

1.1 What is Physical Activity?

Physical activity is defined as body movement, which results in energy expenditure¹. This includes body movements in everyday life including work and household activities, recreational activities, exercise and sporting activities². One example of physical activity is exercise that works your heart and lungs (cardiopulmonary or aerobic exercise) and it is important for people of all ages. Your heart and lungs are muscles, so to keep them fit they need exercise such as raising your heart level for 15 to 60 minutes at a time. Physical activity could also include exercise for strengthening, flexibility and coordination.

1.2 Why Physical Activity – Why Walking?

Literature supports walking as a beneficial form of physical activity for seniors. “Walking is the easiest, most achievable and certainly the most popular way to accumulate the required amount of physical activity. It is a natural part of daily routine; it is a sign of independence and does not require costly outlay to begin³”. Pre-activity screening is not always necessary for older people wanting to commence moderate intensity physical activity such as walking, however those with pre-existing health problems are encouraged to check with their doctor before starting³.

Regular physical activity can impact on three of the most important risk factors for falls injuries, balance, muscle strength and osteoporosis. Regular physical activity is associated with a decreased risk of losing mobility for older people^{3,4}. Furthermore, regular moderate intensity physical activity can reduce the risk of diseases including cardiovascular disease, Type II diabetes, some cancers, osteoporosis and obesity. Physical activity has also been shown to facilitate better stress management, alleviate depression, strengthen self-esteem and enhance mood. Group exercise may be an effective strategy for improving both physiological and psychological functioning in older people⁴.

Many older adults are physically inactive. However, physical activity can have a protective effect from all causes of mortality, even if it is not adopted until middle or later life. Regular physical activity contributes to a healthier, independent lifestyle, greatly improving the functional capacity and quality of life for older people³.

1.3 What Will Walking and Being Physically Active Do for Me?

Our bodies generally respond well to physical activity and walking is one of the easiest forms of physical activity. Improvements may be anticipated in heart and lung function, muscular strength and endurance, flexibility and one's ability to respond to stimuli. Not only will our physical functions improve but physical activity improves how we feel, increasing our sense of well being, relieves stress and tension and it improves the quality of our sleep.

Walking being a form of physical activity offers people many health benefits which can be divided into five categories. The sixth category focuses on the benefits of walking for the community:



- 1 Health benefits for older people
- 2 Reduction in falls
- 3 Reduce symptoms of disease
- 4 Makes you feel better
- 5 Weight management
- 6 Benefits the environment by walking and not using transport



Notes



1.4 Age Related Changes?

As we age there are many changes to our hair, skin, hearing and vision, all of which will take place regardless of physical activity. Some body changes that were thought to be a result of ageing such as a loss of muscle strength are actually a result of inactivity — not enough movement and exercise. Exercise can have a profound effect upon older people with the most “unfit” usually experiencing the greatest benefits⁵.

1.4.1 Health benefits

- Improves overall physical condition and mental wellbeing^{9,5}, and it increases one’s ability to perform physical work.
- Increases longevity¹⁰, extends life and reduces the risk of premature death⁵. Studies have shown that the death rate is halved in retired men who walk for more than two miles every day^{11,12}. Even small improvements in physical fitness are associated with lower risk of death¹¹.
- Increased joint range of motion or flexibility; increased joint suppleness⁵ and reduced pain from arthritis^{9,11}.
- Regular physical activity is associated with a 40 per cent decreased risk of losing mobility for older people¹³.
- Reduced risk of falls and fractures and an increased ability to maintain functional independence⁹.
- Improved sleep patterns and reduced levels of anxiety^{5, 11,12}.
- Decreased blood pressure^{7,11}.
- Reduced depression⁹.
- Lifelong exercise has been shown to lessen the chances of developing Alzheimer’s disease¹¹.
- Walking has the lowest rate of injury than any other form of exercise¹⁴.

1.4.2 Reduction in falls



Research into the causes of falls has shown that reduced muscle strength, a reduction in coordination and flexibility and a reduction in balance, all increase the risk of falling, which can result in serious injury such as a hip fracture. By increasing physical activity it helps to reduce the risk of falls by:

- Improving leg muscle strength^{1,5}.
- Improving balance^{5,11}.
- Improving posture⁵.
- Improving coordination¹¹.
- Can contribute to increases in bone strength¹¹.

1.4.3 Reduces risk of symptoms of diseases

Regular physical activity has been found to assist in:

- Reducing the risk of heart disease by 50 per cent¹. The heart is worked by physical activity making it stronger so it can pump more blood with less effort⁷.
- Contributing to improving bone strength — weight bearing exercise and making the muscles pull against the bone stimulates bone building cells. For increased benefit, strength building exercises are recommended in addition to walking.
- Reducing cancer — regular exercise has been shown to reduce the risk of developing colon cancer by up to 40 per cent¹¹.
- Reducing the risk of diabetes (Type II) by 50 per cent. Physical activity helps the body to use glucose efficiently.
 - Maintaining blood glucose levels within normal limits for people with Type II diabetes^{1,7,11}.
 - Reducing the risk of stroke — the risk of having a stroke is higher in those people who do little or no exercise¹¹.
 - Reducing the incidence of high blood pressure (hypertension) by 30 per cent. Physical activity helps to lower blood pressure by increasing blood circulation and opening narrowed arteries^{7,12}.
 - Reducing blood cholesterol levels⁵. Regular physical activity can help to increase high-density lipoproteins (HDL). These lipoproteins work to remove 'bad' cholesterol from the arteries⁷.
 - Reducing the incidence of obesity by 50%^{1,11,12}.

1.4.4 Makes you feel better

Regular physical activity can help to make you feel better by:

- Reducing stress, anxiety and depression A chemical endorphin is released in your body during physical activity which gives you a natural high feeling^{11,12}.
- Decreasing the likelihood of depression by increasing social contact with other people, promotes feeling of neighbourliness and community¹².
- Making you feel more confident, happy and relaxed^{5, 12}.
- Improving mental alertness¹².
- Helping you to maintain independence and the ability to look after themselves¹².
- Increasing your energy levels and your stamina^{11, 12}.

1.4.5 Weight management

Walking increases your physical activity levels and when combined with healthy eating can help to:

- Reduce body weight as regular physical activity helps to 'burn off' excess body fat⁷.
- The rate at which the body burns kilojoules (calories) increases with physical activity and continues for hours afterward⁷.

1.4.6 Benefits for the environment by walking instead of taking transport

By walking instead of using the car you can help to:

- Reduce air pollution^{11,12}.
- Reduce noise pollution^{11, 12}.
- Reduce traffic congestion^{11,12}.
- Reduce petrol consumption^{11,12}.
- Improve quality of urban life with more people walking and cycling around the community. It discourages antisocial behaviour and promotes a safer community¹².

Notes



1.5 What is Stay on Your Feet?

'Stay on Your Feet WA' is a campaign that promotes positive, healthy and active ageing. The aim is to reduce people's risk of falling and reduce fall related injuries so older people can remain active and independent in their community. The program aims to improve older people's knowledge and change attitudes of the belief that falls are an inevitable part of ageing. Steps can be taken to reduce the risk of falling and to reduce the risk of injury in the event of a fall.

There are many reasons why people fall as they get older; there is no one factor that causes all falls. Often older people are not aware of what can cause falls. They may not recognise the warning signs and do not report these to their doctors. Falls can be caused by:

- Lack of muscle strength due to reduced physical activity
- Taking multiple medications
- Reduced balance and change in walking pattern
- Changes and deterioration in eyesight
- Foot problems and inappropriate footwear
- Health conditions for example problems with blood pressure, cold, flu, arthritis
- Hazards in home and public places ie slippery floors
- Poor nutrition.

The **Stay on Your Feet WA** campaign is based on research evidence of the causes of falls, and how people can stay healthy and active and reduce their risk of falling. The key element of the campaign are the **Stay on Your Feet** Volunteers; who are older people that want to maintain their independence in the community and assist other older people to do the same. Walking can assist with falls prevention by improving muscle strength, joint mobility, and flexibility that in turn helps to improve balance and prevent falls.

The steps to **Stay On Your Feet** are:

- Identify, Remove and Report Hazards
- Manage your health
- Manage your medications
- Eat Well For Life
- Regularly Check Eyesight
- Foot Care and Safe Footwear
- Improve Your Balance
- Walk Tall
- Stay Active



1.6 **What Stops People from Walking?**



- No footpath in street or footpaths that are in disrepair.
- Anxiety about health status, body image, personal safety and appropriateness of dress and equipment¹².
- Limited or inappropriate opportunities.
- Too competitive.
- A lack of confidence.
- Stereotypical images of ageing; 'older people do not do that sport or activity'; people do not feel sporty.
- Negative attitudes by older people to towards sport.
- Doubts as to whether they can perform the activity.
- Fear of injury.
- Fear for safety, ie. being attacked in public places¹¹.
- Lack of time due to other commitments.
- Cost constraints.
- Poor accessibility, lack of public transport, steep steps, poor lighting.
- Medical conditions which require modified activity.
- Lack of information.
- Lack of family support or understanding from family members about the benefits of physical activity¹².
- Roads are barriers for day-to-day movement for older people, heavy road traffic is perceived as dangerous, heightened feelings of insecurity, fear and stress¹.
- Fear of falling restricts physical activity levels⁹.
- Attitudes that older people, retirees or pensioners should put their feet up⁶.
- Taking part viewed as difficult, unpleasant and of little point for sedentary people.
- Bad weather — too hot, too cold, too wet, too windy.

1.7 Staying Motivated

The best thing is that lost fitness can be regained with regular physical activity⁶. Walking is the most common form of physical activity for older people¹. But how do we motivate people to be physically active and join the walking group? Studies into what motivates people to walk in the community have found that:

- People are 50 per cent more likely to walk for recreation or transport if they have a footpath in their street.
- People are twice as likely to walk if they have a pleasant physical environment¹⁷.
- People are twice as likely to walk if they have friends or encouragement to walk¹⁷.

The walking group needs to:

- Be fun and enjoyable.
- Be informal.
- Provide a moderate level of exercise.
- Provide companionship.
- Encourage walkers to bring a friend or meet a friend for the walk.
- Increase self esteem.
- Provide social activities in addition to participating in the walk, such as joining for a drink after the walk or organising a guest speaker to talk about a topic of interest for the group.
- Be at an affordable level.
- Provide information on suitable clothing, shoes and equipment.
- Hold activities at the most convenient times for older people.
- Have leaders, coaches, trainers, volunteers who understand older people and their needs.
- Hold activities close to public transport, encourage car pooling, work with the local community bus transport system¹².
- Ensure the walking route is safe and predictable.
- Use a walking route that has seating, access to toilets and some shade.
- Share any jobs that the walking group needs to do so everyone feels involved.
- Create walks such as 'Wear a funny Hat Day', support health days like Red Nose Day whilst walking and celebrate people's birthdays⁷.
- Be positive and encouraging for those starting out and encourage all members to keep coming back⁷.