

# SINGAPORE PHYSICAL ACTIVITY GUIDELINES FOR OLDER ADULTS (65 YEARS & ABOVE)



Older adults should engage in regular physical activity to improve overall wellbeing, enhance functional capacity, and prevent falls.

## MOVE STRONG & BE BALANCED

### RECOMMENDATIONS

#### RETAIN STRENGTH

Engage in muscle-strengthening activities on 2 or more days a week, at moderate or greater intensity, to keep muscles, bones, and joints strong.

Include **multi-component physical activity that emphasizes strength and functional balance at least 3 days of the week** at a moderate-intensity or greater.



#### HIT 150 - 300

Aim for at least **150 to 300 minutes of moderate-intensity aerobic physical activity per week.**

\*Every minute of vigorous-intensity activity can generally be considered as two minutes' worth of moderate-intensity activity.

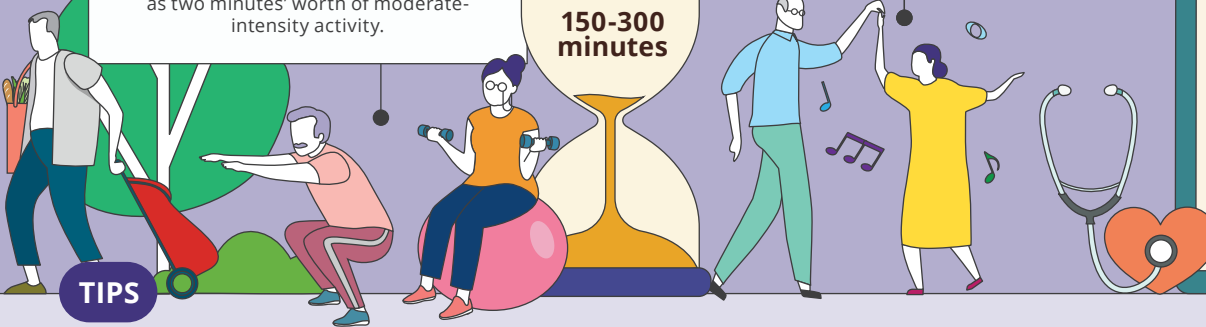
150-300 minutes

Limit the amount of time spent being sedentary, particularly recreational screen time, by **engaging in activity of any intensity.**

#### KEEP MOVING

For adults with chronic conditions (e.g. Type-2 Diabetes and Hypertension), the recommendations and tips are still applicable.

If unsure of how to begin, consult a health professional to determine a suitable exercise regime for you.



### TIPS



Incorporate simple strength training exercises such as resistance band exercises when watching your favourite shows.



Engage in varied multi-component physical activity at home or in a structured group setting, which can combine aerobic, muscle-strengthening, and balance training into a session.



Walk or play sports with your family and friends; this is a great way to be active while spending quality time with your loved ones.



Play and try different sports with friends at publicly available sport facilities.



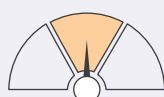
Make use of the outdoor fitness equipment around your community spaces or your built environment as you brisk walk around your neighbourhood.



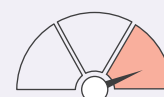
### EXERCISE INTENSITY



**Light**  
Can talk in full sentences and sing



**Moderate**  
Can talk in phrases or short sentences but cannot sing



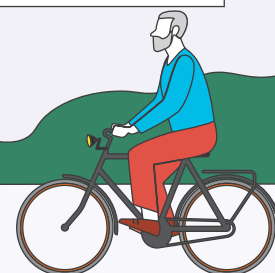
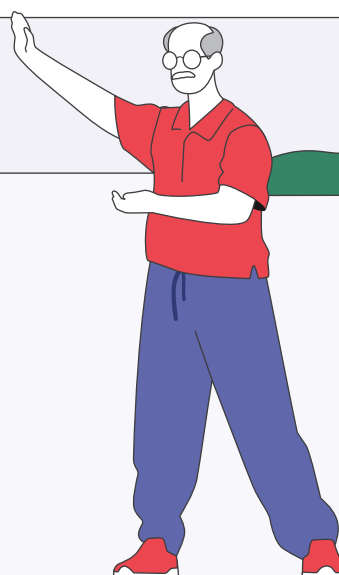
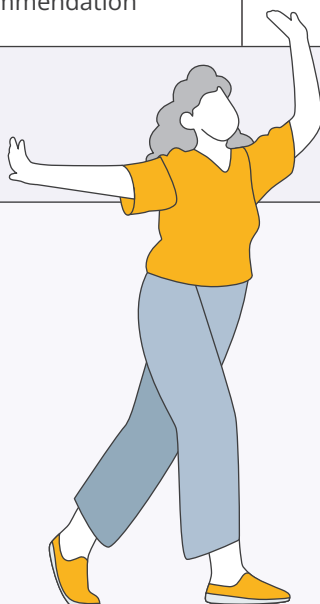
**Vigorous**  
Have difficulty talking

# GUIDELINES BY SUBPOPULATION: OLDER ADULTS



## UPDATES IN THE SINGAPORE PHYSICAL ACTIVITY GUIDELINES (SPAG) Older Adults (65 YEARS & ABOVE)

Previous (2011)	What's New
Break up sedentary periods of 90+ minutes with 5-10 minutes of physical activity.	Removal of time-specific recommendations.
Minimum bouts of 10 minutes of physical activity per week.	No minimum bouts of physical activity.
Single time targets (e.g. 150 minutes).	Clocking in a target range e.g. 150 to 300 minutes of moderate-intensity aerobic physical activity.
No minimum intensity for muscle-strengthening activity.	Muscle-strengthening activities are recommended to be done at least 2 days a week, at moderate-intensity.
No recommendation on frequency of balance physical activity.  No functional training recommendation	Beyond balance training exercises to be done 3 days a week, functional training exercises are also recommended to be done at least 3 days a week.



### IT IS RECOMMENDED THAT...

Older adults should limit the amount of time spent sedentary, replacing that with physical activity of any intensity.

Older adults should engage in moderate-intensity physical activity daily, clocking in at least 150 to 300 minutes of moderate-intensity aerobic physical activity throughout the week.

Incorporate exercises aimed at improving or maintaining muscle strength, balance, and flexibility at least three days a week as part of the weekly physical activities.

# EXAMPLES OF AEROBIC & MUSCLE STRENGTHENING ACTIVITIES BY TYPE

AEROBIC ←	MULTICOMPONENT	→ MUSCLE STRENGTHENING
<p>Brisk Walking</p> <p>Leisure Dancing</p> <p>Jogging</p> <p>Rope Skipping</p>	<p>Cycling</p> <p>Kayaking</p> <p>Circuit Training</p> <p>Racquet Sports</p> <p>Swimming</p>	<p>Tai Chi</p> <p>Pilates</p> <p>Weight Training</p>

PHYSICAL ACTIVITY IS IMPORTANT IN TACKLING THE FOLLOWING HEALTH CONSIDERATIONS THAT CAN IMPACT THE FRAILTY OF OLDER ADULTS.

## JOINT COMPLICATIONS

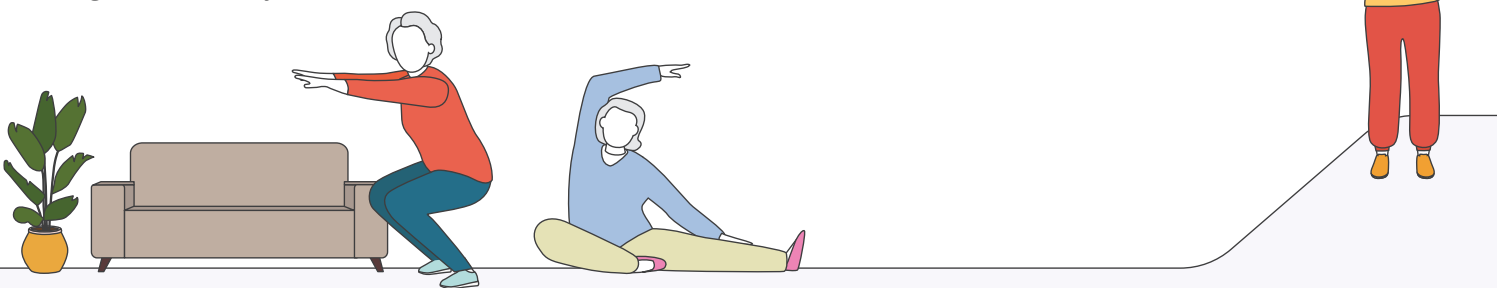
Physical activity helps improve physical function following a hip fracture, improve walking and performance-based measures of gait, balance, strength, and mobility.

## FUNCTIONAL PERFORMANCE

Regular physical activity is safe and beneficial for those with limitations to improve functional ability and ability to do everyday activities.

## OVERWEIGHT & OBESITY

To keep within a healthy weight range, you need to use at least 350 calories per day in physical activity as well as the energy used in everyday tasks.



## DIFFERENT ACTIVITIES OF VARYING INTENSITIES AND THEIR IMPACT ON MUSCLE FUNCTION, BALANCE, AND FLEXIBILITY

	INTENSITY	IMPROVEMENT IN MUSCLE FUNCTION	IMPROVEMENT IN BALANCE/FLEXIBILITY
Walking	Light to moderate	✓	
Jogging	Moderate to vigorous	✓	✓
Swimming	Moderate to vigorous	✓✓	
Tai Chi	Light to moderate	✓	✓
Strength Exercises	Moderate to vigorous	✓✓	
Activities of Daily Living	Light	✓	✓

SCALE ✓ LOW ✓✓ MEDIUM

# SUMMARY OF EVIDENCE



## SEDENTARY BEHAVIOUR



### ALL-CAUSE MORTALITY:

Replacing sedentary or inactive behaviours with light-intensity activity reduces the risk of all-cause mortality, cardiovascular disease, and type-2 diabetes.

### CARDIOVASCULAR DISEASE:

Prolonged sitting is associated with a higher risk of premature death and death from cardiovascular disease (CVD).

### PHYSICAL FUNCTION:

Physical function has a linear relationship with mortality, and those with poor physical function have a higher risk of all-cause mortality, even from mid-life.

### BONE HEALTH:

Evidence supports the benefits of being active throughout the day, such as better maintenance of bone health with more light intensity activity spread out through the day.

## AEROBIC ACTIVITY



### CANCER:

Evidence shows that doing more than 5 hours of moderate-intensity (or 2½ hours of vigorous-intensity) physical activity each week can help prevent and manage some cancers.

### COGNITIVE FUNCTION:

Physical activity reduces the risk of cognitive impairment and dementia, and 30 minutes of moderate activity per day almost halves the odds of experiencing depression.

### CARDIOVASCULAR DISEASE:

Physical activity causes beneficial short- and long-term autonomic and haemodynamic adaptations, resulting in a lower risk of hypertension, a key risk factor for CVD.

### LIFE SATISFACTION:

Positive improvements in life satisfaction were observed for older adults with interventions including 50-minute classes taking place 3 times per week.



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



### FALLS:

Exercise may reduce the rate of falls by as much as 23% in older adults, which can significantly reduce the risk of injury.

### PHYSICAL FUNCTION & INDEPENDENCE:

Multi-component strength and balance activities, including flexibility, are key to improving physical function, helping to maintain functional independence.

### MENTAL HEALTH:

Evidence indicates that resistance exercise interventions have a beneficial effect on mental health, with reductions in depression and anxiety symptoms.

### BONE HEALTH:

Muscle-strengthening activities can be useful in managing osteoporosis and osteoarthritis.

# CASE STUDIES: OLDER ADULTS

## CASE STUDY #1



### FATIMAH, 68

*Recent retiree who is paying more attention to her health due to her age*

Fatimah has been an avid walker for years. Recently retired, Fatimah continues to enjoy her daily 45-minute morning walks at Bishan-Ang Mo Kio Park. She also spends most of her time hanging out with her friends and playing with her grandchildren when they visit over the weekends. While Fatimah feels she is active, she is not as strong anymore. With her age, she is now more cautious when moving about as she worries about falling and injuring herself. She shared her concerns with the doctor whom she visits regularly for her blood pressure and cholesterol checks. Her doctor advised that, while frequent walking is a good start, doing strength exercises is just as important. Fatimah started trying out the various outdoor gym equipment at the park and noticed that she was gradually gaining strength to carry and play with her grandchildren. She also began feeling strong enough to hand carry her groceries when going to the market.

Fatimah has been successful in staying active by taking regular walks and playing with her grandchildren, so keep it up! If you are like Fatimah, you can build on your physical activity by increasing your activity intensity and strengthening your muscles.



Try brisk-walking or cycling instead of walking.



Make use of your park facilities, fitness corners and built environment.



Hand carry your groceries.



Improve your muscle strength and balance through physical activities; e.g. Tai Chi.

Strengthening your body can help you gain confidence and continue to play an active part in your grandchildren's life.

## CASE STUDY #2



### AH HUAT, 77

*Have been leading a sedentary lifestyle as he does not want to put stress on his body at his age*

Having retired for a while now, Ah Huat has a lot of spare time which is spent on watching television programmes, listening to radio, or taking naps when he starts feeling drowsy mid-day. As he has been mostly inactive for many years, he is starting to find it challenging with his daily activities. These include getting up from the toilet seat and climbing the stairs. Ah Huat still enjoys his old hobbies, like the occasional swim or joining his friends for fishing. On days when he heads out for an activity, he feels more energetic. However, Ah Huat has concerns about working his body frequently at his age. His arthritis condition causes him joint pains that make moving around increasingly difficult. This has further deterred him from doing the activities that he enjoys. As a result, he prefers to spend most of his time at home doing more relaxing activities that require less movements.

Going out with friends is a great way to maintain common interests and stay active together. If you're like Ah Huat, you should continue exploring different activities that you find enjoyable and suitable. Rather than avoiding exercise completely, why not try the following with friends and stay active together:



Start slow with walking then gradually progress within your capability.



Muscle-strengthening exercises like Tai Chi and stretch band exercises can help alleviate some pain.

By staying active and improving your strength and balance, you not only gain better health, but confidence and the ability to perform daily tasks better. You can then continue doing the things you enjoy!