

# What is the evidence of activity and exercise for chronic pain



## What is physical activity and exercise

Physical activity is any body movement, produced by our muscles, which results in energy use. This means that daily activities such as housework (e.g. cleaning the floor, making a bed, vacuum cleaning), activities that occur at work (e.g. climbing the stairs, lifting, walking), travelling (e.g. walking, biking), a specific sport, play (e.g. with family) are considered physical activity.

Exercise is a subset of physical activity, which is defined as a structured and planned activity with the goal of improving or maintaining physical fitness or health. Common forms of exercises include aerobic (e.g. walking and running), strength or resistance training (e.g. using weights or own body), flexibility exercises and other movement-based treatments (e.g. Tai Chi and Yoga). These exercises can be land or water based.

## Physical activity and exercise improve our health and wellbeing

There is reasonable knowledge that physical activity and exercise improves cardiovascular health, muscle strength and endurance, bone health, balance, pain, wellbeing and quality of life, social and community involvement/connectedness. Physical activity and exercise can also reduce the risk of conditions such as diabetes, stroke, heart disease and depression. Guidelines around physical activity and exercise have been developed. These suggest the recommended amount of activity per week and the intensity of activity. These guidelines are consistent for the general population, as well as for those with long term conditions and with disability, including most individuals with persistent pain.

## **How much physical activity and exercise is required?**

In adults aged between 16 and 64 years of age and older, the World Health Organisation (WHO) recommends 150 minutes of moderate physical activity over a week. Ideally, the activity should be sustained for 10 minutes or more. Moderated physical activity means that you notice your heart and breathing rate has increased, you are unable to sing but you can still talk to someone. Specific muscle strengthening exercises should occur at least twice a week.

However, if you are unable to achieve these recommendations, SOME movement/physical activity is better than none. This last point is important to remember, as the greatest improvements in health outcomes occur when someone who currently does no physical activity or exercise at all starts to move more, even if the amount started with is far below the recommended physical activity guidelines. In essence, all movement is beneficial and makes a contribution to well-being. Some people like to use step counts as a measure of their physical activity. The same concept applies here too. While steps between 7,500 and 8,000 per day is recommended, aiming for more steps than currently achieved is equally important.

## **Physical activity and exercise for people with persistent pain**

Physical activity and exercise of low-to moderate intensity by people with persistent pain can diminish the pain experience. This happens by your body releasing natural chemicals that can also relieve pain. But for many people with persistent pain, this effect can take time to occur because of the changes within the nervous system and how threat (which often activity is perceived to be) is responded to.

If the physical activity and exercise has been collaboratively decided upon (is an activity of interest or enjoyment and started at a thoughtfully considered intensity and duration) then the increase in pain is usually passing and most frequently occurs at the beginning of an activity session. Importantly, the increase in pain usually becomes less severe over time when the same physical activity and exercise is repeated. At first, more generalised movement is helpful but over time exercises targeting specific areas of the body may become useful too. Physical activity and exercise is unlikely to cause tissue harm when started in this way. Starting physical activity and exercise can be very challenging. Likewise maintaining physical activity. Strategies taught in this programme, along with peer support, can help you be active despite pain.

Pain cycle can be broken by using a variety of strategies- your journey to finding what works for you will be/is unique.

Additional reading:

A useful website on pain and physical activity

(<https://aci.health.nsw.gov.au/chronic-pain/for-everyone/pain-and-physical-activity> )