### **OBESITY-Prevention & Management**

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#### WHO defines obesity and overweight as

# "Overweight and obesity are defined as abnormal excessive fat accumulation that may impair health





WHO







Weight & Health

 Being overweight can be a serious problem for health and can cause many diseases.

• When being overweight is enough to cause serious health problems it is called <u>obesity</u>.



### Obesity—Body Mass Index (BMI)

BMI is a simple index of weight-for-height that is commonly used in classifying overweight and obesity adult populations and individuals.

Definition: It is defined as the weight in kilograms divid by the square of the height in meters (kg/m<sup>2</sup>).



Obesity.





#### OBESITY



Body mass index =

Weight in Kg

Height (m)<sup>2</sup>

Ideal BMI = 21 - 25

**Obesity is BMI > 30** 



**Professor K R Bruckdorfer** 

#### **Body Mass Index**



#### BMI estimates body fat and health risks

BMI Categories:

- Normal weight = 18.5-24.9
- Overweight = 25-29.9
- Obesity = BMI of 30 or greater



#### Waist circumference

## Women's waist measurements should be less than 35 inches. Men's should be less than 40 inches.

If you have a large waist circumference, talk to your doctor about weight loss.



Obesity..





### **Obesity symptoms**

- Obesity increases weight, reduces physical movements, and also brings in slowness in emotional and mental activities.
- Food intake increases.
- Obesity can result in frustration.
- Laziness increases, reducing overall efficiency.
- Sometimes obesity can create obstruction to breathing process.
- Obesity may result in heart problems, diabetes or blood pressure.







#### Steps leading to obesity

## Obesity..

- According to WHO
- The fundamental cause of obesity & overweight is an energy imbalance between calories consumed on one hand, and calories expended on the other hand.







Steps leading to obesity

According to WHO

Global increases in overweight and obesity are attributable to the factors:

 A shift in diet towards increased intake of energy-den foods

A sedentary lifestyle with decreased physical activity





#### Steps leading to obesity

# Obesity....

Using time and labour saving devices tends to make us laz
Video games, computer and TV games has restricted from outdoor games which gives physical exercise
A child born to overweight parents, is more prone to becoming obese

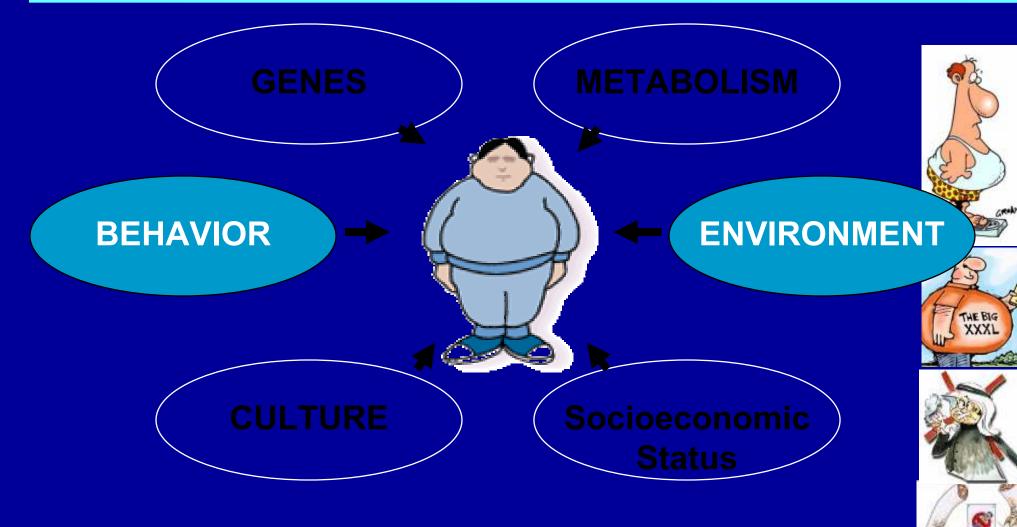
Equating obesity with perfect health







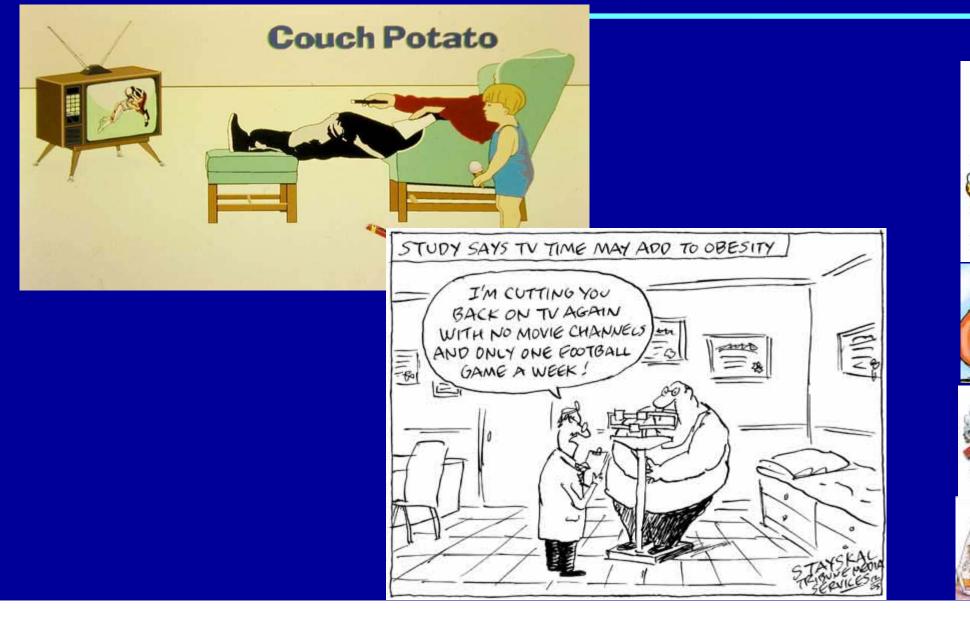
### Causes of Overweight & Obesity



### Genetics Permits Obesity... Environment Causes It!

# Obesity..

THE BIG



#### **Risk factors**

# Obesity....

Diet
Inactivity
Psychological factors
Genetics
Age
Cigarette smoking
Pregnancy
Medications
Medical problems
Alcohol



## Risk Factors – how it brings obesity Obesity....

Diet: Regular consumption of high-calorie foods, such as fast foods, contributes to weight gain. High fat foods are dense in calories. Loading up on soft drinks, candy & desserts also promotes weight gain. Foods and beverages like these are high in sugar and calories







## Risk Factors – how it brings obesity Obesity....

Inactivity: Sedentary people are more likely to gain weight because they don't burn calories through physical activities.



Mr 'Free 2B Me' wants the right to smoke, drink and lie on the couch all day but he also demands that taxpayers pay his medical bills.







## Obesity....

Psychological factors: Some people overeat to cope with problems or deal with emotions, such as stress or boredom.



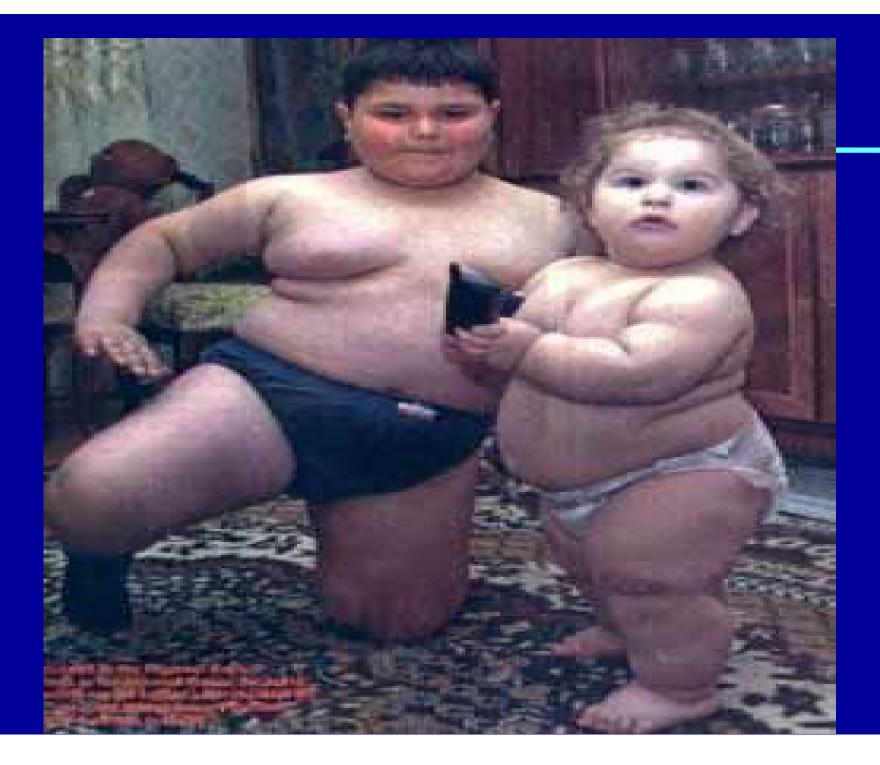






Obesity....

Genetics: If one or both of your parents are obese, your chances of being overweight are greater. Your genes may affect the amount of body fat you store and where that fat is distributed. But, your genetic makeup doesn't guarante that you'll be obese.





## Obesity....

Age: As you get older, you tend to be less active. In addition, the amount of muscle in your body tends to decrease with age. These changes also reduces calorie needs. So if you don't reduce calorie intake you'll gain weight.



THE BIG

### Risk Factors – how it brings obesity Obesity....

Cigarette smoking: Smokers tend to gain weight after quitting. Former smokers often gain weight because they eat more after they quit.



### Risk Factors – how it brings obesity Obesity....

Pregnancy: During pregnancy a woman's weight necessarily increases. Some women find this weight difficult to loose after the baby is born.

This weight gain may contribute to the development of obesity in women.





Obesity....



Medication: Corticosteroids and tricyclic antidepressants, in particular, can lead to weight gain. So can some high blood pressure and anti-psychotic medications.



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Obesity....

**Medical problems:** 

Hormonal imbalances, such as pcos

Arthritis, can also lead to decreased activity, weighting
 gain.





### Risk Factors – how it brings obesity Obesity....

Alcohol: Drinking alcohol adds calories to your diet. Just one regular beer is about 150 calories.









#### **Types of obesity**

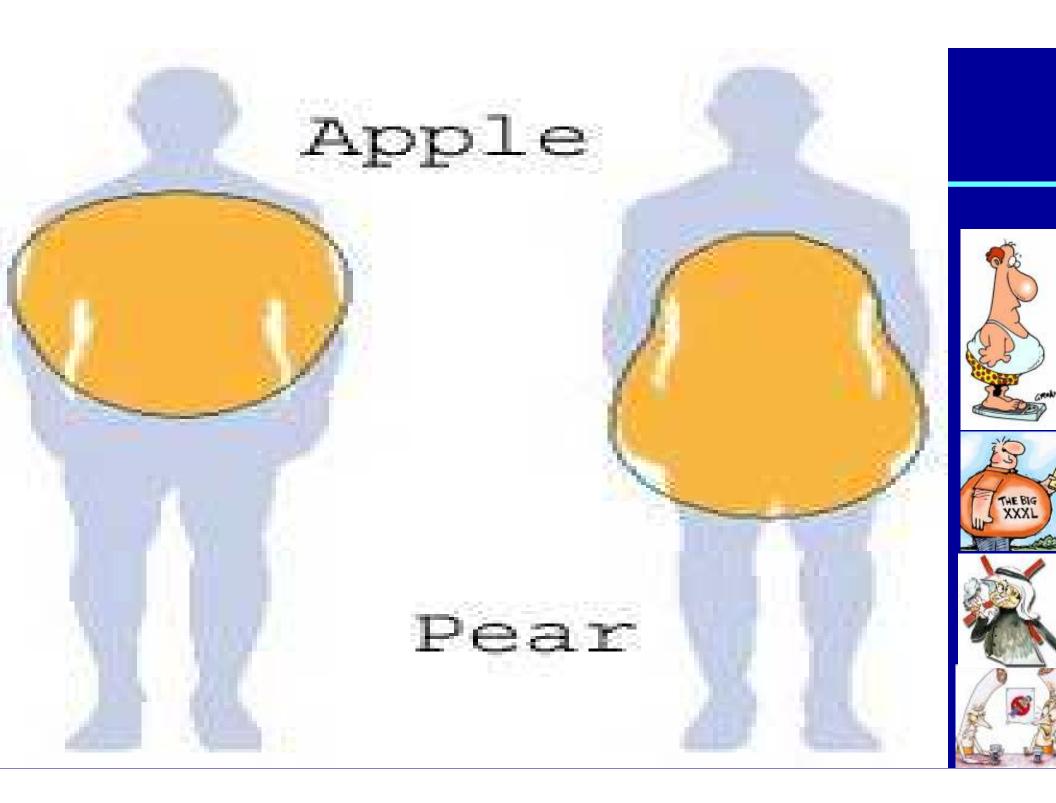
#### Mainly there are two types of obesity, they are:

Android: Android type of obesity is likened to the shape of an apple. The shoulders, face, arms, neck, chest & upper portion of the abdomen are bloated. The stomach, arms, shoulders & breast gives a stiff appearance. More

Obesity.

common to males.

Android type of obesity is a major risk for heart damage & heart disease due to high cholesterol.



#### **Types of obesity**

## Obesity

Gynoid: In this type the lower part of the body has extra flesh. Females are more affected. Gynoid type of obesity is similar to pears. The flesh is somewhat flabby in the abdomen, thighs, buttocks & legs. The face and neck mostly give a normal appearance.

The vital organs affected mostly are the kidney, uterus, intestines, bladder & bowls.



### If you are a obese & least concerned of yourself then you are on the way of developing diseases and disabilities.





### Medical Complications of Obesity

Pulmonary disease abnormal function obstructive sleep apnea hypovenblation syndrome

#### Nonalcoholic fatty liver

#### Gall bladder disease

#### Gynecologic abnormalities

abnormal/minises intertility polycystic ovarian syndrome

#### Osteoarthritis

Skin

Gout -

Idiopathic intracranial hypertension

Stroke

Cataracts

#### Coronary heart disease

Diabetes
 Dyskpidemis
 Hypertension

#### Severe pancreatitis

Cancer breast, uterus, cervix colon, osophagus, pancreas kidney, prostate

Phiebitis venous stasis

this former,







#### **Diseases and disabilities**

# Obesity.

- 🔹 Diabetes
- Abnormal blood fats
- **k** Coronary artery disease
- \star Heart Attack
- \star Stroke
- \star Arthritis
- 🔹 Sleep apnea
- \star Cancer
- Fatty liver disease
- Gall bladder disease



## Obesity....

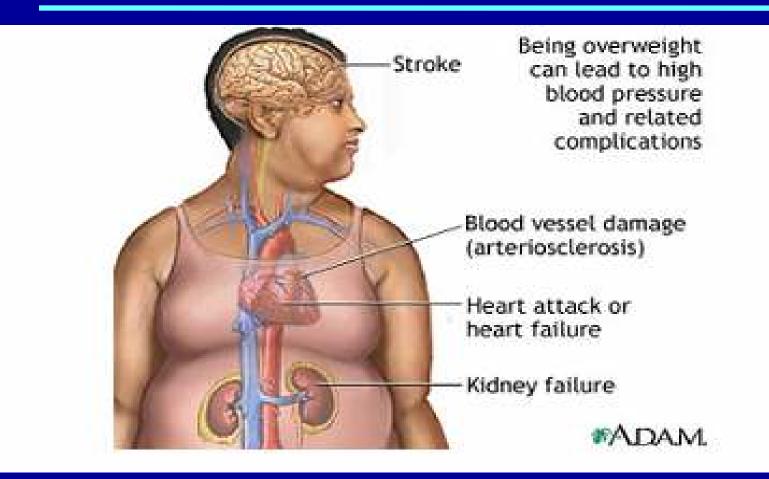
### What Are the Health Risks of Overweight and Unfit?

#### Health problems in childhood

Type 2 diabetes Joint problems High blood pressure High cholesterol Asthma Sleep apnea Depression Low self-esteem Eating disorders Potential increased risk as adult Heart attack Stroke Cancer Gallbladder disease Kidney stones Osteoarthritis **Pregnancy complications** 

### **Obesity consequences**

## Obesity.





#### Treatment

## Obesity

Dietary changes Choose healthy foods Choose the right carbohydrates Cut back on sweets Reduce fat Count calories Avoid oily food



### **Choose your right food**

# Obesity.









#### **Treatment**

# Obesity....

Increased physical activity Group weight loss programs Individual weight loss programs



### Work out individually

# Obesity.





### Work out in groups





### Work out in groups



#### Treatment

Behavior change: To lose weight and keep it off, you need to make changes in your lifestyle.

Motivate yourself
Make lifestyle changes a priority
Have a plan
Avoid food triggers
Keep a record
Focus on the positive
Don't give up





