EXERCISE

WHAT QUESTIONS SHOULD I AND MY FAMILY BE ASKING?

- Do I feel weak, tired, or have low energy all the time?
- Is it safe for me to exercise?
- How do I get started?
- Are there any exercises or activities I should avoid?
- How does my health condition affect my ability to exercise?
- Are my long-term (chronic) illnesses controlled?
- Do I have any pain? If so, is it under control?
- Which exercises will help me the most?
- What are the exercises I can do sitting or lying in bed?

WHAT ACTIONS CAN I TAKE FOR THIS AGENDA?

- Join a community walking group
- Go for a brisk walk around the block after lunch
- Take up a favorite sport again
- Go for a nature hike on the weekend
- Taking the stairs instead of the elevator when possible
- Parking farther away from your destination to walk more
- Walking or biking places instead of driving
- Working in the yard or gardening
- Doing light exercises while watching television
- Changing positions from lying to sitting or sitting to standing
- Learn key older adult-friendly workouts that have great benefits such as aerobic and resistance training

- Exercise is any effort that involves physical activity to maintain fitness and health. Exercise does not necessarily mean it is for losing weight
- It can also be done to achieve better strength, endurance, and well-being
- As we age, exercise becomes even more important to maintain our robustness and function

WHAT ARE THE BENEFITS OF EXERCISE ESPECIALLY IN OLDER ADULTS?

- Maintaining mobility and reduce the risk of falling. Strengthening your muscles is a good way to maintain independence and balance
- Improve or maintain body weight. Usually in older adults being a little overweight is better than being underweight
- Maintain bone health. Exercise reduces the risk of bone disease. Refer to our "bone health" agenda for more details
- Maintain mental health and feel better. There is new research showing that exercise
 decreases harmful proteins in the brain and can reduce the risk for depression and
 anxiety
- Improve vigor and robustness. This will help you recover from illnesses faster and reduce the length of stay in the hospital. See the "vigor" agenda for more details
- Improve the quality of sleep, not just duration. Refer to the "sleep" agenda for more details
- Maintain functional independence. Exercise will allow you to keep doing the things you want to do longer

EXERCISE IMPROVES BALANCE, ENERGY, SLEEP, MOOD, WEIGHT, AND BONE HEALTH. EXERCISE REDUCES FRAILTY AND FALLS

WHAT CAN EXERCISE HELP PREVENT? WHAT DISEASES CAN BE HELPED OR LESSENED BY EXERCISING?

- Diabetes
- Heart disease

- Stroke
- Bone disease
- Dementia
- Frailty
- Depression

WHAT KIND OF EXERCISE IS MEDICALLY RECOMMENDED IN OLDER ADULTS?

- Any activity is better than none
- Aim to be physically active every day
- The more you do the better
- The amount of exercise ideally is 30 minutes a day for 5 days a week
- However, if you cannot do this it is ok to start with less time or fewer days
- The best type of exercise to get health benefits in older adults is "resistance training" and "aerobic exercises"
- Resistance training improves strength using weights and different forms
- Aerobic exercise improves endurance by increasing your heart rate such as with running

EXERCISING 5 TIMES A WEEK 30 MINUTES EACH TIME HAS GREAT HEALTH BENEFITS

KEY EXERCISES ARE RESISTANCE TRAINING AND AEROBIC EXERCISES

ARE THERE DIFFERENT DEGREES OR AMOUNT OF EXERCISE FOR OLDER ADULTS?

Yes, exercise can be:

• Light intensity (easy difficulty)

- Moderate intensity (medium difficulty)
- Vigorous intensity (hard difficulty)

Light intensity examples are:

- Getting up to make a cup of tea
- Moving around your home
- Walking at a slow pace
- Cleaning and dusting
- Vacuuming
- · Making the bed
- Standing up

Moderate intensity examples are:

- Brisk walking
- Water aerobics
- Riding a bike
- Dancing
- Pushing a lawn mower
- Hiking

Vigorous intensity examples are:

- Aerobics
- Jogging or running
- Swimming fast
- Riding a bike fast
- Tennis
- Football
- Hiking uphill
- Energetic dancing
- Martial arts

- Find an activity you like such as swimming
- Minutes count. Try increasing your activity level 10 minutes at a time. Every little bit helps
- Active time can be social time. Look for group activities or classes in your community.
 Get your family or friends to be active with you
- Walk wherever and whenever you can. Take the stairs instead of elevators when possible
- Start slowly and listen to your body
- Stop if you feel pain or you're exhausted

EXERCISE TYPES CAN BE DIVIDED INTO EASY, MEDIUM, OR HARD DIFFICULTY

EXERCISE IN A WAY THAT WORKS FOR YOU

WALKING IS BETTER THAN STANDING, STANDING MORE SO THAN SITTING AND SITTING MORE SO THAN LYING DOWN

WHAT ARE SAFETY TIPS I SHOULD KNOW BEFORE DOING A LOT OF EXERCISES?

- Talk to your doctor if you have any medical illnesses you think can stop you from exercising
- Examples of health issues to bring up to try and exercise safely are:
- Dizziness
- Shortness of breath
- Chest pain or pressure
- Blood clots
- Wounds that won't heal
- Joint swelling
- Recent surgery
- A hernia

WHAT IF I AM TOO OLD, WEAK, OR IN PAIN TO EXERCISE?

- There is no age limit to exercising
- There is research showing benefits to exercising even in those over 90 years old
- If you feel weak and want to start, talk to your doctor for simple exercises
- There are even exercises you can do sitting or lying in bed
- Make sure your pain is under control before exercising

THERE ARE GREAT BENEFITS TO EXERCISE NO MATTER HOW OLD YOU ARE

MAKE SURE ANY PAIN OR HEALTH ISSUES ARE WELL CONTROLLED BEFORE DOING SO

WHAT IF I DON'T LIKE EXERCISING?

- There are many things one can do to make exercising fun and easier
- Listen to music or an audiobook while exercising
- Window shopping while walking laps at the mall
- Get competitive such as playing tennis
- Take photographs on a nature hike
- Meet new people at a yoga class or fitness center
- Watch a movie or show while on the treadmill
- Instead of chatting with a friend over coffee, chat while walking, stretching, or training
- Go for a run, walk, or cycle when you're feeling stressed
- Find an exercise buddy, someone whose company you enjoy, and try activities you've never tried before

THERE ARE MANY CHANGES OR ACTIVITIES YOU CAN DO THAT COUNT AS EXERCISE

FIND WAYS TO MAKE EXERCISE MORE SOCIAL AND FUN

References

- 1. Robert L Kane et al. Essentials of Clinical Geriatrics 8th edition (2018) Jeffrey B. Halter et al.
- 2. Hazzard's Geriatric Medicine and Gerontology 7th edition (2016)
- 3. Jayna Holroyd-Leduc et al. Evidence Based Geriatric Medicine (2012)
- 4. Pollock ML, Graves JE, Swart DL, Lowenthal DT. Exercise training and prescription for the elderly. Southern Medical Journal. 1994 May;87(5):S88-95
- 5. Mills EM. The effect of low-intensity aerobic exercise on muscle strength, flexibility, and balance among sedentary elderly persons. Nursing Research. 1994 Jul-Aug;43(4):207-211
- 6. Evans WJ. Exercise training guidelines for the elderly. Medicine and Science in Sports and Exercise. 1999 Jan;31(1):12-17
- 7. Province MA, Hadley EC, Hornbrook MC, et al. The Effects of Exercise on Falls in Elderly Patients: A Preplanned Meta-analysis of the FICSIT Trials. *JAMA*. 1995;273(17):1341–134
- 8. McNeil, J. K., LeBlanc, E. M., & Joyner, M. (1991). The effect of exercise on depressive symptoms in the moderately depressed elderly. *Psychology and Aging*, *6*(3), 487–488
- 9. Brach JS, Simonsick EM, Kritchevsky S, et al. The association between physical function and lifestyle activity and exercise in the health, aging and body composition study. J Am Geriatr Soc 2004; 52:502.
- 10. Martinez-Gomez D, Guallar-Castillon P, Garcia-Esquinas E, et al. Physical Activity and the Effect of Multimorbidity on All-Cause Mortality in Older Adults. Mayo Clin Proc 2017; 92:376.
- 11. Hamer M, Lavoie KL, Bacon SL. Taking up physical activity in later life and healthy ageing: the English longitudinal study of ageing. Br J Sports Med 2014; 48:239.
- 12. Miller ME, Rejeski WJ, Reboussin BA, et al. Physical activity, functional limitations, and disability in older adults. J Am Geriatr Soc 2000; 48:1264.
- 13. Cress ME, Buchner DM, Questad KA, et al. Exercise: effects on physical functional performance in independent older adults. J Gerontol A Biol Sci Med Sci 1999; 54:M242.
- 14. Mänty M, Heinonen A, Leinonen R, et al. Long-term effect of physical activity counseling on mobility limitation among older people: a randomized controlled study. J Gerontol A Biol Sci Med Sci 2009; 64:83.

- 15. Pahor M, Guralnik JM, Ambrosius WT, et al. Effect of structured physical activity on prevention of major mobility disability in older adults: the LIFE study randomized clinical trial. JAMA 2014; 311:2387.
- 16. Stessman J, Hammerman-Rozenberg R, Cohen A, et al. Physical activity, function, and longevity among the very old. Arch Intern Med 2009; 169:1476.
- 17. Young J, Angevaren M, Rusted J, Tabet N. Aerobic exercise to improve cognitive function in older people without known cognitive impairment. Cochrane Database Syst Rev 2015; :CD005381.
- 18. Forbes D, Forbes SC, Blake CM, et al. Exercise programs for people with dementia. Cochrane Database Syst Rev 2015; :CD006489
- 19. Li F, Harmer P, Fisher KJ, et al. Tai Chi and fall reductions in older adults: a randomized controlled trial. J Gerontol A Biol Sci Med Sci 2005; 60:187.
- 20. Gillespie LD, Robertson MC, Gillespie WJ, et al. Interventions for preventing falls in older people living in the community. Cochrane Database Syst Rev 2012; :CD007146.
- 21. Li F, Harmer P, Eckstrom E, et al. Effectiveness of Tai Ji Quan vs Multimodal and Stretching Exercise Interventions for Reducing Injurious Falls in Older Adults at High Risk of Falling: Follow-up Analysis of a Randomized Clinical Trial. JAMA Netw Open 2019; 2:e188280.
- 22. Bann D, Hire D, Manini T, et al. Light Intensity physical activity and sedentary behavior in relation to body mass index and grip strength in older adults: cross-sectional findings from the Lifestyle Interventions and Independence for Elders (LIFE) study. PLoS One 2015; 10:e0116058.