

Benefits of Physical Activity and Active Lifestyle

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Physical activity, exercise and physical fitness

- Physical activity: any bodily movement produced by skeletal muscles that increases energy expenditure relative to rest
- Exercise: purposeful, structured and repetitive movement to improve or maintain physical fitness. Examples: walking, dancing, swimming, yoga, strength training, balance exercise
- **Physical fitness**: a state of well-being with a low risk of premature health problems and energy to participate in a variety of activities

Physical activity and exercise contribute to physical fitness





1. Aerobic exercise

Also known as cardio or cardiovascular exercise, is any type of physical activity that increases heart rate and breathing rate and is sustained for an extended period of time. During aerobic exercise, the body uses oxygen to produce energy, which is why it is also called aerobic respiration.

Examples: running, walking, cycling, swimming, dancing, rowing







2. Strength training

Also known as resistance training or weight training, is a type of physical exercise that involves working against a resistance to build and strengthen muscles. This resistance can come in the form of weights, resistance bands, or even body weight exercises like push-ups and squats.

As the muscles are progressively challenged with heavier weights or more repetitions, they adapt and become stronger.



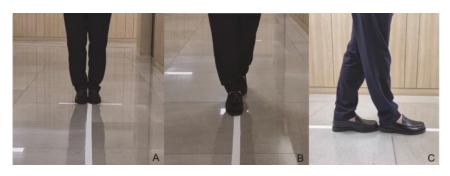




3. Balance exercises

Balance exercises for older adults are physical activities that are designed to improve balance, stability, and reduce the risk of falls. These exercises can be done anywhere and do not require any special equipment. Here are some examples of balance exercises for older adults.

Examples: standing on one leg, heel-to-toe walk, walk in a straight line, Tai Chi







4. Flexibility exercises

Improve range of motion and reduce the risk of injury. They can reduce muscle stiffness. Yoga: Yoga is a low-impact exercise that combines stretching, strength, and balance to improve flexibility and overall physical function.

Pilates and Tai Chi include flexibility exercises

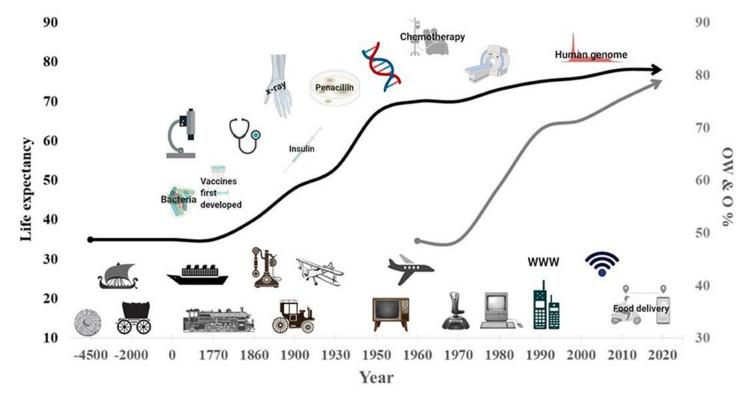






Sedentary behaviour

 Refers to activities that involve sitting or reclining and that require very little energy expenditure





Sedentary behaviour

- As we age, we tend to become more sedentary due to various factors, such as retirement, decreased mobility, and chronic health conditions. However, prolonged periods of sedentary behaviour can have negative health effects, such as decreased muscle mass, impaired circulation, and increased risk of chronic diseases, including cardiovascular disease, diabetes, and obesity
- Older adults who engage in regular physical activity can reduce the negative health effects of sedentary behaviour. Even small amounts of physical activity, such as walking or stretching, can be beneficial
- It's important for older adults to find ways to incorporate physical activity into their daily routines and to avoid prolonged periods of sitting or reclining



Benefits of physical activity in third age

- Improved cardiovascular health: Regular physical activity can help lower blood pressure, reduce the risk of heart disease, and improve overall cardiovascular health
- Increased muscle strength and flexibility which can make everyday tasks easier to perform
- Physical activity can help improve balance and coordination, which can also help prevent falls
- Physical activity can help reduce the risk of chronic diseases such as diabetes, osteoporosis, and some types of cancer







Benefits of physical activity in third age

 Improved mental health: Exercise can help reduce symptoms of depression and anxiety and improve overall mood



- Enhanced cognitive function: Physical activity has been shown to improve cognitive function, including memory and attention
- Socialization opportunities: Engaging in physical activity can provide opportunities for socialization and help older adults maintain social connections





Benefits of aerobic exercise in third age

- Improves heart health, lower blood pressure, and reduce the risk of heart disease and stroke
- Improves overall fitness and endurance, allowing engaging in daily activities with greater ease
- Reduces the risk of chronic diseases such as type 2 diabetes, osteoporosis, and some forms of cancer
- Improves cognitive function and reduces the risk of cognitive decline in older adults
- Reduces stress, anxiety, and depression, and improves overall mood and mental health







Benefits of strength training in third age

- Increases muscle strength and endurance
- Improves bone density and reduced risk of osteoporosis
- Improves balance and coordination
- Increases metabolism and fat burning
- Improves overall physical function and quality of life
- Reduces risk of injury in other physical activities





Benefits of balance exercise in third age

- Improve stability and prevent falls and related injuries, such as hip fractures, or head injuries
- Improve mobility and independence in daily living
- Enhance cognitive function: memory, attention, executive functions
- Boost confidence in ability to perform daily activities safely







Benefits of flexibility exercise in third age

- Improve range of motion, less stiffness in joints, greater ease of movement
- Reduce risk of injury particularly in the muscles and joints
- Enhance posture, release tension in the muscles, allow the body to maintain a more upright position



- Improve balance and reduce the risk of falls
- Improve circulation, improve blood flow to the muscles, reduce stiffness and soreness





Physical activity with frailty and chronic diseases

While research shows the many health benefits of physical activity it is obvious that factors like frailty and chronic diseases can challenge the ability to exercise regularly. So how can we limit, or the influence of these factors and ensure an active lifestyle even for people with chronic diseases like Parkinson's or Alzheimer's?

- Be aware that not every type of exercise will be possible due to limitations like frailty
- Certain adjustments might be needed to cater to the person's precondition:
 - ✓ Seated exercises, or aquatic exercises e.g., to compensate for a lack of balance
 - ✓ Adjustment of duration, intensity, and frequency of physical activity e.g., after falls or on "bad days"
 - ✓ Emphasis on encouragement and the person's preferred activities to keep up their motivation
 - ✓ Emphasis on the person's mental state during physical activity



Physical activity and Alzheimer's disease

Exercise and physical activity can improve the life quality of people in all stages of Alzheimer's disease. The UK's Alzheimer's Society lists many benefits, including:

- Improvements in physical health e.g., reducing the risk of high blood pressure
- Improvements in cognition e.g., the ability to slow down mental decline
- Increase in social interactions, self-esteem, and mood
- Improvements in independence and maintaining the ability to perform daily tasks

It is important that the chosen activities are suitable and enjoyable for the person. Some people prefer to exercise on their own while others prefer group activities. It might be a good idea to try different things to find the perfect activity for someone. Recommended activities include e.g.:

- Walking, gardening, and housework
- Tai Chi, dancing, and indoor bowls
- Seated exercises, specific movements while lying down/getting up for later stages of the condition

Physical activity and Parkinson's disease

Physical activity is also an essential element for people with Parkinson's disease (PD). The Parkinson's Foundation lists many benefits of regular exercise such as:

- Improvement of PD symptoms, e.g., balance and mobility issues, depression, constipation, and cognitive skills
- Slower decline in the quality of life when starting exercise early in the condition
- Greater positive health-related effects for people with advanced PD

Establishing an active lifestyle is an important part of managing PD symptoms, but it can be a challenging and frightening task.



Increasing physical activity: tips and ideas

Creating fun and suitable ideas for activities and games can be exhausting. Especially for institutions like nursing homes resources, staff, and time can be limiting factors. The following list offers some ideas for exercises and games to create enjoyable moments while staying active:

- Dancing, singing, or karaoke nights
- Bowling or throwing games with soft balls and big buckets/cones
- Seated "badminton", "table tennis", or "volleyball" with balloons
- Creative games like "hungry hippos" or "sweep ball"

Several organizations, institutions, and caretakers share their ideas on websites or social media platforms such as YouTube or Instagram, e.g., @bewegen.is.leven (YouTube and Instagram); @goldencarers (Instagram, www.goldencarers.com), @coastcarehomes (Instagram)







Thank you for your attention!

