

Department of
Nutrition & Dietetics

Weight Management



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Overweight and Obesity

Overweight and obesity are defined as excessive body fat accumulation that may affect one's health. Body fat can be estimated using body mass index (BMI) and waist circumference.

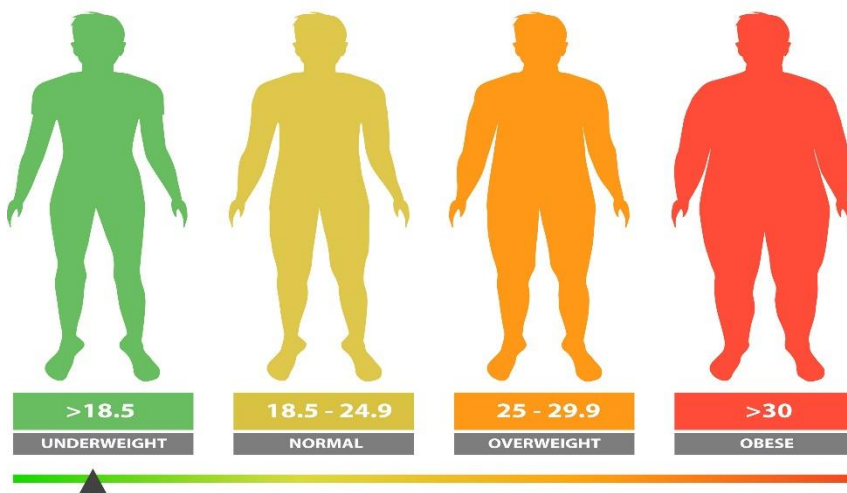
Body Mass Index (BMI)

Body mass index (BMI) estimates the amount of body fat, by using your weight and height to determine your weight category.

$$\text{Body Mass Index (BMI)} = \frac{\text{Weight (kg)}}{\text{Height (m)} \times \text{Height (m)}}$$

The World Health Organization (WHO) defines overweight and obesity as shown below.

BODY MASS INDEX



Asians generally have more body fat compared to Caucasians of the same BMI. Asians with a BMI of 23 are at a higher risk of developing diabetes and heart disease – refer to table on the next page.

Health risk	BMI (kg/m ²)
Risk of nutritional deficiency	<18.5
Low risk (healthy range)	18.5-22.9
Moderate risk	23-27.4
High risk	≥27.5

Waist Circumference

Waist circumference gives you an estimate of your visceral fat (fat that wraps around your abdominal organs). A larger waist circumference indicates that there is more fat stored in the abdomen. Above a certain waist circumference, the risk of developing cardiovascular disease and other obesity-related medical conditions is higher – refer to table below.

Waist Circumference (cm)	
Men	Women
>90	>80



Incorrect. Waist circumference is **NOT** the narrowest part of the waist.



Correct. Measure your waist at the level of the belly button.

Importance of Maintaining a Healthy Weight

Excess weight may increase the risk of many health conditions, including diabetes, heart disease, stroke, certain types of cancer, back and joint pains, sleep apnoea (difficulty breathing when sleeping) and depression. This can affect your daily living, social life and work performance.

Maintaining a healthy weight can help you to:

- ✓ Prevent or manage your health conditions
- ✓ Sleep better and feel more energised

Why do I want to lose weight?

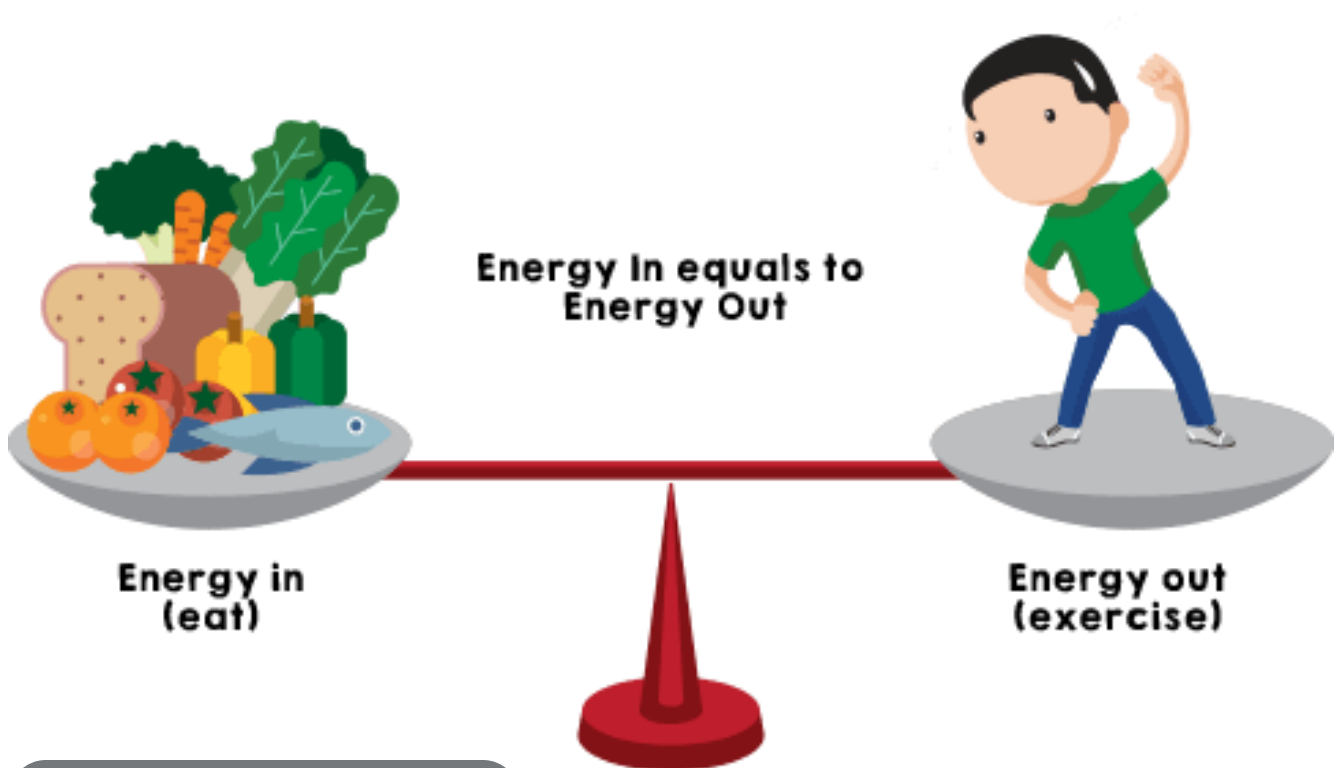
How to Lose Excess Body Fat and Weight?

Weight gain occurs when you eat (energy in) more than you burn off (energy out). To lose the excess body fat and weight, your body needs to burn more energy than you eat. You can achieve this through a **healthy and balanced diet** and **regular physical activity**.

Weight maintenance: energy in = energy out

Weight loss: energy in < energy out

Weight gain: energy in > energy out



1g carbohydrates = 4kcal
1g protein = 4kcal
1g fat = 9kcal
1g alcohol = 7kcal

Setting a SMART Goal

Losing weight does not happen overnight. Sustainable weight loss will require you to make permanent changes to your lifestyle and habits. Set goals and reach them safely for better health.

SMART goals are:

- Specific
- Measurable
- Attainable
- Realistic (e.g. 0.5-1kg weight loss per week)
- Time-bound

Here is an example of a SMART goal:

I will aim to lose 10% of my current weight over 6 months at a rate of 0.5-1kg per week.

Current weight: _____ kg (BMI: _____)

Goal weight: _____ kg in _____ months (BMI: _____)

Lifestyle Changes – A Healthy and Balanced Diet

Good nutrition is an important part of leading a healthy lifestyle. Combined with physical activity, a healthy and balanced diet can help you reach and maintain a healthy weight.

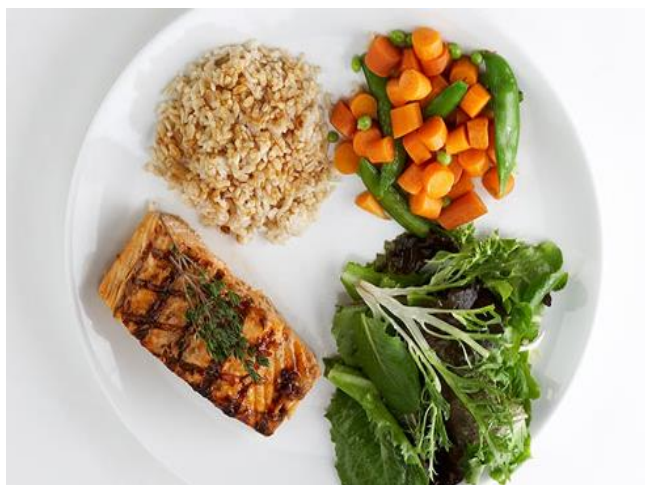
To reduce energy intake, it is recommended to:

- ✓ Reduce portion sizes
- ✓ Reduce fat intake
- ✓ Reduce sugar intake
- ✓ Limit alcohol intake
- ✓ Increase fibre intake

Reduce Portion Sizes

My Healthy Plate is a visual guide for creating balanced and healthy meals. It shows you what to eat in the right amounts for each meal, so that you can plan your portions accordingly.

- ✓ Fill half your plate with fruit and vegetables.
- ✓ Fill a quarter with wholegrains.
- ✓ Fill a quarter with meat and others.







Source: HealthHub

Reduce Fat Intake

Fat is high in calories (1g fat = 9kcal). Cutting back on fat is an effective way of reducing energy intake.






Here are some high fat foods to avoid (✗) and their lower fat alternatives (✓):

High fat foods ✗	Lower fat alternatives ✓
Regular/japanese-style mayonnaise	Light mayonnaise
Salad dressings (e.g. caesar and thousand island)	Salad dressings (e.g. balsamic vinegar)
 Fatty meat and processed meat (e.g. sausage, salami, bacon and ham)	 Lean meat
 Full fat/cream dairy products	 Low fat or skim dairy products
Potato chips, chocolates, cakes, kuehs, ice cream	Plain baked potato, low fat yoghurt, fruits

Healthy cooking tips:

- ✓ Use less fat (oil, butter, lard and ghee) when cooking.
- ✓ Choose lower fat cooking methods such as grilling, broiling, baking, steaming and microwaving.
- ✓ Use cooking spray or a non-stick pan.
- ✓ Remove the layer of oil/fat that rises to the top of soups and gravies.
- ✓ Reduce the frequency of deep frying foods (e.g. deep fry chicken wings once a week instead of every day).
- ✓ Reduce the amount of spreads (e.g. margarine and peanut butter) and salad dressings.

Healthier choices when eating out:

High fat foods ❌	Lower fat alternatives ✓
  	 
Nasi lemak with deep fried chicken wing, fried egg, ikan bilis and chilli 10 tsp oil	Nasi padang with ayam panggang (skinless), boiled egg and stir-fried vegetables 3 tsp oil



1 teaspoon (tsp) = 5g oil

High fat foods ❌



Laksa
15 tsp oil



Nasi biryani with masala chicken
12 tsp oil



Lower fat alternatives ✅



Sliced fish beehoon soup
(no milk)
1 tsp oil



Plain white rice with tandoori
chicken thigh, skin removed
3 tsp oil

Tips to reduce fat intake when eating out:








- ✓ Trim off visible fat and skin of meat.
- ✓ Choose unflavoured white/brown rice over flavoured rice (e.g. chicken rice, coconut rice and biryani rice).
- ✓ Choose noodles in clear soup over noodles in gravy or fried/dry noodles.
- ✓ Avoid adding fried shallots, sauces and gravies.

Reduce Sugar Intake









Foods and beverages with added sugars contribute extra calories to your diet without providing valuable nutrients. It is recommended to keep sugar intake to **less than 10% of your daily energy intake**.

That is approximately 10 teaspoons of sugar (based on a 2000kcal per day intake). A further reduction to 5 teaspoons of sugar per day can bring about additional health benefits such as weight loss.

Here are some high sugar foods to avoid (✗) and their lower sugar alternatives (✓):

High sugar foods ✗	Lower sugar alternatives ✓
 White sugar, brown sugar, rock sugar, glucose, gula melaka, sugar syrup	 Cinnamon powder, natural flavours (e.g. pandan), artificial sweeteners
 Condensed milk	 Low fat evaporated milk
 Sweets/lollies	 Sugar-free sweets/lollies
 Canned/dried fruits	 Fresh/frozen fruits

Here are some high sugar beverages to avoid (✗) and their lower sugar alternatives (✓):

High sugar beverages ✗	Lower sugar alternatives ✓
 <p>Coffee/tea with condensed milk 4 tsp sugar</p>	 <p>Coffee/tea without milk and sugar 0 tsp sugar</p>
 <p>Milk tea with pearls 10 tsp sugar</p>	 <p>Oolong tea without milk and sugar 0 tsp sugar</p>
 <p>Green tea frappuccino 7 tsp sugar</p>	 <p>Green tea without milk and sugar 0 tsp sugar</p>
 <p>Soya bean milk with syrup 4 tsp sugar</p>	 <p>Soya bean milk without syrup 1 tsp sugar</p>



1 teaspoon (tsp) = 5g sugar

High sugar beverages ❌

Lower sugar alternatives ✅



Regular cola-based soft drink or
energy drink
7 tsp sugar



Diet/sugar-free cola-based soft
drink or energy drink
0 tsp sugar



Malted drink with
condensed milk
4 tsp sugar



Cocoa drink without milk
and sugar
0 tsp sugar

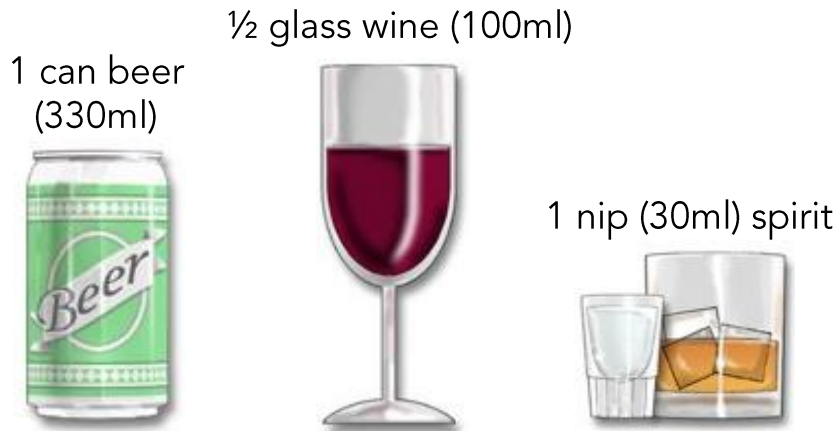
Tips to reduce sugar intake:

- ✓ Choose diet/sugar-free/no sugar, reduced/less sugar or unsweetened/no added sugar beverages.
- ✓ When ordering beverages, ask for "siu dai/kosong", "25%/0% sugar" or "less/no syrup".
- ✓ Plain water is best. Enjoy water infused with fruits (e.g. lemon), rose or mint leaves.



Limit Alcohol Intake

Alcohol is high in calories (1g alcohol = 7kcal). It is recommended to **avoid alcohol** because it provides empty calories with no nutritional benefits. However, **if you do drink alcohol, remember to drink in moderation**. Women should drink no more than one standard drink per day and men should drink no more than two.



Examples of one standard drink

Tips to help you drink in moderation:

- ✓ Drink water in between alcoholic drinks. This will help slow down your drinking.
- ✓ Use low/zero calorie mixers (e.g. diet soft drinks and soda water) to help reduce added calories.
- ✓ Choose light or non-alcoholic beers/wines/spirits with less or no alcohol content.
- ✓ Instead of drinking, consider other social activities such as exercising with friends.

Increase Fibre Intake

High fibre foods take a longer time to digest. This will make you feel full for a longer period of time while consuming lesser calories.

Tips to increase fibre intake:













- ✓ Aim for two servings of fruits and two servings of vegetables daily.
- ✓ Choose wholegrains (e.g. brown rice, oats and whole meal bread).
- ✓ Incorporate plant-based proteins (e.g. beans and lentils) during cooking.
- ✓ Eat healthy snacks (e.g. nuts and seeds) in moderation.



Healthier Snacks

Some snacks can be high in fat, high in sugar, or both. This makes them high in calories, and you will need to walk more steps to burn these calories.

Here are some high calorie snacks to avoid (✗) and their lower calorie alternatives (✓):

High calorie snacks✗	Lower calorie alternatives✓
<div></div> <div>1 packet of potato chips (80g)  = 8448 steps</div>	<div></div> <div>1 cup of corn kernels without butter (164g)  = 3916 steps</div>
<div></div> <div>1 chocolate bar (50g)  = 6006 steps</div>	<div></div> <div>1 slice of fruit (75g)  = 550 steps</div>
<div></div> <div>1 piece of chocolate cake (55g)  = 4400 steps</div>	<div></div> <div>1 slice of multigrain bread (32g) + 1 tsp margarine  = 2545 steps</div>

High calorie snacks ❌

Lower calorie alternatives ✅



1 chicken curry puff (115g)
👣 = 7463 steps



1 bowl of soya bean curd, with
syrup (310g)
👣 = 4024 steps



1 wafer ice cream (110g)
👣 = 8433 steps



banana fritters (65g)
👣 = 4312 steps



1 piece of kueh/cookie
👣 = 4488 steps



1 piece of plain thosai (45g)
👣 = 2139 steps



1 bowl of soya bean curd, no
syrup (310g)
👣 = 1460 steps



1 small tub of low fat natural
yoghurt (150g)
👣 = 1947 steps



1 banana (118g)
👣 = 1474 steps



3 pieces of kueh bahulu/
multigrain crackers (30g)
👣 = 3214 steps



Other Healthy Eating Tips

1. Have regular meals at fixed timings

- Missing a meal makes you hungry and therefore you are more likely to binge on unhealthy snacks or eat more during the next meal.



2. Label reading

- Compare similar foods, and choose a brand with lower calories per 100g.
- Choose food products and eateries with the Healthier Choice Symbol.

A close-up of a hand pointing to a nutrition label on a food product. The label is divided into sections for 'Nutrition' and 'Vitamins/Minerals'. The 'Nutrition' section lists typical values for 100ml and 250ml, along with %GDA* for an adult. The 'Vitamins/Minerals' section lists values for 100ml and 100g.

	Typical values	100ml contains	250ml contains	%GDA* adult
Energy	199kJ	47kcal	120kcal	6% 2000kcal
Protein	0.5g	10.5g	26.3g	1.3g 29%
Carbohydrate	10.5g	10.5g	26.3g	29%
of which sugars	trace	trace	trace	90g 70g
Fat	trace	trace	trace	90g 70g
of which saturates	trace	trace	trace	90g 70g
Fibre	trace	trace	trace	90g 70g
Sodium	trace	trace	trace	90g 70g
Salt equivalent	trace	trace	trace	90g 70g

*Guideline daily amounts

	100ml contains	100g contains
Vitamins/Minerals	100ml contains	100g contains
	100ml contains	100g contains
	100ml contains	100g contains



Eat All Foods In Moderation

3. Mindful eating

- Listen to your body. Only eat when you feel hungry. Stop eating when you are full.
- Focus on eating and avoid any distractions.
- Chew your food thoroughly and avoid eating too fast. It takes your brain up to 20 minutes to realise you are full.



Lifestyle Changes – Physical Activity

Benefits of physical activity:

- ✓ Helps you manage your weight
- ✓ Reduces your body fat
- ✓ Lowers your risk of chronic diseases (e.g. diabetes, heart diseases and stroke)
- ✓ Reduces blood glucose and cholesterol levels
- ✓ Relieves stress
- ✓ Helps you sleep better



Aim for moderate-intensity physical activity for at least 30 minutes per day, 5 days per week.

Here's how you can incorporate physical activity into your daily routine:

- ✓ Get off the bus or train one stop earlier and walk the rest of the way.
- ✓ Take the stairs instead of the lift/elevator.
- ✓ Start small and gradually increase the intensity of your physical activity over time (e.g. start with one flight of stairs per day for the first week and increase by one flight each week).

Consult your doctor to check if you are medically fit to perform these physical activities.

Summary

Excess weight may increase the risk of many health conditions. Weight gain occurs when you eat (energy in) more than you burn off (energy out). To shed the excess body fat and weight, your body needs to burn more energy than you eat. You can achieve this through a **healthy and balanced diet** and **regular physical activity**.

To reduce energy intake, it is recommended to:

- ✓ Reduce portion sizes
- ✓ Reduce fat intake
- ✓ Reduce sugar intake
- ✓ Limit alcohol intake
- ✓ Increase fibre intake

Strategies

Meal Plan

Breakfast

Morning tea

Lunch

Afternoon tea

Dinner

Supper

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Department of Nutrition and Dietetics
TTSH Medical Centre, Level B2

Contact:
6357 7000 (Central Hotline)



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