

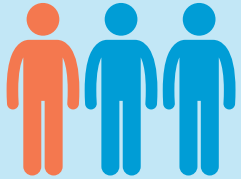
# What is diabetes?

Diabetes is a **condition** where your **body cannot manage sugar properly**, resulting in **too much sugar in your blood**

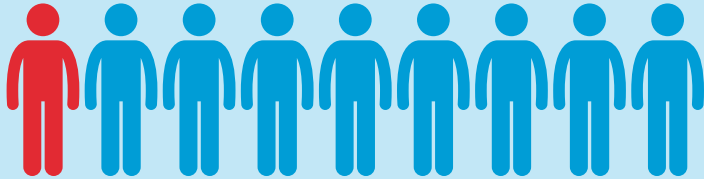
## What is pre-diabetes?

Pre-diabetes is when your **blood sugar levels are higher than normal** but **not high enough to be diagnosed with diabetes**

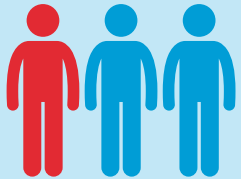
# Diabetes is a **common** and **serious condition** in Singapore!



**1 in 3** Singaporeans is at risk of developing diabetes



**1 in 9** Singaporeans has diabetes



**1 in 3** individuals with diabetes does not know he or she has it



**1 in 3** individuals diagnosed with diabetes continues to have high blood sugar levels



**2 in 3** individuals with newly diagnosed kidney failure have diabetes



**1 in 3** individuals with diabetes has eye disease



**Every day**, about **4** individuals with diabetes **undergo amputations**

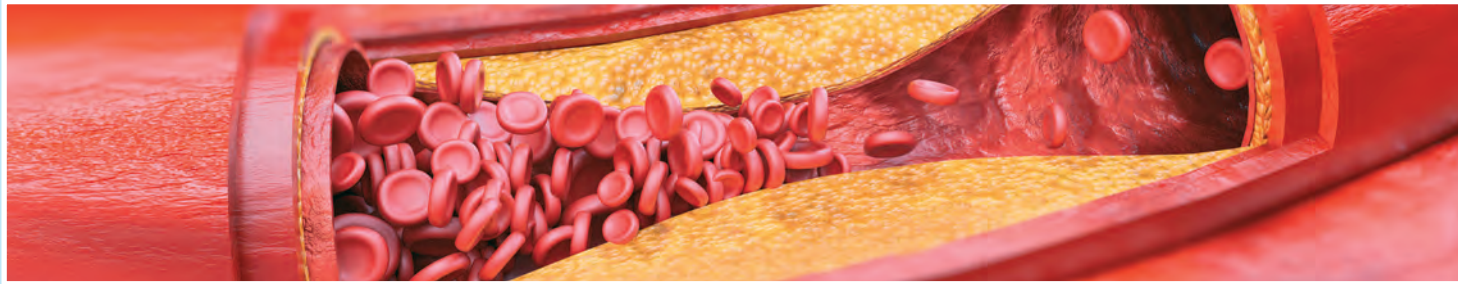
# Diabetes can cause complications for your body

High blood sugar

High blood pressure

High blood cholesterol

**Blood vessel damage**



**Brain**

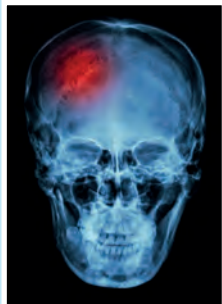
**Eyes**

**Teeth**

**Heart**

**Kidneys**

**Feet**



Stroke



Blindness



Tooth decay,  
gum disease



Heart attack



Kidney failure



Amputation

# What increases your risk of **developing pre-diabetes** and **type 2 diabetes**



**Family member(s)** known to have diabetes



**History of diabetes** during pregnancy



**40 years of age** and above



**Body Mass Index (BMI)** of **23.0 kg/m<sup>2</sup>** or higher



**Inactive** (sedentary) lifestyle



**Unhealthy** eating habits



# Blood sugar levels spike when you eat food rich in sugar and/or refined carbohydrates



White rice



Noodles



Prata



White bread

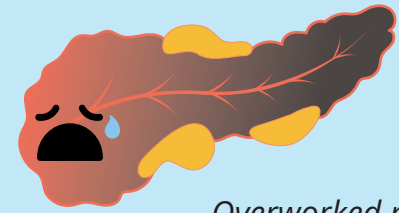


Kueh



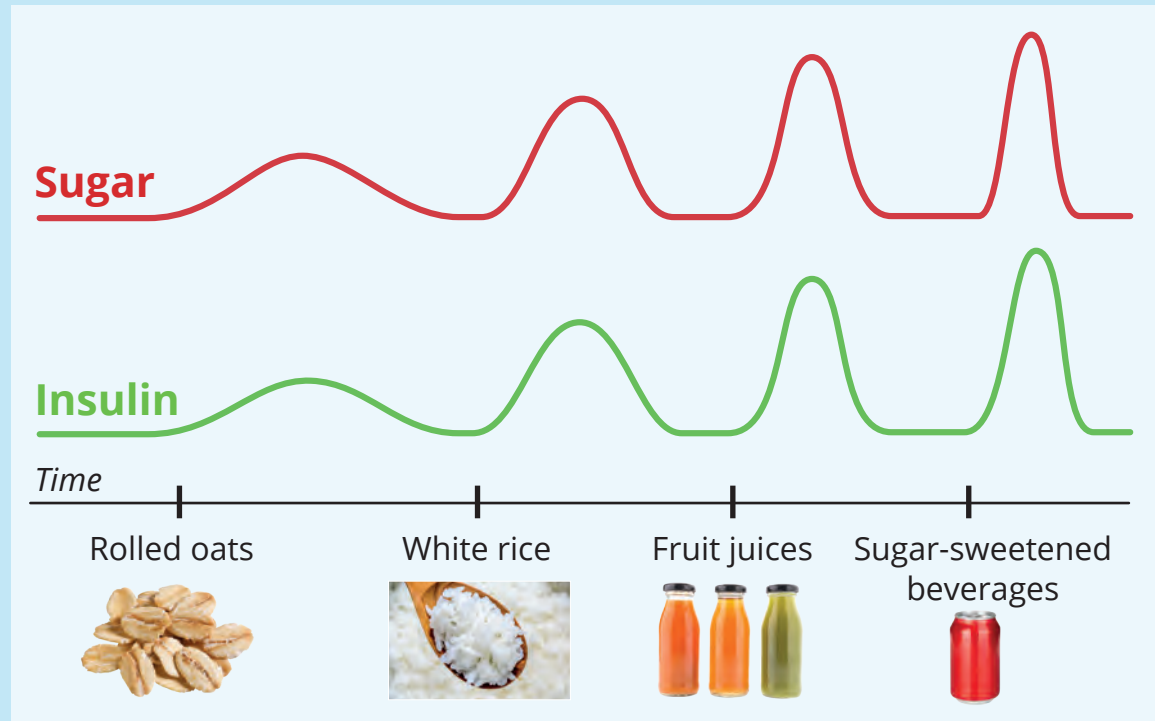
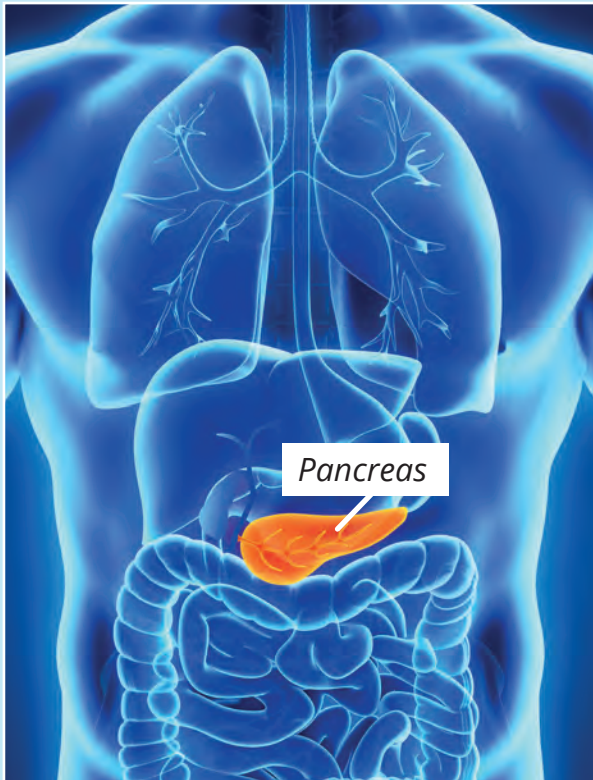
Fruit juices and sugar-sweetened beverages

# High blood sugar levels cause your **pancreas** (insulin\* factory) to work harder



*Overworked pancreas*

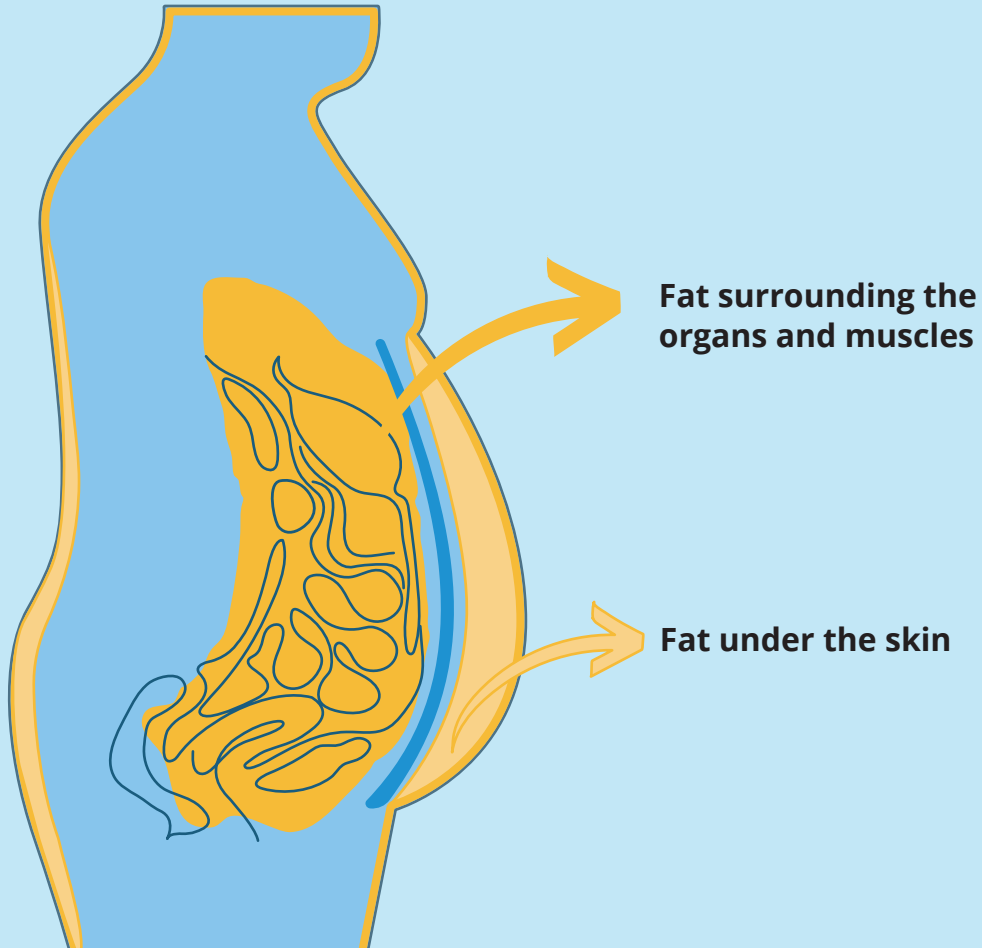
Frequent **intake of sugar** and refined carbohydrates causes stress, fatigue and eventual **damage to** your constantly overworked **pancreas**



*\*Insulin is a hormone that helps to control the blood sugar level in your body*

# Excess (unused) sugar in your body is stored as fat

Where is the fat located?



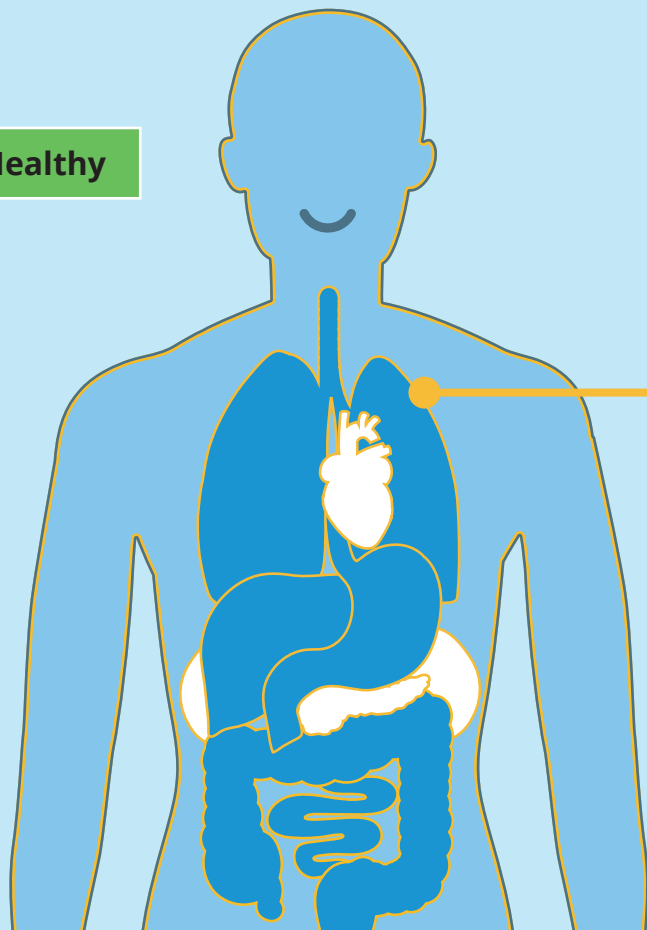
Apple-shaped body

## Consequences of excess fat in the body

- High blood sugar
- High blood pressure
- High blood cholesterol

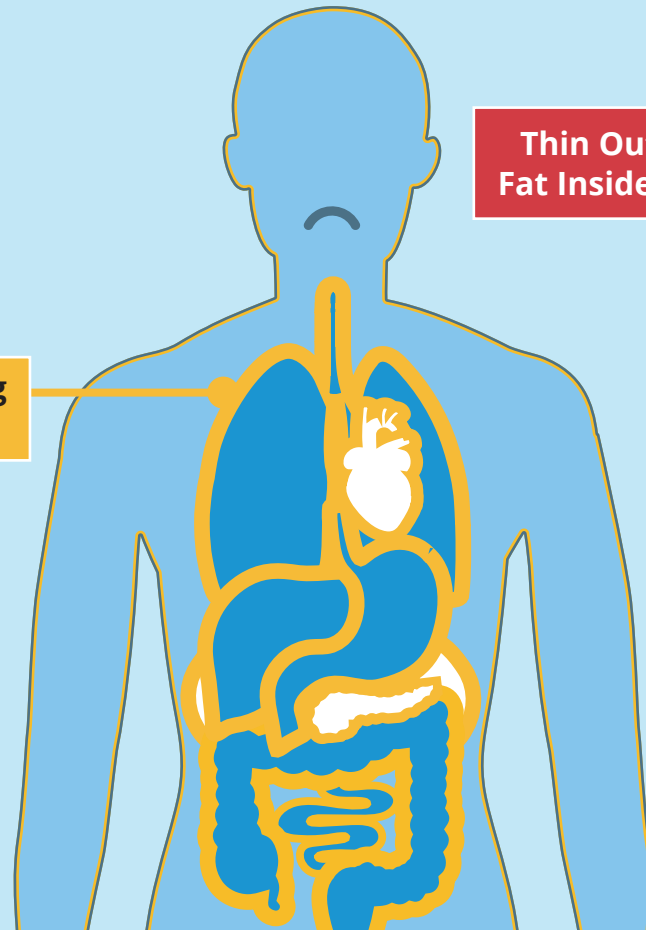
# There may be **excess fat** in your body **even if you look thin**

Healthy



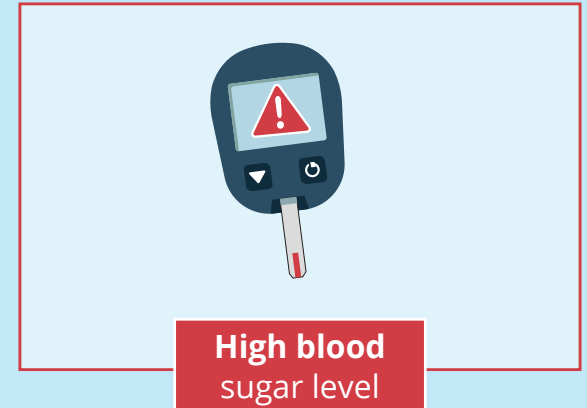
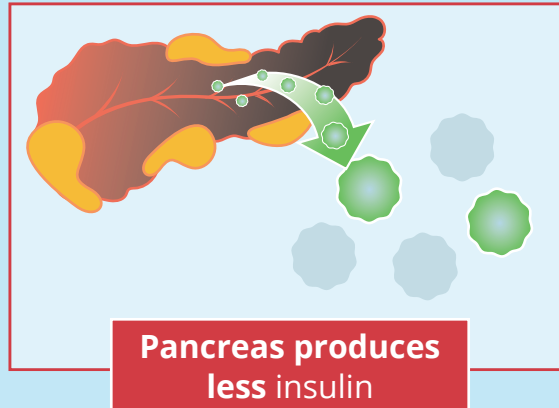
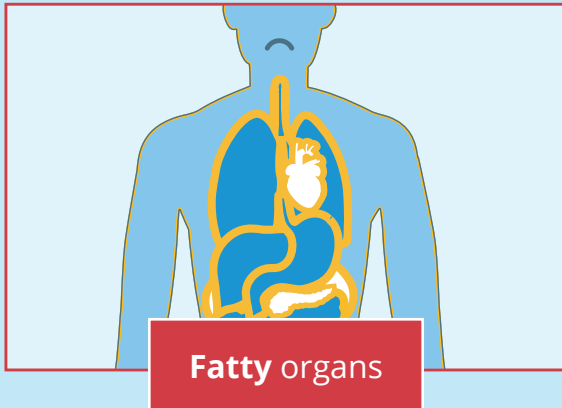
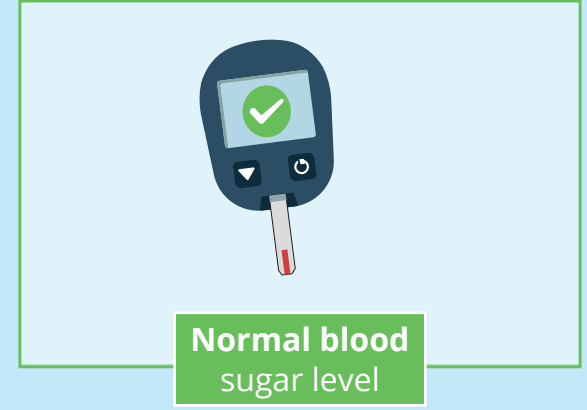
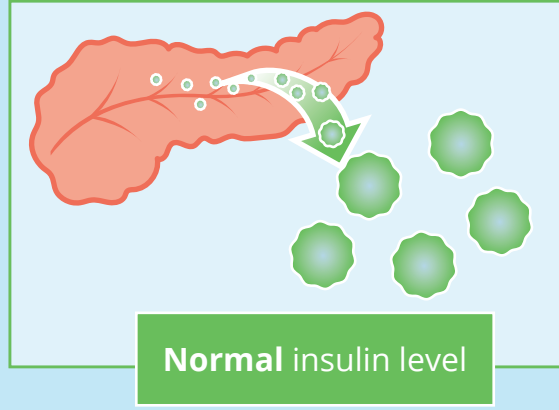
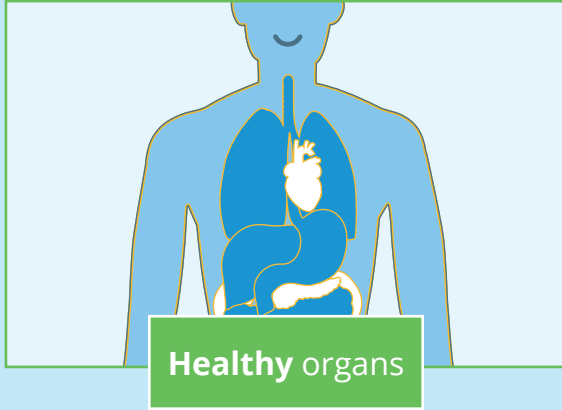
Fat surrounding organs

Thin Outside,  
Fat Inside (TOFI)



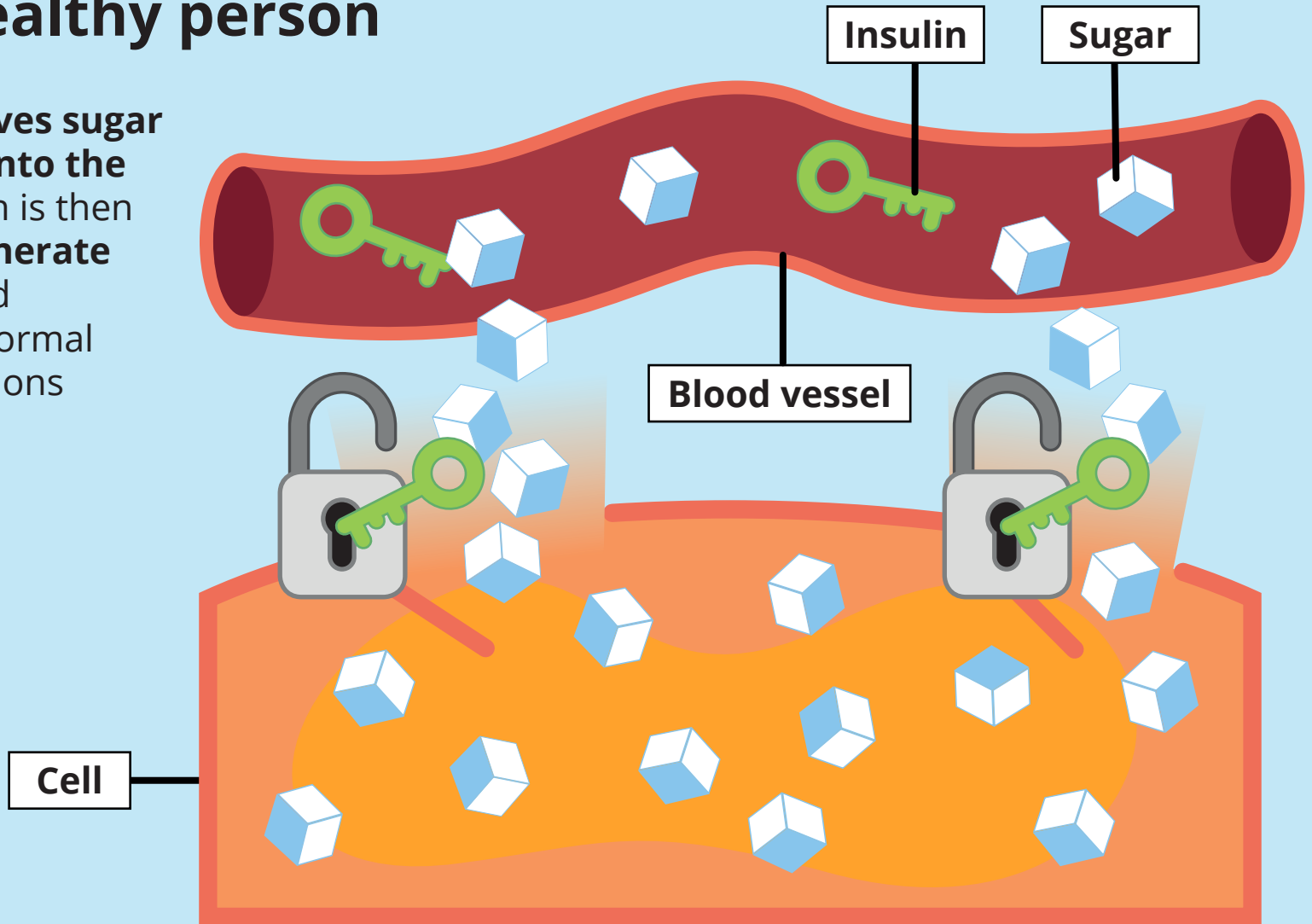


# Excess internal fat can cause damage



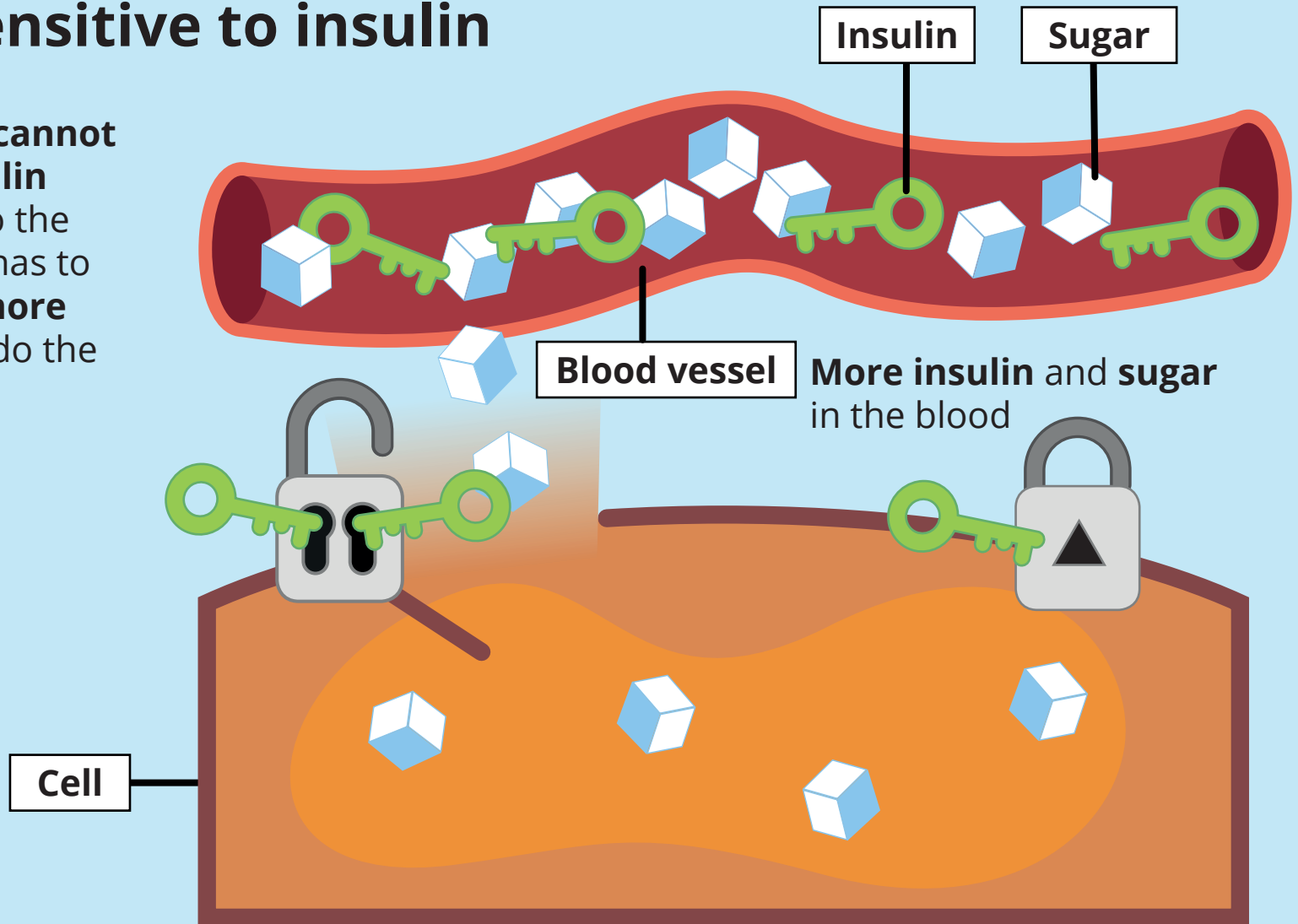
# How insulin works in a healthy person

Insulin **moves sugar (glucose) into the cells**, which is then used to **generate energy** and maintain normal body functions

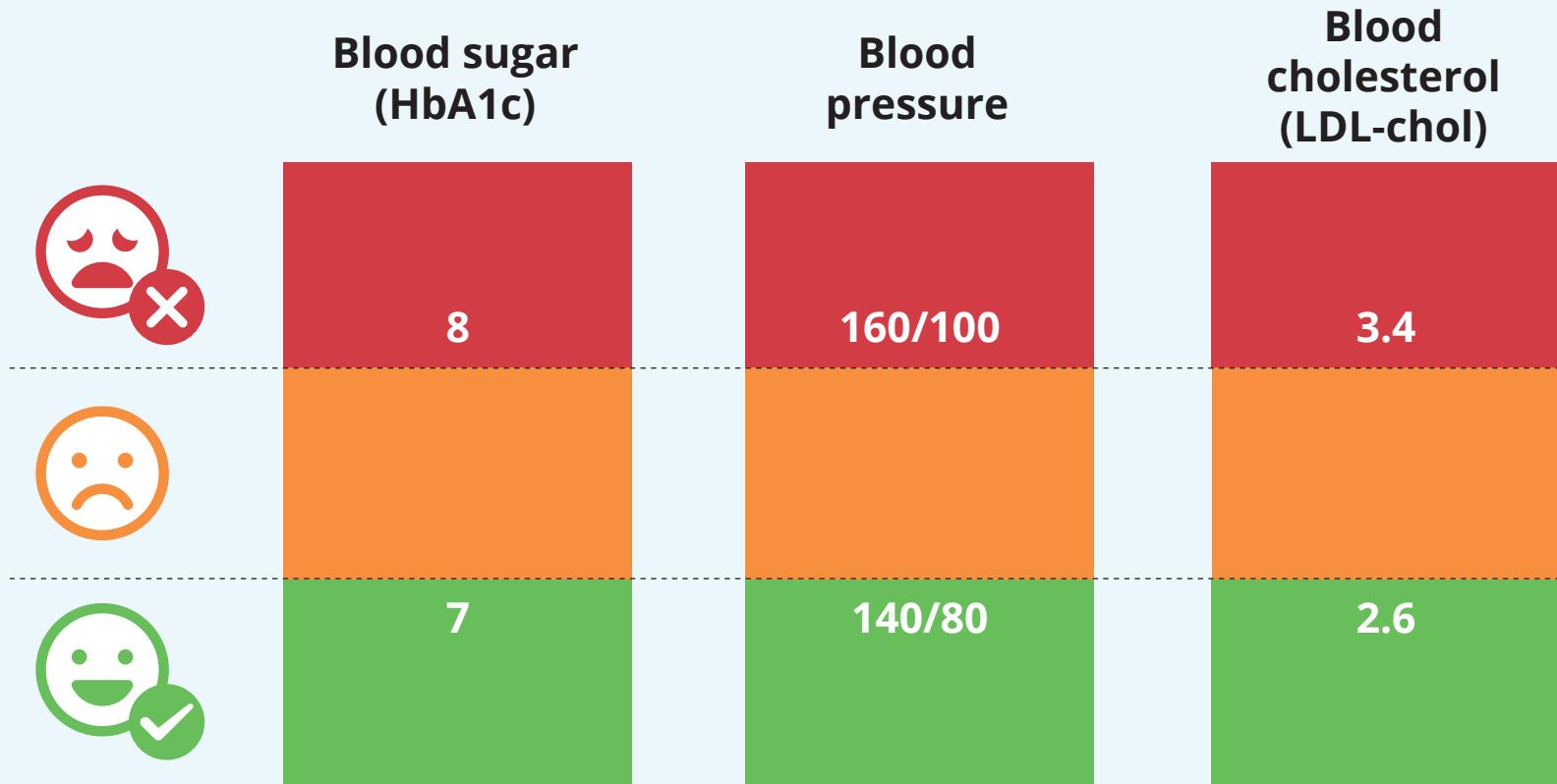


# Excess **internal fat** makes cells **less sensitive to insulin**

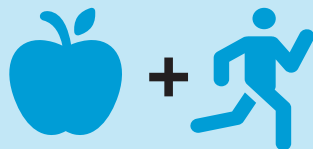
Body cells **cannot sense insulin** properly so the **pancreas** has to **produce more insulin** to do the same work



# Manage pre-diabetes and type 2 diabetes **well**

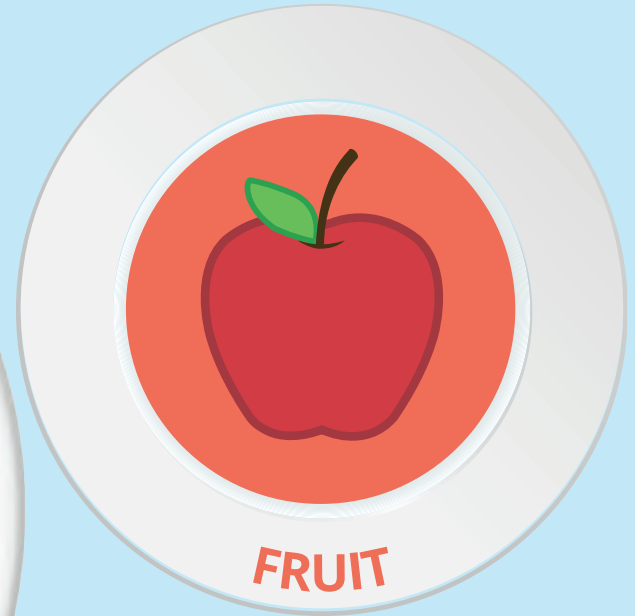
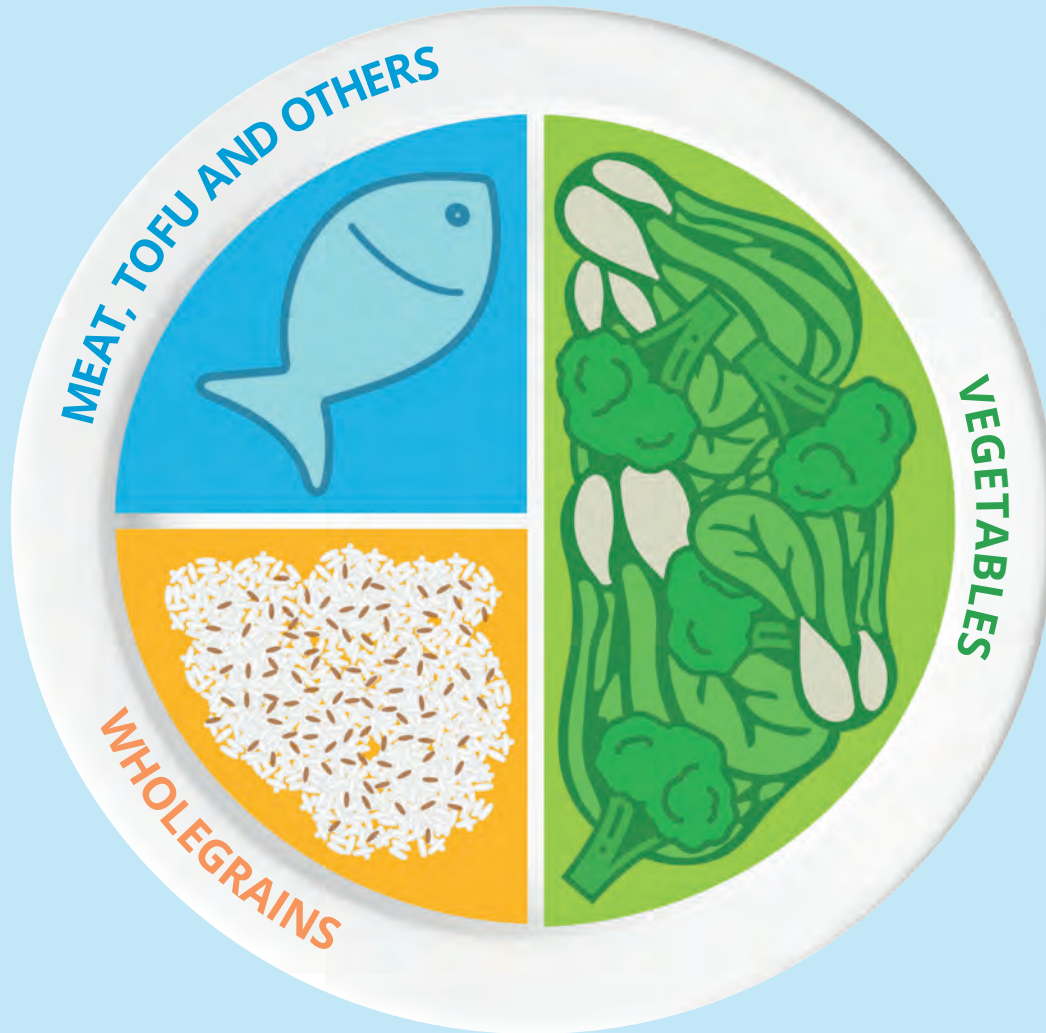


Speak with your care team as your targets may vary






**Healthy eating habits** and regular **physical activity and exercise** can help you achieve target levels of blood sugar, blood pressure and cholesterol

# My Healthy Plate

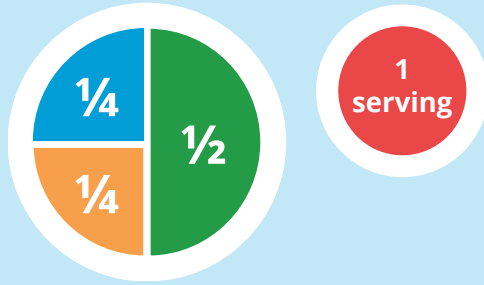


**Eat 2 servings  
of fruit daily,** by  
having fruit with or in  
between meals

 Choose water  Use healthier oils  Be active



# My Healthy Plate



## **¼ plate | Wholegrains**

e.g. brown rice, multigrain bread, rolled oats

## **¼ plate | Meat, tofu and others**

e.g. chicken breast, fish, tofu, legumes, lean meat

## **½ plate | Vegetables**

e.g. leafy greens, eggplant, mushrooms

## **1 serving | Fruit**

e.g. 1 medium apple, 1 handful of blueberries,  
1 wedge of papaya

**Complete your meal with 1 serving of fruit**

# My Healthy Plate: Chinese



Choose water






Use healthier oils



Be active

# My Healthy Plate: Malay



 Choose water  Use healthier oils  Be active

# My Healthy Plate: Indian



Choose water



Use healthier oils






Be active



# My Healthy Plate: Western



 Choose water  Use healthier oils  Be active



# Regular physical activity benefits you in many ways



## Improves productivity

Boosts attention, memory and creativity



## Improves overall mood

Reduces stress and improves mental health



## Increases health benefits

Reduces risk of colon cancer, heart diseases, diabetes and high blood pressure



## Increases fitness levels

Improves strength and stamina

# In summary

**1/2** the usual  
portion of  
carbohydrates  
(e.g. rice)

**2x** Vegetables

**3x** Exercise per  
week (at least  
150 minutes)



# My first small step towards My Healthy Plate



Bak chor mee



Have **more vegetables**



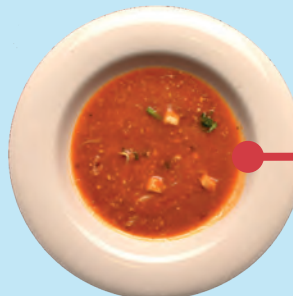
Nasi briyani



Have **less rice or noodles**



Mee rebus



Have less **gravy**;  
**leave** the gravy behind

# My first small step towards healthier drink choices



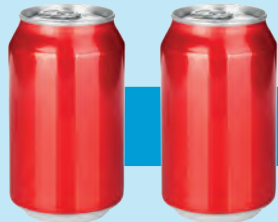
**Kopi**



**Kopi C siew dai**



**Kopi O kosong**



**Sugary drinks**



**1 can, 1 water**



**Water**



# My first small step towards getting active everyday

Make it a habit to do a few of these activities throughout your day



**Take the stairs** instead of the lift



**Brisk walk** for 10 minutes



**Walk around** every hour



Take **10,000 steps** daily



**Get off one bus stop earlier** and walk

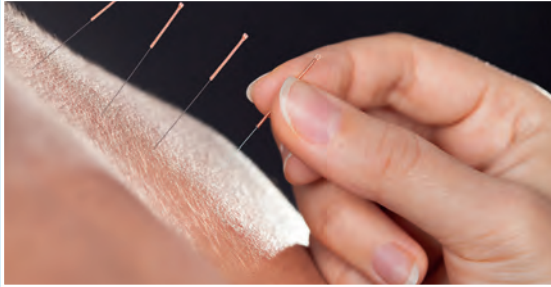


Exercise with **family** and **friends**



# Traditional and Complementary Medicine (T&CM)

## Examples of T&CM treatments



Traditional Chinese Medicine and acupuncture

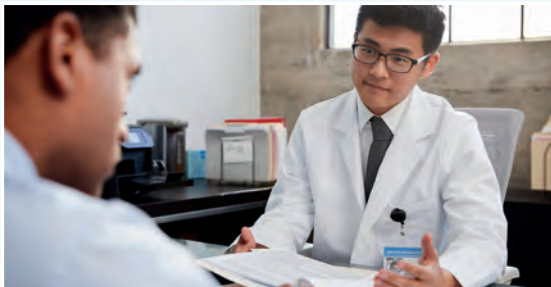


Traditional medicines like Ayurveda



Herbal medicines and supplements

## What I need to do if I am on T&CM



**Continue with Western medicine** unless otherwise advised by your doctor



Seek **advice from a T&CM practitioner** before taking herbal medicines or supplements



Continue to **monitor your blood sugar** as advised

# Traditional and Complementary Medicine (T&CM)

What I need to know

## **Traditional and Complementary Medicine (T&CM)**

In Singapore, Traditional Medicine (TM) typically refers to Traditional Chinese Medicine (TCM), Traditional Malay Medicine (TMM) and Traditional Indian Medicine (TIM), while Complementary Medicine (CM) refers to all other forms of medicine that are non-mainstream, e.g. chiropractic, osteopathy, aromatherapy, etc

Scientific studies on effectiveness of T&CM for diabetes and its complications are inconclusive or insufficient

*Only Traditional Chinese Medicine practitioners are licensed in Singapore*

List of TCM practitioners

[www.tcm.gov.sg](http://www.tcm.gov.sg)



# Caregiver

# Am I experiencing caregiver stress?

## Common signs and symptoms



Finding **no meaning**  
in caregiving



Loss of **appetite**



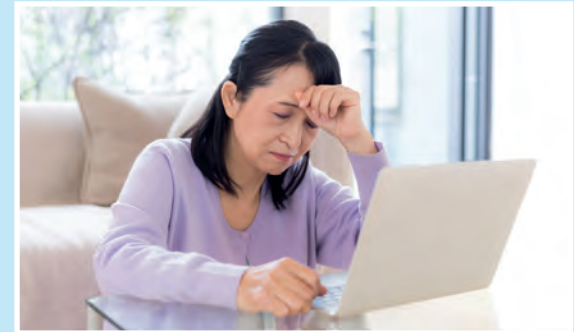
**Insomnia**



Chronic **fatigue**



Feeling **hopeless**  
and helpless



**Withdrawal** from  
family and friends



# How can I manage caregiver stress?

## Practise self-care



Get enough rest



Positive self-talk



Physical activities and other hobbies



Meditation, yoga, taichi, or qigong

## Seek support



Talk to supportive friends and family



Join support groups



Make use of respite care



Seek professional help



# How can I help my loved one live a healthier life?



Cook and have **healthy meals together**



Walk or **exercise together**



**Accompany** your loved one to medical appointments



**Praise** your loved one for self-management efforts



Plan social events around **diverse activities**



Pair **healthy food** with **positive events**