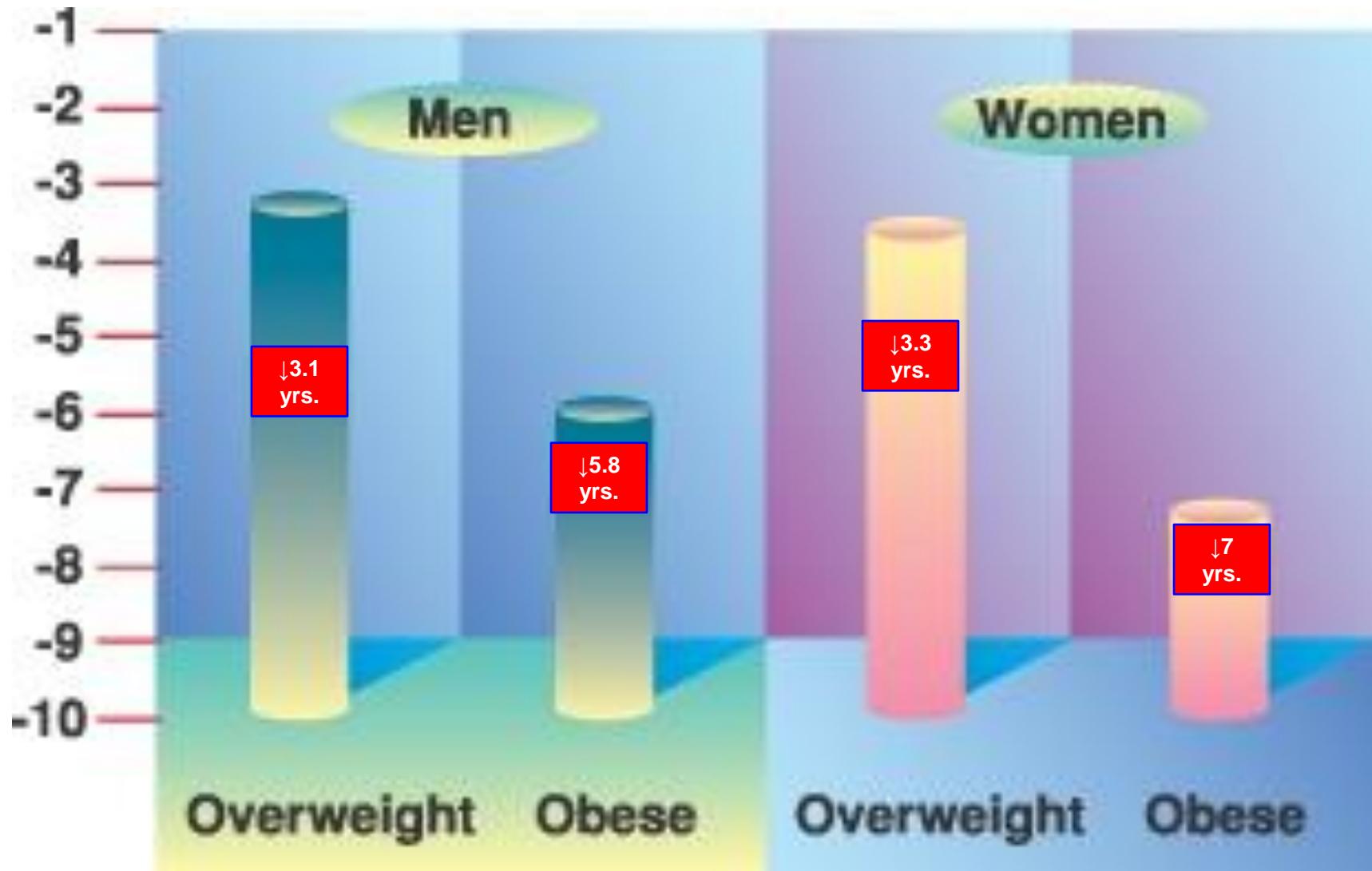
Hypertension
Osteoarthritis
Gout

Cancer

↑ Anaesthetic risk
Polycystic ovary syndrome

Obesity is
a serious potentially life-threatening condition
NOT
an affliction brought on by lack of self-control.

Obesity & Life Expectancy



Obesity-Associated Annual Hospital Costs For children



23%
Children

40%
Adults

**Get NO free-time
Physical Activity
AT ALL.**

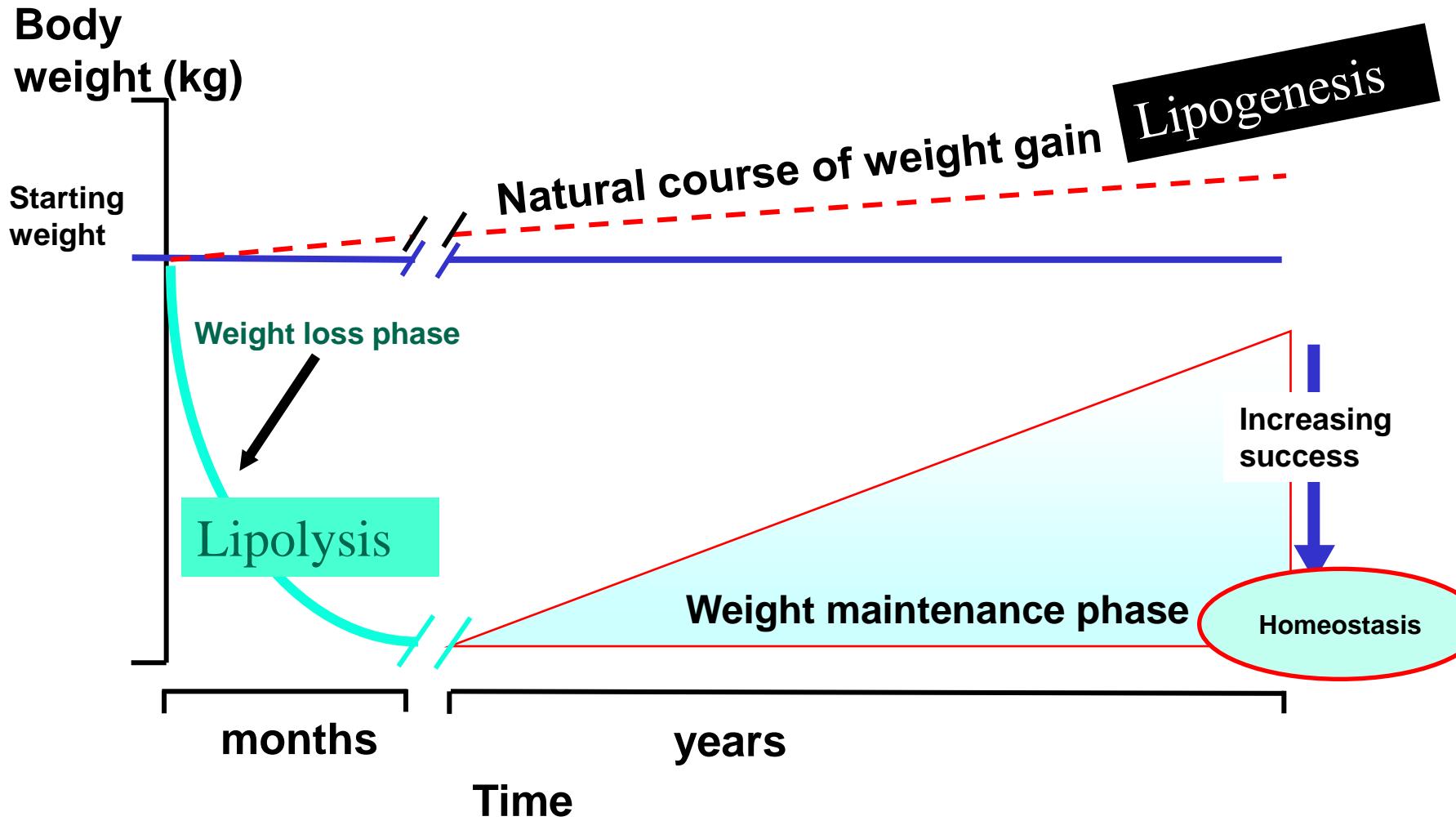


Benefits of 10% Weight Loss

| | |
|-----------------------|---|
| Mortality | >20% fall in total mortality >30% fall in diabetes related deaths >40% fall in obesity related deaths |
| Blood pressure | Fall of 10mmHg systolic & diastolic pressure |
| Diabetes | 50% fall in fasting blood glucose |
| Lipids | 10% dec. in total cholesterol 15% dec. in LDL 30% dec. in triglycerides 8% inc. in HDL |

Jung 1997

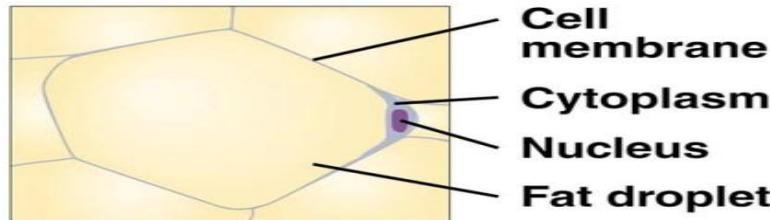
Success in Weight Management!



Success in Wt management: Early Theories

- **Fat cell theory:**

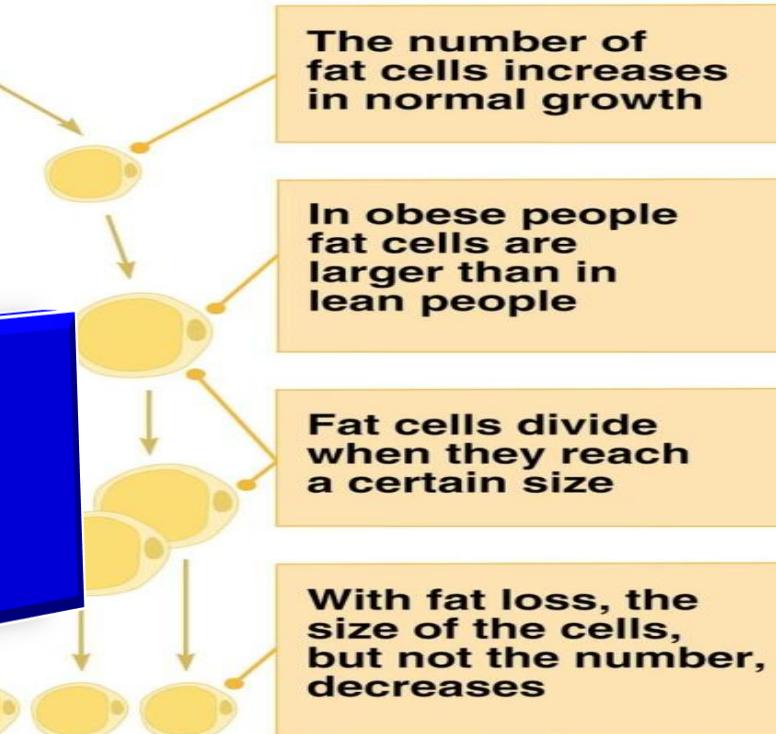
& size



- **Set point theory:**

A “set weight” that body tries to maintain.

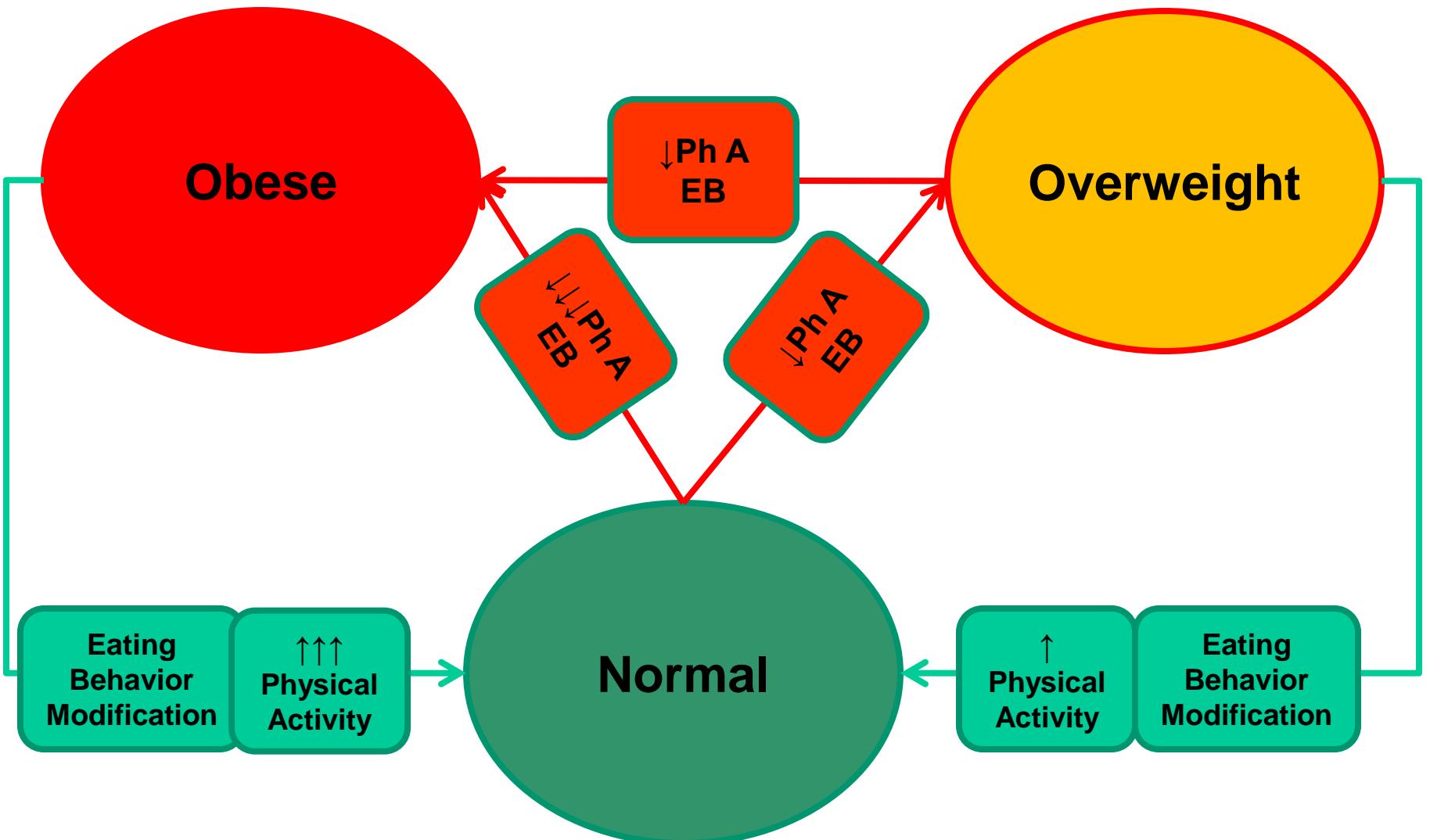
Once gained,
FAT cells
never actually
lost!



Childhood
Adolescence
Pregnancy



Obesity Pandemic: What Can We Do!





5



**30min / day
5x / wk**



5x / wk



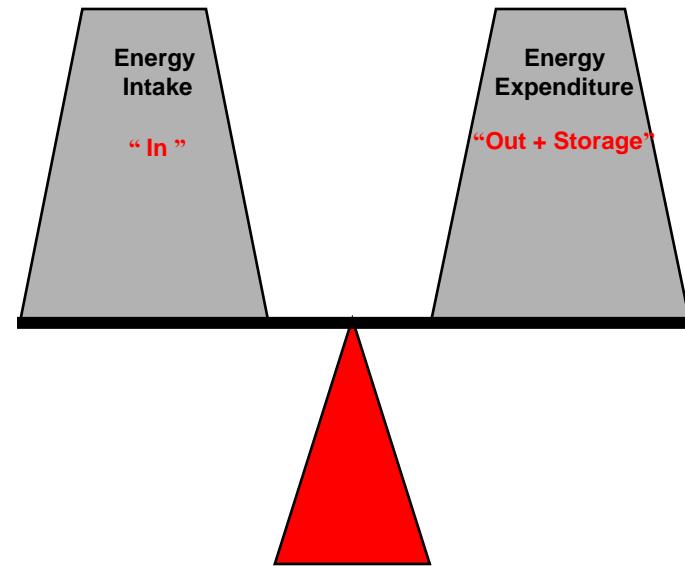
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- Adequacy
- Balance
- Moderation
- Variety
- Caloric Control
- Nutrient Density

Food Tips

- ! How often should one eat?
- ! When should one eat?
- ! How should one eat?
- ! What is the Plate Model?
- ! Less Fats?
- ! More fiber?
- ! Which beverage should you drink?



TIP:
If you reduce by

ONLY 1 hour

of TV TIME,

**you will increase their life
expectancy by**

2-3 years

