

ORGANIZATION NEWS

Information/Education Page

Physical Activity Recommendations for the Aging Brain: A Clinician-Patient Guide



The positive benefits of regular physical activity on cognitive function are well-known today.¹⁻⁷ However, older adults experience challenges beginning or sustaining regular exercise throughout their lives. At a time when >40 million people in the United States are ≥ 65 years old,⁷ there is a need for health care providers to advise patients and their families on safe physical activity practice aimed to maintain or improve cognitive health.⁷

Setting achievable physical activity goals, developing a patient-centered active lifestyle plan, and monitoring for physical training adjustments at medical office visits have been shown to enhance physical activity levels among older adult patients, including older individuals with cognitive impairments.^{8,9} This educational page is designed to guide the health care professional in providing physical activity recommendations for the older adult patient during the office visit.

Importance of regular physical activity to achieve optimal cognitive health in the older patient

- Physical activity is strongly associated with healthy aging,^{7,10} and it has shown to help older adults maintain optimal physical and cognitive function throughout life. In addition, physical activity reduces the risk for developing dementia.¹¹⁻¹³
- Sedentary older adults who become physically active show significantly less formation of beta amyloid. Beta amyloid is a brain protein involved in the development of Alzheimer disease.^{1-3,5}

Methods to increase your older patient's physical activity levels

- Discuss your patients' lifestyle behavior, physical activity levels, diet, and overall cognitive health (memory, sleep behavior, depression, and anxiety). Discuss obstacles that the patient might face to reach a healthy lifestyle.¹⁴

- Record and monitor your patient's lifestyle behaviors (ie, physical activity levels, diet plan, smoking) as part of the patients' integrated treatment.¹⁵
- Educate your patient about the benefits of exercise and the dangers of a sedentary lifestyle.¹⁶
- Develop healthy lifestyle achievable goals with patient input and participation (eg, health contract, peer mentoring, access to exercise environments).
- Use a multidisciplinary, multifaceted, patient-centric approach to promote physical activity.¹⁷
- Review your patients' physical activity progress at every office visit and promote shared decision-making.¹⁸

Additional considerations to encourage patient/provider discussion about increasing physical activity levels

- Regularly discuss and review health conditions and medications that might influence cognitive health and activity participation with your older adult patient.¹⁶
- Evaluate physical capacity and readiness to engage in physical activities (eg, issues related to exercise safety and awareness).¹⁸
- Provide structured referrals into community-based activity programs staffed with health care professionals with expertise in promoting physical activity among older adults (eg, health coaches).¹⁴
- Use cognitive-behavioral strategies to motivate older adults to increase their daily physical activity level.¹⁹

Physical Activity Recommendations for the Aging Brain: A Patient Guide

Common Patient Questions	Recommendation
What exercises are good for my brain?	<p>Any exercise is good for you, but the aerobic types use the large groups of muscles from your body and for a longer time, increasing the blood flow to your brain. This helps to protect your brain from cognitive decline. Examples of these types of exercises are</p> <ol style="list-style-type: none"> 1. Mobility activities (eg, walking, jogging, cycling) 2. Household activities (eg, gardening, house cleaning, chores) 3. Recreational indoor and outdoor activities (eg, tennis, racquetball, swimming, skiing) 4. Planned and structured exercises (eg, group fitness class)
How can I get the benefits of exercise without getting hurt?	<ul style="list-style-type: none"> • When you exercise, connect your mind to your body and try to feel your muscles contracting. • Keep a steady breathing while performing the movements. • Feel your body temperature rising gradually while you exercise. Keep in mind that any drastic changes in temperature or breathing might be a sign that you are doing too much and you will need to slow down. • Start with easy and basic movements and gradually add more effort to your movements (eg, moving your arms and legs together and faster). • Make sure to use the FIT principle by interchanging the exercise <ol style="list-style-type: none"> 1. Frequency (the number of times you exercise during the week) 2. Intensity (the duration you exercise each session) 3. Types (changing the exercise type such as cycling versus walking) • If you have balance or musculoskeletal problems, start by exercising gently and progressively increase the frequency (the times per week that you exercise) and the intensity (your exercise duration).
How much exercise do I need to do to gain the cognitive benefits?	<ul style="list-style-type: none"> • The right exercise amount for you is the amount that is possible for you to do safely. • You should start with an exercise amount that you feel comfortable in performing. Add more exercises slowly with the goal to achieve the desirable public health recommendation. • The public health recommendation is to participate in physical activities that use moderate aerobic intensity for at least 30 minutes on 5 days per week, or opt for slightly more intense exercises for at least 20 minutes on 3 days per week.
What type of exercise should I do to get stronger and more independent?	<ul style="list-style-type: none"> • Perform strengthening activities on at least 2 days per week. This maintains or increases your muscle strength and independence. • Use handheld weights or strength machines to help you achieve greater strength. Start with 2 sets of 8 repetitions and gradually increase to 3 to 4 sets of 12 repetitions. • Include exercises that work different muscles groups and body areas (ie, arms, trunk, legs). • When you are doing strength resistance exercises (eg, hand weights), always perform them in a slow and well-controlled way. • Participation in more than the minimum recommended amount of aerobic and strengthening exercises leads to additional health benefits and higher levels of fitness.
What exercises are good to improve my balance and reduce my risk of falls?	<ul style="list-style-type: none"> • Stretching exercises may increase flexibility, balance, and daily function. Stretching exercises can also improve the range of motion of your joints. • Exercises that maintain or improve balance (holding on a chair, standing on 1 leg at a time) can reduce the risk of falls and related injuries. • Hold a stretch for about 30 seconds, then switch sides and repeat. • Do not bounce while stretching. If you feel pain during stretching, reduce the stretch intensity. • Perform activities that maintain or increase flexibility for at least 10 minutes and at least 2 days per week. • If you have health conditions or injuries, discuss with your doctor or physical therapist the types of stretches that are right for you.
What should I add to my exercise plan to maximize cognitive function?	<p>The brain is constantly responding to different sensory stimuli, so adding additional sensory stimuli to your exercise program might stimulate and integrate other brain areas while you move. Examples of additional sensory activities to perform while exercising are</p> <ol style="list-style-type: none"> 1. Carrying on a conversation 2. Listening to a story or music 3. Complex movements such as dance choreography/ballroom dance 4. Balance exercises
What can I do to improve my enjoyment and adherence to an exercise program?	<ul style="list-style-type: none"> • Leisure-type activities (eg, daily social, family, and community activities) can be more fun, but the best exercise is the one that makes you feel happy and that you have fun doing alone or with others. • If you are a social type of person, try bowling or similar social activities. • Some people prefer individual-type exercise (eg, running, swimming).
NOTE. Physical activity recommendations are mostly based on the American College of Sports Medicine/American Heart Association guidelines. ^{1,18}	

Authorship

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