

22 THESES OF THE ARMI ACTIVECHAIR:

1. The population is aging. According to population projections, the number of people aged over 75 will increase by 50% by 2025 and will double by 2040. The projection is more or less the same throughout the EU.
2. Society's resources are limited to meet this challenge.
3. People are encouraged to live in their own home for as long as possible.
4. Most of us want to live in our own home for as long as possible.
5. To enable this, the functional capacity of the elderly needs to be supported.
6. As you age, between the age of 50 and 60, your muscle power weakens, especially in your lower limbs. This also reduces the performance speed of the lower limbs. This impairs the ability of the elderly to function and, among other things, diminishes their balance.
7. Poor balance increases the risk of tipping. In Finland, one in three over the age of 65 and one in two over the age of 80 fall at least once a year. This results in about 7,000 hip fractures each year. Most of these are due to falling over.
8. Every third women in the 75-85 age group suffer from knee arthritis and one in five of both men and women suffer of hip arthritis.
9. Physical activity can have a significant impact on the ability of the elderly to function, to cope independently, to prevent illness and to improve the quality of life.
10. An excellent exercise for increasing the strength of the lower limbs of the elderly is getting up from the chair.
11. As you age and as your thigh muscles become weaker when you rise from a standard chair, your knees often turn inwards and your feet outward. When the load is applied to the inner parts of the legs and lower limbs, the activation of the gluteal muscles, which is required when uplifting, is substantially reduced. As a result, the upward force on the lower limbs required for ascension is reduced and painful strain on the knee and hip joints occurs. This makes getting up from an ordinary chair uncomfortable.
12. Armi Activechair utilizes upper body weight to steer the person into the natural ascending position, with knee and hip joints (approx. 130 degrees) approaching a neutral position (muscles close to resting length), lower limbs provide maximum power output. This reduces the strain on the knee and hip joints as the muscles support the joints and the ascension becomes less painful. In this natural ascending position, the muscles are able to provide the most efficient movement possible with minimal risk of damage.
13. The upper limb forces of the elderly are also usually weak. The Armi Activechair also allows you to exercise your arms when getting up from the chair. After learning how to get up from the chair, you can control the use of force between your forearms and lower limbs to exercise both.
14. Due to adverse knee and hip angles (support of the muscles supporting the joints is not optimal) getting up from a standard chair causes stress on the joints and thereby may cause pain in the knee or hip joints, which reduces the amenity and desire of getting up from a standard chair.
15. The ingenious mechanics of the chair, utilizing the tilting seat and tilting armrest, steers and lifts up the person automatically into such ascending position where the unfavorable phase of stress on the knee and hip joints is bypassed.

16. As you get older, the pelvic floor muscles weaken, even a slight exertion, for example, getting up from a chair can cause urinary incontinence. The mechanics of Armi Activechair guides the person past the heaviest stage of exertion and may thus prevent urinary incontinence altogether.
17. Senior chairs operating with external power (electricity, compressed air) impair the ability to function because own muscles are not used in ascension, unlike with the Armi Activechair. Unlike armchairs with external power, the Armi Activechair increases your performance, and makes ascension more efficient, easier and painless.
18. High senior chairs do not guide the ascender to the natural ascending position, and often the person's feet do not reach to the floor when sitting in a chair. The intent for the Armi Activechair is that your feet are firmly on the ground. Armi Activechair is always individually adjusted so that the person's feet soles rest securely on the floor.
19. The armrests of Armi Activechair rise slightly upward and are long enough. This allows the arms to rest on the armrests while sitting down in the chair. Sitting down is more safe and the risk of tipping is reduced. Too short or too low armrests increase the risk of tipping.
20. Armi Activechair is also a great exercise tool for exercising lower limb, arms, middle and upper body muscles.
21. Armi Activechair also facilitates the work of caregiver or nursing staff. The Armi Activechair has an integrated tab for the assistant's hand behind the backrest. By assisting from behind the backrest and by pressing the other armrest, it is possible to ease the ascent of the chair as needed, while utilizing the ascent's own resources as much as possible.
22. Armi Activechair is designed to be ergonomic and provides excellent seating comfort.



By: Jorma Eerola
Physiotherapist OMI, MDT
Osteopath
armi-aktiivituoli.fi