### SINGAPORE PHYSICAL ACTIVITY GUIDELINES FOR ADULTS (18 - 64 YEARS)

Adults are encouraged to engage in physical activity not only through recreation and leisure, but also when in different settings - At home (household chores), as a form of transportation (cycling, brisk walking, jogging), or in occupational and community settings.



# **GUIDELINES BY SUB-POPULATION: ADULTS**

#### UPDATES IN THE SINGAPORE PHYSICAL ACTIVITY GUIDELINES (SPAG): ADULTS (18 - 64 YEARS)

Previous (2011)	What's New
Break up sedentary periods of 90+ minutes with 5-10 minutes of physical activity.	Removed time-specific recommendations.
Minimum bouts of 10 minutes of moderate- intensity physical activity per week.	No minimum duration.
Single time targets (e.g. 150 minutes of moderate-intensity aerobic activity per week).	Clocking in a target range e.g. 150 to 300 minutes of moderate-intensity activity per week.
No minimum intensity for muscle strengthening activity.	Muscle strengthening activity at moderate- or vigorous-intensity is encouraged, at least 2 days a week.
COMMENDED THAT	

Any level of physical activity is better than none. Where possible, adults should break up prolonged sedentary periods with light physical activity for health benefits.

Adults should accumulate a total equivalent of 150 to 300 minutes of moderate-intensity activity (mostly aerobic) throughout the week for health benefits. Spreading the activity throughout the week minimises the risk of injury and prevents excessive fatigue which can contribute towards meeting the recommendations.

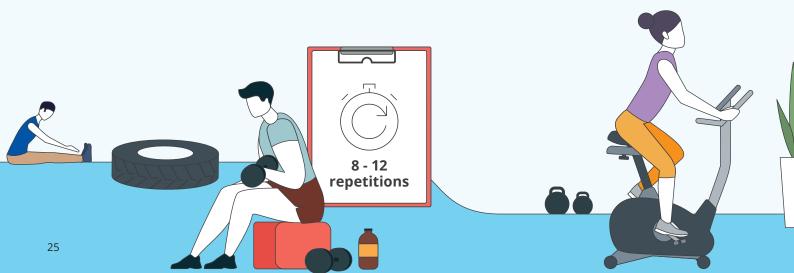
Additionally, adults should engage in moderate-intensity muscle strengthening activities targeting the major muscle groups at least twice per week to build their strength. Finding the suitable weight/resistance is key and a general good practice is to complete 8 to 12 repetitions per set to achieve strengthening outcomes.

For adults with chronic conditions, the same recommendations and tips are still applicable but if unsure on how to begin, consult a health professional to determine a suitable exercise regime.

Meeting the recommendations can offer additional health benefits, such as:

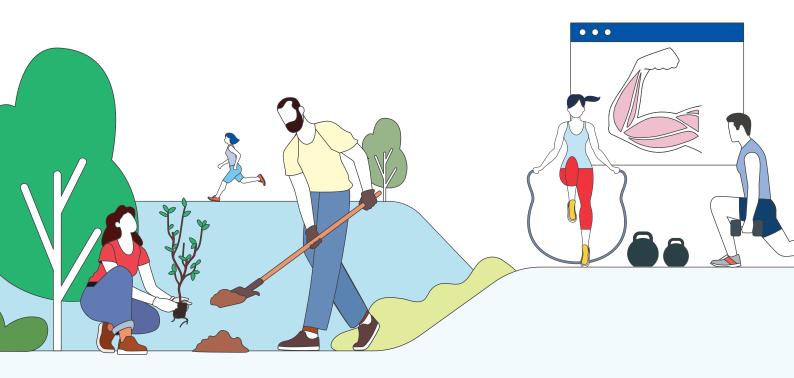
Diabetes – Resistance training can aid in controlling hormone levels

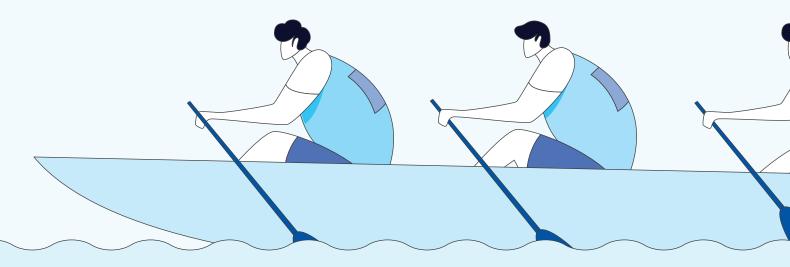
Obesity – Physical activity expands energy and by engaging in sufficient activity to burn off excess calories, it can contribute to weight loss Hypertension – Physical activity strengthens your heart and promotes better blood flow



## **EXAMPLES OF AEROBIC & MUSCLE** STRENGTHENING ACTIVITIES BY TYPE

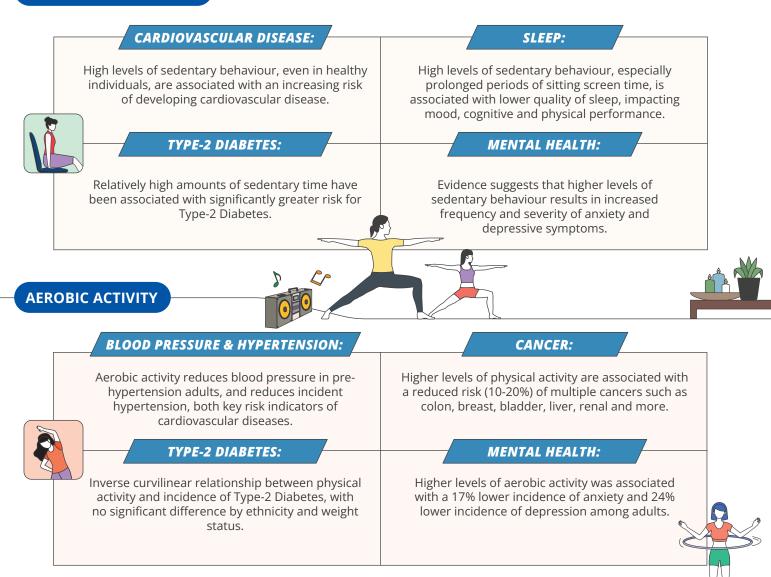
AEROBIC <	MULTICOMPONENT	MUSCLE STRENGTHENING
Jogging Leisure Dancing Rope Skipping Running	Cycling Kayaking Circuit Training Racquet Sports Swimming	Tai Chi Pilates Weight Training





# SUMMARY OF EVIDENCE: ADULTS

### SEDENTARY BEHAVIOUR



#### VIGOROUS-INTENSITY AND MUSCLE/BONE STRENGTHENING ACTIVITIES

#### **BODY COMPOSITION:**

Resistance training increases lean muscle mass and resting metabolic rate, aiding fat loss in adults, and reducing the rate of muscle loss.

#### **COGNITIVE FUNCTION:**

Muscle-strengthening activity is associated with improvements in cognition (memory and processing speed) and lowered the risk of Alzheimer's disease.

#### BONE HEALTH:

Resistance training increases bone mineral density in adults, which helps to reduce incidence of lower back pain and mitigate symptoms of arthritis.

#### MENTAL HEALTH:

Resistance training and yoga are correlated with improvements in sleep quality and mental health indicators, such as reducing symptoms of anxiety and depression.

## **CASE STUDIES: ADULTS**

#### CASE STUDY #1



### SHAFIQ, 24

Transitioning from student to full-time work

Shafiq led an active lifestyle when he first entered university and took part in many sporting events. As he had just finished his National Service, he was determined to maintain his fitness level while juggling schoolwork. During his free time, he and his peers would play football at the school field.

As Shafiq transits to a full-time working adult, he finds himself struggling to manage his time and to strike a balance between work and social life. He often works overtime on weekdays and occasionally on weekends too. When his friends invite him to dinner, he is often too tired from work and would rather stay home to browse social media or watch shows online. He has realised that his ability to perform basic movements has deteriorated in recent years due to his inactivity. Despite his busy schedule, Shafiq enjoys football and finds time to join his friends on some weekends for a few games. At times, Shafiq will also go for an evening jog if he feels overwhelmed by work as he finds it to be helpful in clearing his mind and reducing stress levels.

Shafiq has been doing a good job in trying to stay fit despite his busy schedule. By using pockets of time to clear his mind through exercise and playing football with friends, he can stay connected while keeping fit. For individuals like Shafiq, always remember to:



Find the time to incorporate workouts into your routine, for example, replace 30 minutes of social media time with a quick strength training session.



Bite-sized movement snacks during the workday can help improve systemic circulation and energise you after long bouts of sedentary behaviour.



Make full use of your travelling time by cycling to nearby places to get a quick workout.





AMANDA, 37 Working mother with 2 young children

As a parent with young children, Amanda usually prioritises her family's needs before her own, such as ferrying her children around and completing household chores. With her busy work schedule, she has little time for exercise. However, Amanda learnt about High Intensity Interval Training (HIIT) workouts which can help her achieve more in less time. She started doing HIIT during her free time and eventually incorporated a quick 20-min HIIT workout into her day. With HIIT, Amanda also included weights training and overtime, she noticed that her usual chores were not as tiring as she feels physically stronger. Even on days that are busy, Amanda still does a 20-min workout every other day because it has become something she enjoys, and it helps her feel more ready for the day. On weekends, Amanda also tries to engage in activities with her family, such as exploring local nature trails or cycling at the park connectors.

It is great to hear that Amanda has found an enjoyable way to meet the recommended level of physical activity despite her busy schedule. For working mothers who would like to do the same, try the following:



Attend weekly exercise programmes while incorporating muscle strengthening exercises at least 2 days a week.



Get your children involved and exercise together during the weekends for a good way to stay active while bonding at the same time.



Ride your scooter or bicycle when doing the pick-up or drop-off to move as a family on school days.

## **CASE STUDIES: ADULTS**

#### CASE STUDY #3



#### NICHOLAS, 48

Delivery man with irregular working hours

Nicholas' job as a delivery man is a physically demanding job. He delivers parcels from the warehouse to different locations, requiring him to lift items of various sizes and weights and walking short distances to deliver the items (i.e., from the van to the apartment). He usually takes the lift to higher floors but sometimes chooses to take the stairs for deliveries to lower floors to save time.

As his work hours are irregular (working on both weekdays and weekends), he does not have a fixed exercise routine and uses random pockets of time to go fishing with his friends. On his day off, he meets up with his friends at the coffeeshop for meals and drinks, where he can enjoy some downtime and relieve stress from work. Apart from this, he spends most of his off days resting at home.

Climbing stairs while making deliveries is a good practice to get an aerobic workout. Being a delivery man, he is already getting work-related physical activity in his daily routine. He may benefit from some strength, mobility, and flexibility exercises to enhance his quality of movement and build strength. If you're like Nicholas and have irregular working hours, here are some tips for individuals to achieve a healthier lifestyle.



Incorporate mobility and flexibility movements throughout the day to increase your systemic blood circulation and help the overworked joints and muscles feel better.



Try playing a sport with your friends before going for a meal together. By doing so, you get to spend quality time plus keep fit and relieve stress.



If you are exercising close to bedtime, try keeping to a light- or moderateintensity exercise to avoid disruptions to your sleep.



Incorporate muscle-strengthening exercises at least 2 days a week to combat age-related muscle loss.



#### NISHA, 58

Retired, recently diagnosed with Type-2 Diabetes

Nisha is a hotel manager who is recently retired. She mindfully slows down her pace of life by revisiting old hobbies. She conducts part-time cooking classes at the nearby Community Centre and volunteers with a sports interest group as a local guide, occasionally organising community health and wellbeing events.

Unfortunately, Nisha was subsequently diagnosed with Type-2 Diabetes. She manages her condition by making gradual lifestyle changes like using healthier alternatives when cooking. She also keeps herself active by participating in a variety of community fitness classes such as zumba and yoga at least twice a week, and hikes with her interest group once a month. Nisha has always been motivated to learn more about taking ownership of her health, but her recent annual health check-up gave her a surprise. She learnt that she has low skeletal muscle mass and is at risk of sarcopenia. Worried and puzzled, Nisha hopes to understand why she is at-risk despite being active and how she can combat age-related muscle loss.

Nisha is a role model for her efforts in incorporating healthy practices into her daily life. Here are some other helpful tips that could benefit Nisha and others in a similar situation:



You can protect yourself from sarcopenia through more muscleand bone-strengthening activities such as stretch band classes, aqua aerobics, and Tai Chi.



Participate in dance classes, such as zumba, at higher frequencies and alternate between dance activities and strengthening exercises, such as Active Health workshops aimed to combat age-related loss of muscles.