

# Obesity

## The Silent Killer



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# What is Obesity

Obesity is defined as an excess amount of body fat that poses a risk to health.

The normal amount of body fat\* is between 25-30% in women. Over 30% body fat are considered obese.

The normal amount of body fat\* is between 18-23% in men. Over 25% body fat are considered obese

\*(expressed as a percentage of body weight)



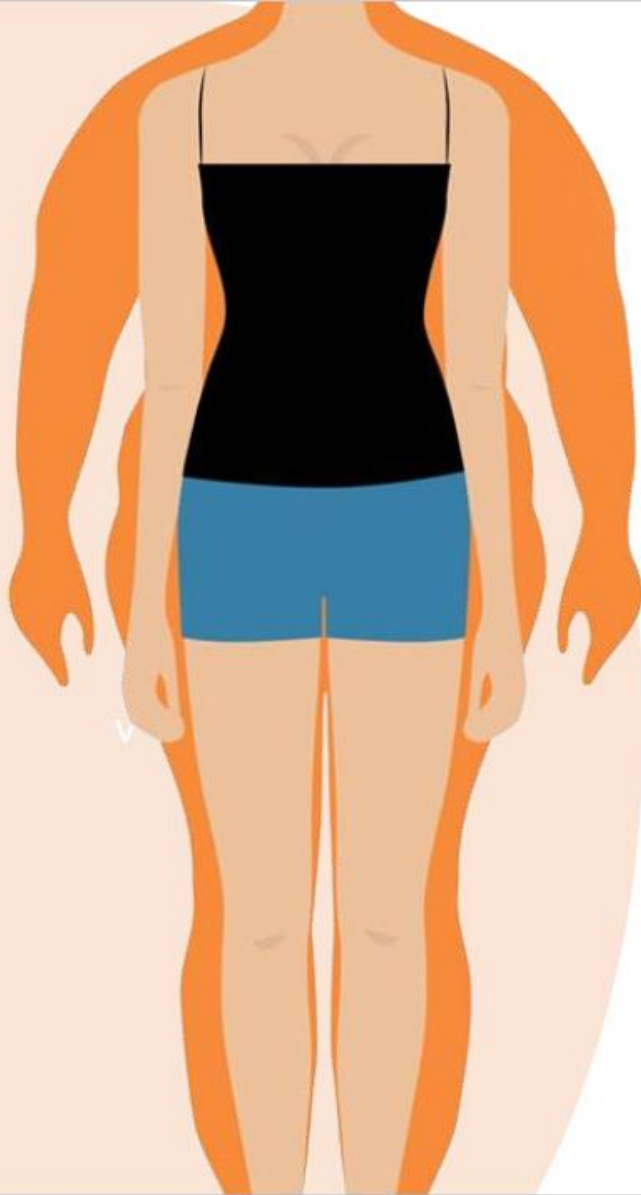
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# Measuring obesity

## Body mass index (BMI)



$$\text{BMI} = \text{Weight (kg)} / \text{Height}^2 (\text{m}^2)$$



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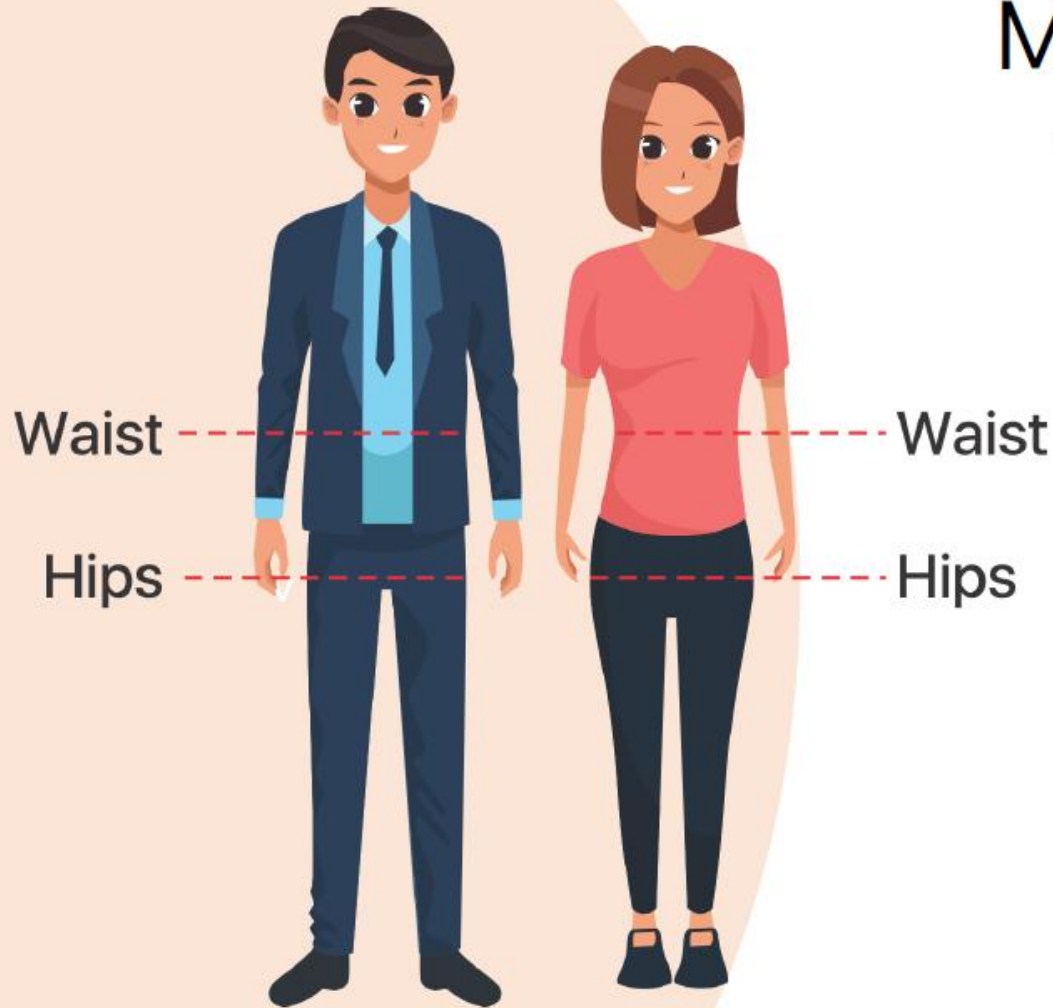


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## Measuring obesity

# Waist/hip ratio



Waist to the hip ratio is the ratio to the circumference of the waist to that of the hip, i.e. waist/hip.

A person with improper waist-to-hip ratio is at a greater risk for developing number of health-related problems, such as hypertension, type 2 diabetes, and high cholesterol.



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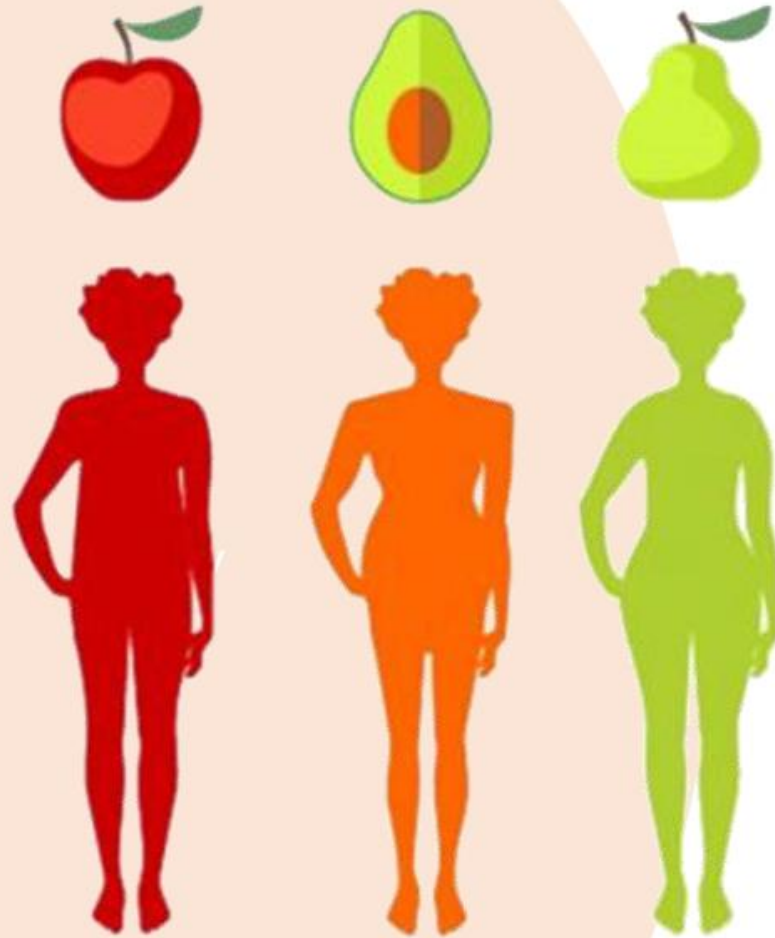


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# What is Waist to hip ratio



WOMEN	HEALTH RISK	BODY SHAPE
0.80 OR Below	Low	Pear
0.81 to 0.85	Moderate	Avocado
0.85+	High	Apple

MEN	HEALTH RISK	BODY SHAPE
0.95 or Below	Low	Pear
0.96 to 1.0	Moderate	Avocado
1.0+	High	Apple



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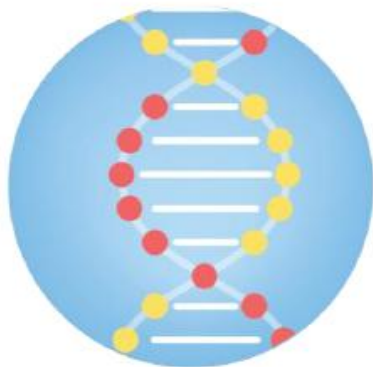


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# Causes of Obesity



Overeating



Genetics



Sedentary lifestyle



Insufficient sleep



Stress



Certain medications



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# Overweight & obesity

are emerging health problems in India



Overweight people in India have almost doubled  
in last **10 years.**



One third to one half of urban Indian men and  
women are suffering from obesity related  
problems.

According to National Family Health Survey 2005-06, overweight prevalence was found to be higher  
in urban areas than rural areas and lower in people who are involved in agriculture or manual work.



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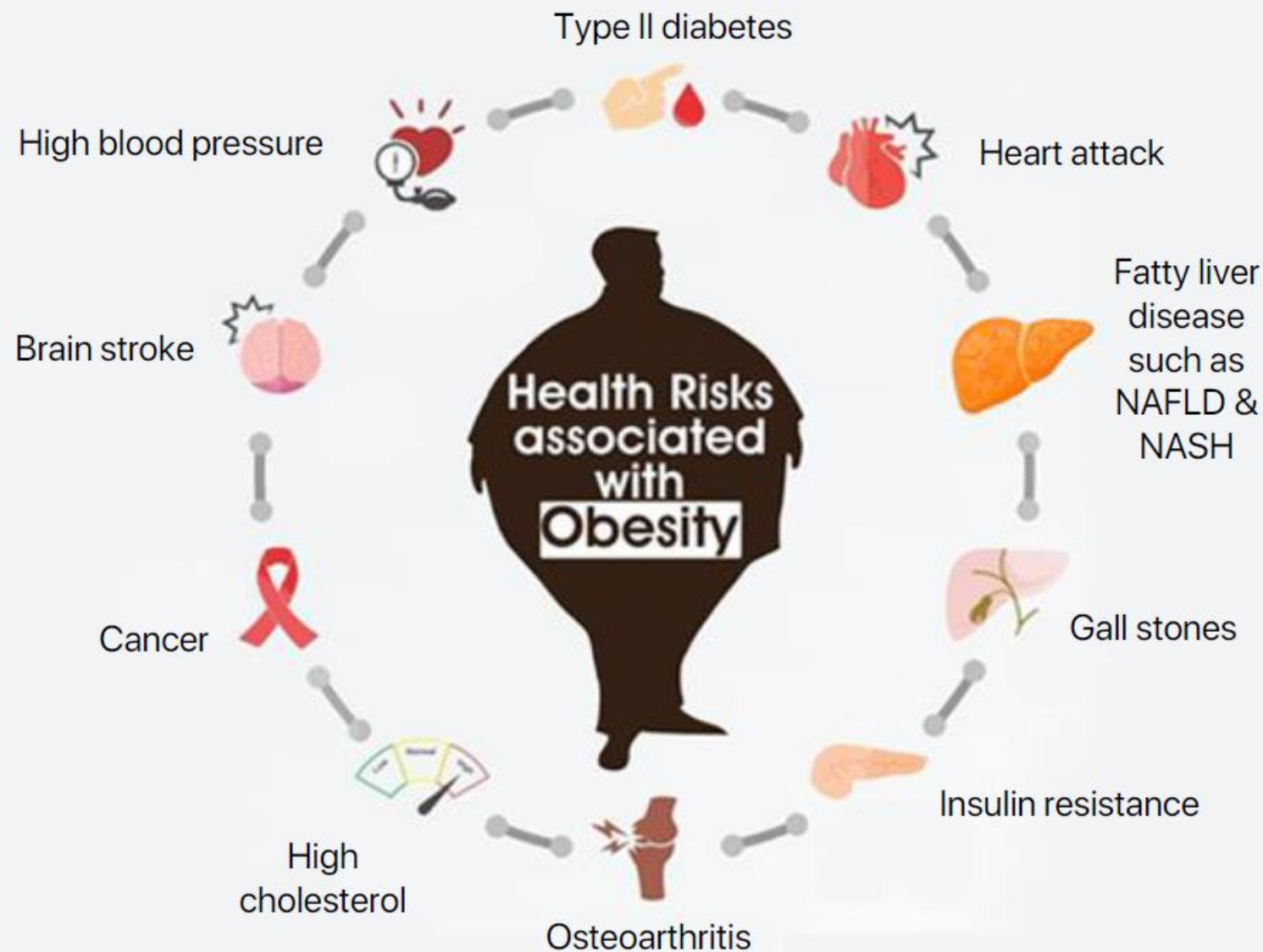


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# Obesity and risk of lifestyle disorders



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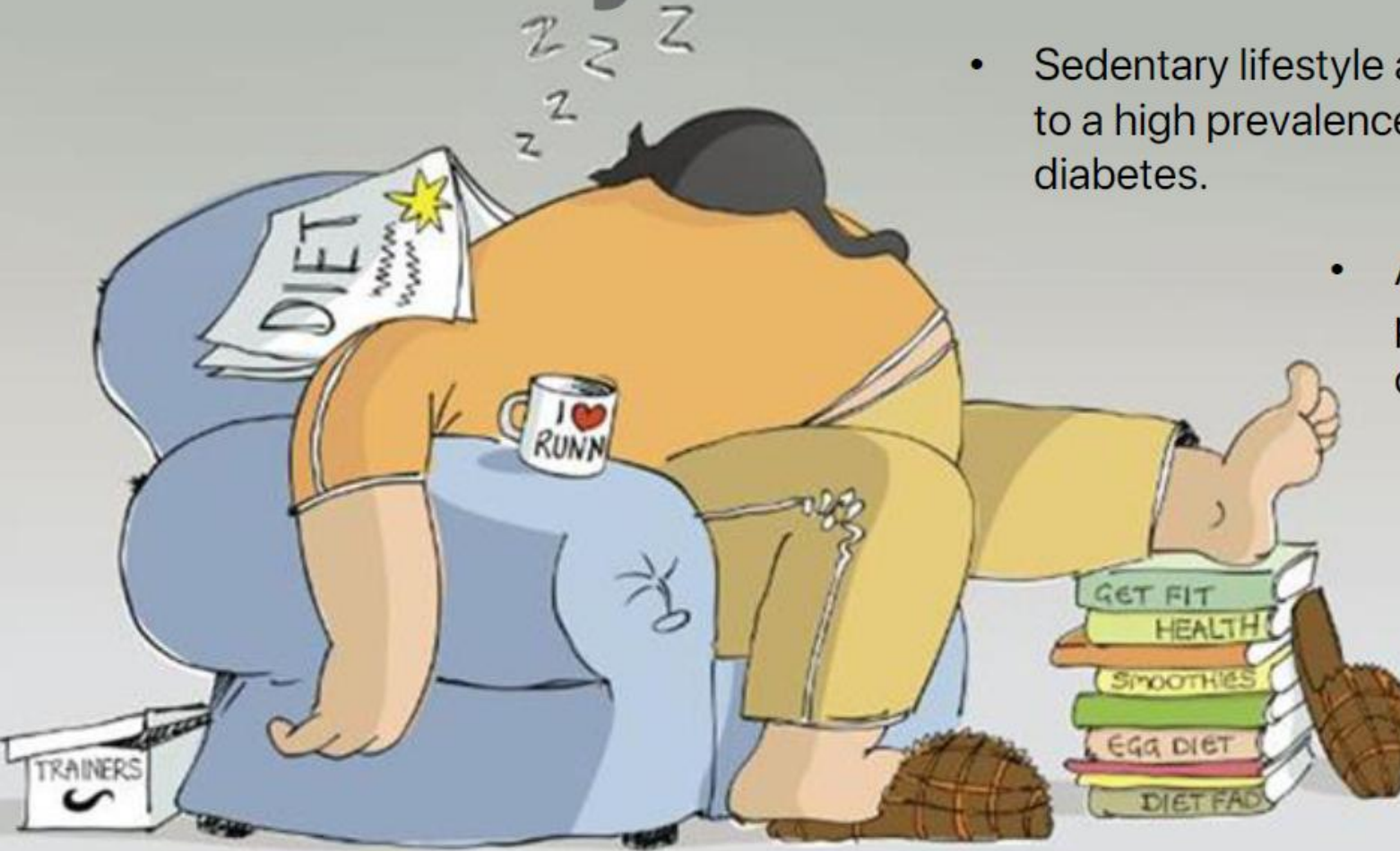
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# Fatty liver & Obesity



- Sedentary lifestyle and high calorie, sugar, and fat intake lead to a high prevalence of obesity, insulin resistance, and diabetes.
- After a certain threshold of weight gain a person can become resistant to insulin and develop type II diabetes
- NAFLD appears to develop when the liver, which normally helps to process and regulate the amount of sugar and fat in the blood, starts storing excess fat in its own liver cells.



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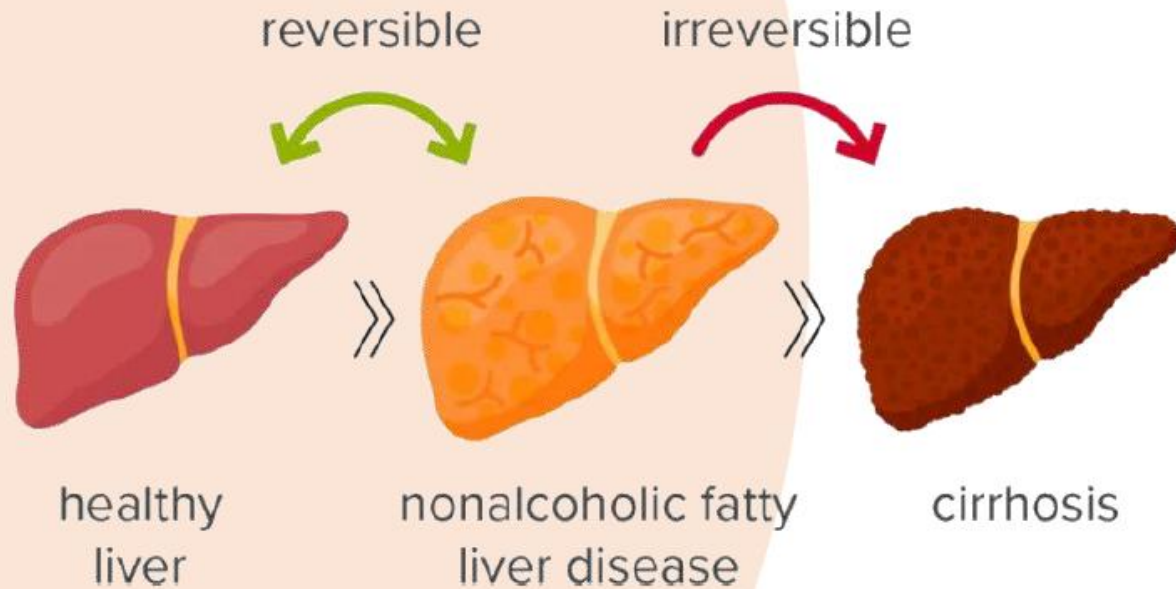


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# Fatty liver & Obesity



- About 25 to 40 percent of people with NAFLD progress to more severe form of the disease, called nonalcoholic steatohepatitis, or NASH.
- If the damage continues, it can lead to cirrhosis – permanent scarring of the liver, which progressively destroys the liver's ability to function.
- BMI correlates with the degree of liver damage, that is, the greater the BMI, the greater the liver damage.



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# Management of Obesity

Anyone who carries a lot of extra weight – especially the “central obesity” that collects around the belly – should be seeing a doctor regularly for:

- Advice on weight control
- Advice on potential health risks of obesity

Losing 5 to 10 percent of body weight may help lower chances of developing health problems related to overweight and obesity such as high blood pressure and high cholesterol levels, type II diabetes and NAFLD



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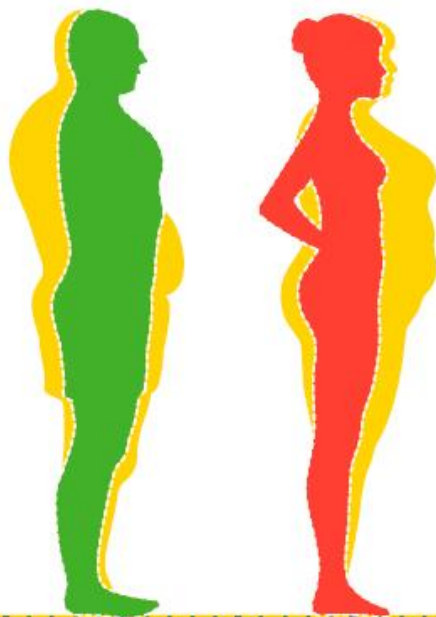
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# Obesity Prevention

Simple rules to stay in shape



Adopt new healthy habits

Balance your calorie intake

Control your weight gain



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# Adopt new healthy habits

GOOD HABITS

**Bike  
to Work**



**Balanced  
Diet**



**Swim**



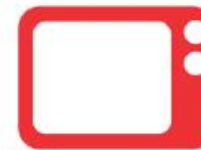
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**Drive  
to Work**



**Fast  
Food**



**Watch TV**

BAD HABITS



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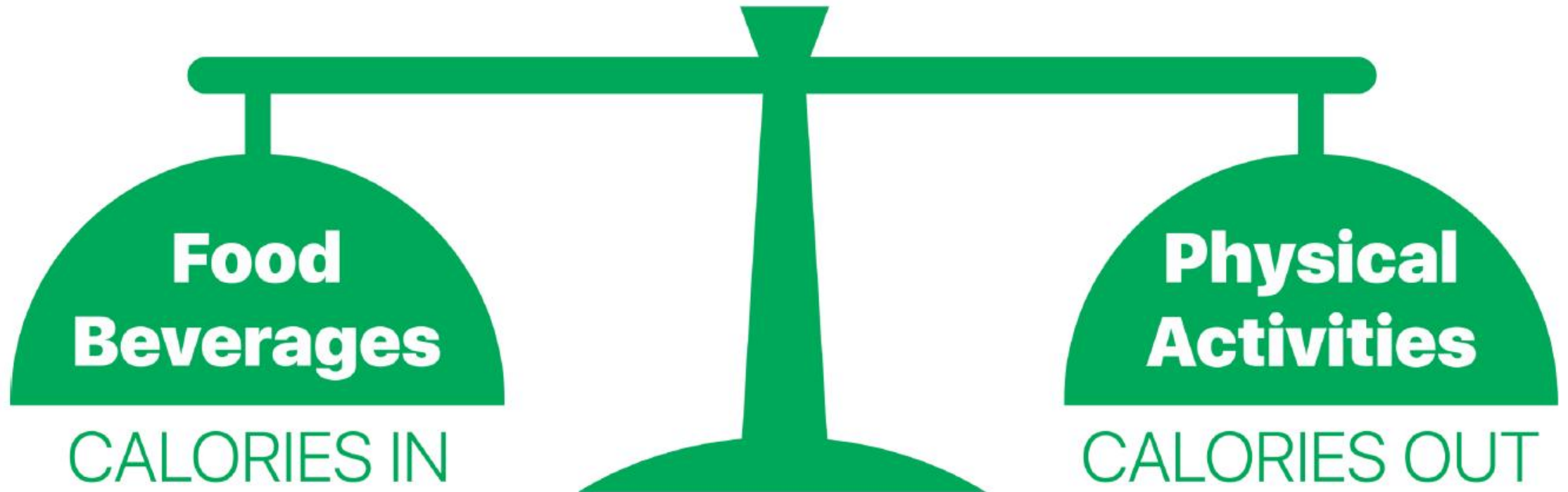
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# B Balance your calorie intake



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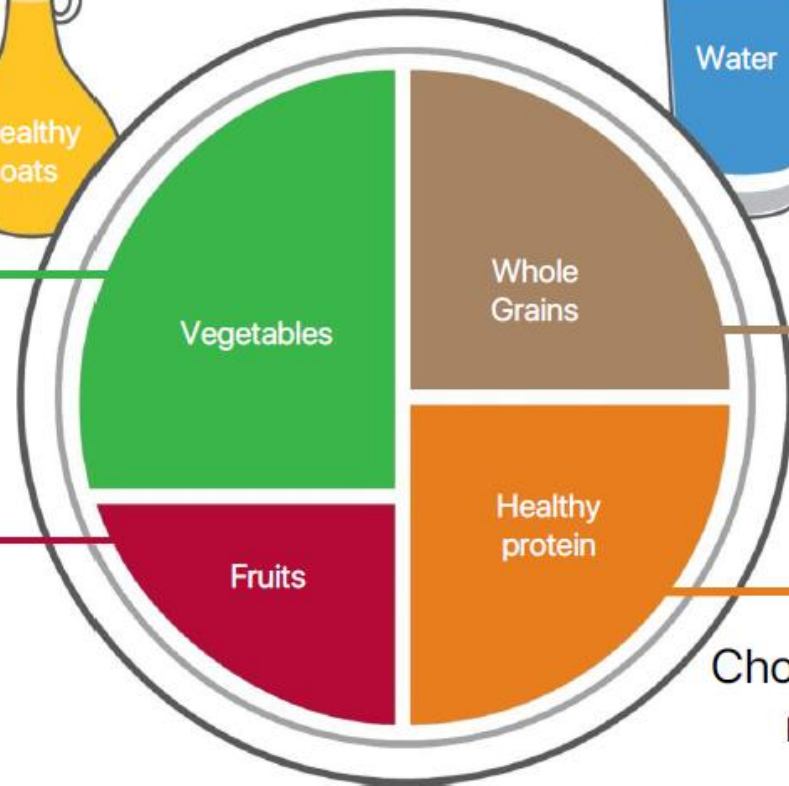


# Healthy Eating Plate

Use healthy oils (like olive and canola oil) for cooking, on salad, and at the table. Limit butter. Avoid trans-fat.

The more veggies- and the greater the variety- the better.

Eat plenty of fruits of all colors.



Drink water, tea or coffee (with little or no sugar). Limit milk/dairy (1-2 servings/day) and juice (1 small glass/day). Avoid sugary drinks.

Eat a variety of whole grains (like whole-wheat bread, whole grain pasta, and brown rice). Limit refined grains (like white rice and white bread).

Choose fish, poultry, beans, and nuts; limit red meat and cheese. Avoid processed meats.



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# Guidelines for exercises to prevent obesity



To stay fit, the World Health Organization recommends a weekly exercise practice of:

150 min. of **moderate**  
intensity exercise

or

75 min. of **high**  
intensity exercise

**Low-intensity:** walking, gardening  
**Moderate intensity:** swimming, slow jogging, yoga  
**High intensity:** tennis, cycling, running



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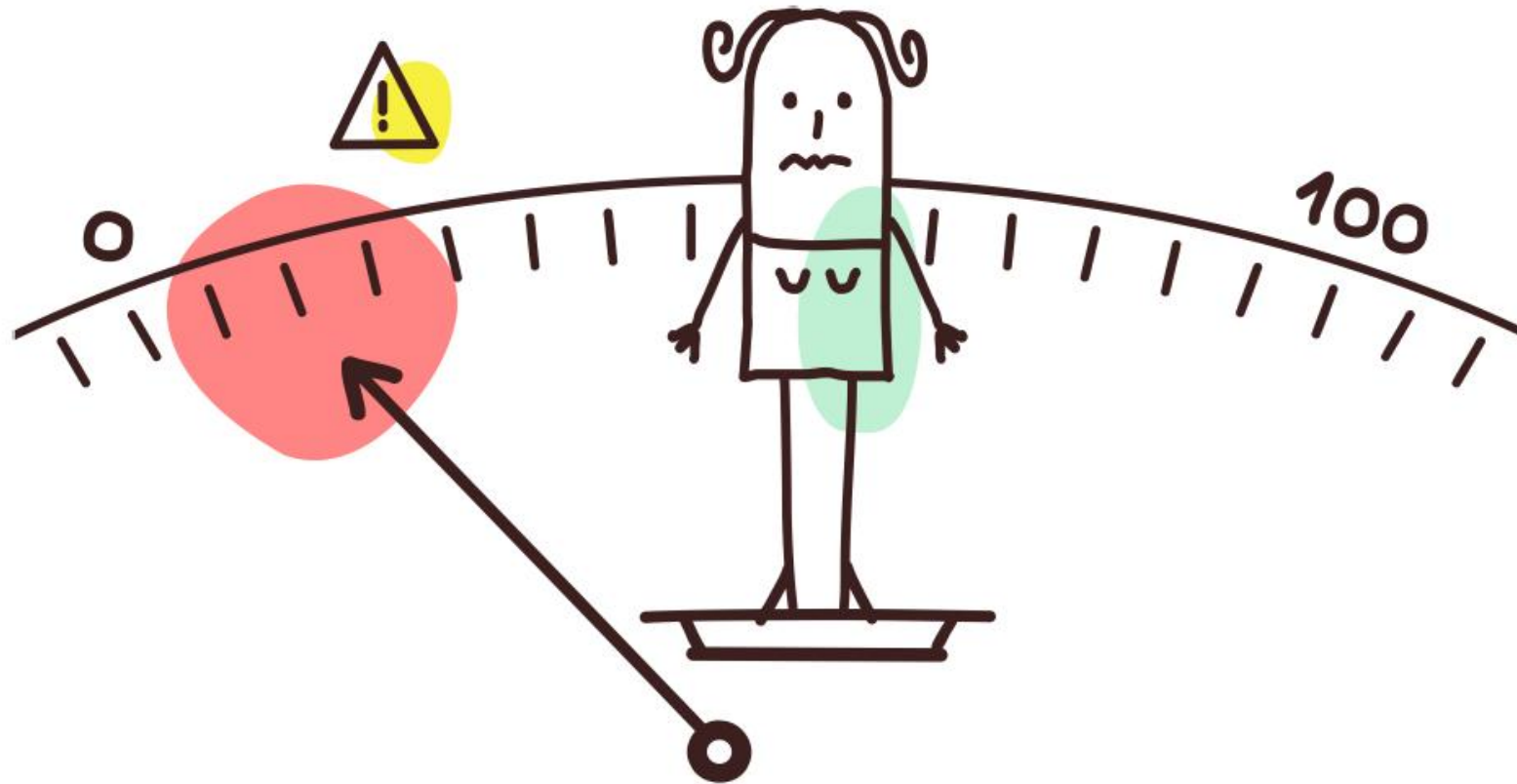
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# Control your weight gain



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# Tips to help you lose weight

These tips are designed to fit into your everyday life. Plan how and when you will start using them.



1  
Keep a meal routine  
-eat at roughly the same time each day



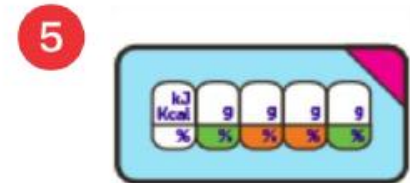
2  
Cut down on calories and look for low fat options



3  
Walk off the weight with 10,000 steps each day



4  
Pack a healthy snack- for example, fresh fruit instead of biscuits or crisps



5  
Look at the labels- pick options higher in fibre and lower in fat, salt and sugar



6  
Caution with your portions  
- don't heap food on your plate and think twice before having seconds



7  
Up on your feet  
- break up sitting time



8  
Think about your drinks  
- choose water or sugar free squashes, and limit fruit juice to one glass per day



9  
Focus on your food  
- don't eat on the go



10  
Don't forget your 5 a day  
-whether fresh, frozen or tinned



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