

GO FOR GOLD

Do whatever small amounts of physical activity you can do, as often as you can do it.

Chair-based Exercise

Chair-based, or seated, exercise can be a useful way for older people to engage in exercise programmes if they are less able to take part in the standing and floor-based exercise classes. During a chair-based exercise class, participants remain seated in a sturdy upright chair or in their own mobility aid like a wheelchair. Someone doing the class may experience this as light to moderate exercise depending on their own ability and level of fitness. As the intensity of the exercise increases for a person, so will their heart rate, breathing rate and use of energy (“calorie burn”). Light exercises may include slow walking, gentle seated exercises or slow, supported movement. Some people may experience this as light exercise which may not usually cause substantial increase in the person’s heart rate or breathing. Moderate exercise would increase the heart and breathing rate and may cause someone to sweat.

Guidelines

The UK Chief Medical Officers’ and the World Health Organization guidelines:(1, 2)

- Doing some physical activity is better than doing none; even small amounts can benefit one’s health.
- New to exercise? Start by doing small amounts and gradually, over time, increase how often, how intensely and for how long you exercise.
- For those age 65 years and over, be as physically active as your abilities allow and adjust how much effort you put into physical activity based on your fitness levels.
- If ability allows, ultimately aim to get at least 150 minutes of moderate cardiovascular activity each week; or 75 minutes of vigorous activity each week.

GOLDSTER★ **Points and Evidence Levels for this Activity**

Domain	Impact Strength	Points	Information	Evidence Type	Evidence Level
Physical	Mild	1	Evidence on chair-based exercise has shown slight improvement in muscle-strength, cardiovascular fitness, mobility and function in older people who are frail and reduced risk of falls for older people discharged from hospital.(3, 4)	Randomised Controlled Trial, Systematic Review	Low
Cognitive	None	0	There is no available evidence that chair-based exercise has been proven to benefit cognitive function.	-	None
Emotional	Mild	1	Evidence on chair-based exercise has shown slight improvement in mental health in older people who are frail.(3, 4)	Randomised Controlled Trial, Systematic Review	Low

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Evidence Discussion

Most of the studies relating to chair-based exercise have been done on people aged 65 and older who are more frail or may have been recently discharged from hospital. It has been shown in a systematic review (SR) that some chair-based exercise programmes did show some slight improvement in cardiovascular fitness, mobility and function and mental health in older frail people without any harmful effects.(3) In a randomised controlled trial (RCT), the seated exercise group had a reduced fall risk compared to those who just received social visits after being discharged from hospital.(4)

Key References

1. World Health Organization. WHO guidelines on physical activity and sedentary behaviour.2020. Available from: <https://www.who.int/publications/i/item/9789240015128>.
2. Department of Health and Social Care LCWG, Department of Health Northern Ireland and the Scottish Government,. UK Chief Medical Officers' Physical Activity Guidelines. 2019. Available from: <https://www.gov.uk/government/publications/physical-activity-guidelines-uk-chief-medical-officers-report>.
3. Anthony K, Robinson K, Logan P, Gordon AL, Harwood RH, Masud T. Chair-based exercises for frail older people: a systematic review. Biomed Res Int. 2013;2013:309506.
4. Vogler CM, Sherrington C, Ogle SJ, Lord SR. Reducing risk of falling in older people discharged from hospital: a randomized controlled trial comparing seated exercises, weight-bearing exercises, and social visits. Arch Phys Med Rehabil. 2009;90(8):1317-24.