Senior Fitness and Sports



Regular exercise will help protect you from chronic disease, improve your mood and lower your chances of injury. The older you are, the more you have to gain from exercise. All it takes is 30 minutes a day, 5 days a week.

Source: Agency for Healthcare Research and Quality

In This Article:

- Why should I exercise?
- Why aren't seniors exercising more?
- What if I feel physically unable to exercise?
- Benefits of exercise
- To get started
- Types of activity / exercise
- Online Resources for senior sports

Why should I exercise?

Are you one of the many seniors out there who knows you should be exercising, but you aren't sure where to begin? Do the tools of fitness -- exercise bikes, nautilus machines, treadmills, exercise balls and free weights -- intimidate you? Or maybe you find exercise boring? If any of the above apply to you, you are not alone. Although many older people are well aware of the importance of physical fitness, 85% of seniors do not exercise on a regular basis. Many older people don't exercise for t same reason that people of all ages resist physical activity – they think of it as too hard, too boring or they are disappointed the lack of immediate results.

If you are finding it hard to get moving, a reminder of the benefits should spur you to action. Regular physical activity, in addition to making you look and feel good, lowers your risk for a variety of conditions, including Alzheimer's and dementia, heart disease, diabetes, colon cancer, high blood pressure, and obesity. In fact, exercise and strength training can help you look and feel younger. According to Miriam Nelson, a Tufts University scientist and specialist in aging, "Biologically, we can reverse the aging process by 15 to 25 years. We can do that by becoming stronger." Exercise can also help you maintain you mobility and independence. Regular activity helps keep bones and muscles strong, promotes good balance and combats frailty.

Why aren't seniors exercising more?

One of the most common reasons seniors (and others) don't exercise is because they think of exercise as a chore, rather than enjoyable pastime. If you think of exercise that way, challenge yourself to think differently because it can have a profoun

effect on all aspects of your life. Recognize that regular physical activity can provide more than just physical benefits. Feelir involved, connected and passionate about things will also help you live a longer and healthier life. Exercise (in all of its man forms) can be just one of the ways that you keep yourself actively engaged in the world and do things that you really love to do. You are more likely to make a lifelong commitment to good fitness if you shift your focus and decide to do things that yo enjoy.

Making Exercise Fun

Exercise can be fun and it doesn't have to be the traditional walking, swimming or biking. You can try different sports or traditional exercise programs if you wish, or you can take up an active hobby like gardening. Even better, make a regular fitness routine sociable by forming a birdwatching/hiking club or a "walking before shopping day," a time for you and your friends walk the mall for 30 minutes before the stores open. Making sure your activities are fun is the most important step in your decision to be healthy and fit over the long term. Doing a variety of enjoyable activities will enrich all aspects of your life and be easily maintained; the side benefit will be a strong and healthy body.

For more information, read Helpguide's article: Making Exercise Fun

What if I am frail or physically unable to exercise?

Some seniors are reluctant to exercise because of the mistaken belief that exercise is bad for older people – especially thos with various diseases and disabilities – because it puts too much of a strain on your body. As you age, the body does take a little longer to repair itself, but moderate physical activity is good for people of all ages and of all ability levels. In fact, the benefits of exercising regularly far outweigh the risks, as you will see from the section below. Remember that your body was meant for movement, and just like a car or a bike needs to be used to keep working properly, your body needs to be used to function best.

Of course, there are some people whose physical abilities are limited by medical conditions or frailty. If you are one of these people, you may have to go about exercise more carefully than others, but don't dismiss it entirely. If you have physical limitations, consult your doctor before starting your exercise program. With proper instruction and guidance, you can learn activities and exercises that you can do to improve mobility and reduce frailty. If you are frail, it is particularly important to be careful, but to find a way to move your body because regular exercise greatly reduces the risk of falling and broken bones. exercise in a class setting with proper supervision and definitely consider swimming or another form or water exercise as it can be less jarring to the body – the local YMCA or YWCA are good places to start when looking for exercise programs that address special needs. See references and resources for information about chair exercises for those who have limited mobility.

Benefits of exercise

Just as a proper diet and engaging activities can help you live a more fulfilling life, physical activity will yield a multitude of physical, mental and psychological benefits. Some of the benefits that result from regular exercise:

Feel and look better

- **Self Confidence** Being active and feeling strong will naturally help you feel more self confident and sure of yourself. This improved sense of well being might help your overall mood and attitude about life.
- **Contentment** Natural endorphins produced by exercise may actually help you feel better and alleviate sadness or depression.
- **Social Interaction** If you choose, exercise can be a great way to meet people and socialize. Joining a class or walking with friends should make the exercise more enjoyable and it can also help you stay connected with others.
- Sleep Better People who exercise regularly tend to sleep better than those who don't. They usually fall asleep more quickly, sleep more deeply and awake less often during the night. Some fitness experts believe that a very short period of moderate activity in the evening, for example a 10 minute walk after dinner, will help you sleep more deeply

- at night. It is important to note that if you regularly experience problems sleeping, the general recommendation is to exercise early in the day rather than in the evening because exercise can keep you up at night. Having exercised earlier in the day should help you sleep better though.
- Mental Acuity (Alzheimer's Disease Prevention) New research shows that regular exercise can help prevent Alzheimer's disease and dementia. Exercise helps encourage regular brain functions and can help keep the brain active. Exercise can also provide numerous benefits for patients of Alzheimer's including reduced risk of depression and improving memory and circulation. See references and resources for more information.

Maintain or lose weight

- *Metabolism* Increase your metabolism; as you increase muscle mass you will burn more calories because muscle burns more calories than fat.
- **Body Composition** Body composition refers to the makeup of the body in terms of lean mass (muscle, bone, vital tissue, and organs) and fat mass. An optimal ratio of fat to lean mass is an indication of fitness. The right combination of exercise and healthy eating will help you decrease body fat and increase or maintain muscle mass.

Increase mobility, flexibility and balance

- **Balance and Flexibility** Balance and flexibility will improve when you exercise on a regular basis. Improved strength, flexibility and posture will help with balance and reduce your risk of falling. Greater flexibility should also reduce the pain of arthritis.
- *Mobility* If you do a variety of exercise, you will naturally increase your coordination. You should be better able to navigate your regular chores and activities.
- Muscular Strength and Endurance Exercise will improve your ability to use your muscles over a brief period of time as well as sustain your strength for repeated use or over a longer period. Greater muscle strength helps improve your ability to balance and increases you ability to perform everyday tasks without straining your muscles. On average, men and women over 40 lose one-quarter to one-third of a pound of muscle each year which is replaced by fat. This gradual loss results in a one to two percent loss of strength each year causing movement to become more difficult and contributing to a reduction in activity and exercise. Strength training, which can be achieved in a variety of ways, is particularly important for counteracting this damaging loss of muscle. Research at Tufts University has shown that strength training is one of the most important ways to slow down the process of aging and protect all of the body's functions. The research has also indicated that strength training can dramatically improve arthritis pain and stiffness as well as decrease depression.

Reduce risk of disease, sickness and injury (by strengthening muscles and bones)

- *Immune Function* A healthy, strong body fights off infection and sickness more easily and more quickly. Rather than sapping your energy reserves entirely, recovery from illness should be less strenuous.
- Cardio-Respiratory and Cardiovascular Function Regular physical activity lowers your risk of heart disease and high blood pressure. If you have hypertension, exercise will lower your blood pressure.
- Bone Density/Osteoporosis Exercise protects against loss in bone mass. Better bone density will reduce the risk of osteoporosis and lowers risk of falling and broken bones. Post-menopausal women can lose as much as 2 percent bone mass each year and men also lose bone mass as they age. Research done at Tufts University shows that strength training can dramatically reduce the loss of bone mass, help restore bones, and contribute to better balance and less fractures.
- **Gastrointestinal Function** Regular exercise promotes the efficient elimination of waste and encourages your digestive health.
- Chronic Conditions and Cancer Regular physical activity lowers risk of Alzheimer's disease and dementia, diabetes, obesity, heart disease, osteoporosis and colon cancer, to name just a few. It also helps in the management of high cholesterol and arthritis pain.

Good physical fitness improves the way the body works, and enables the body to rebound much more quickly from sickness or injury. These physical benefits along with the natural endorphins produced by exercise may also naturally lead to an improved mood and help decrease depression. Physical fitness and a physically active lifestyle may be one of the most

important contributions to healthy aging. So start now.

To get started

Often the hardest part of a new endeavor is getting started. You can do it. At first, pace yourself and move slowly. Work on making exercise a regular part of your day, regardless of time and intensity. As it becomes a habit, it will become easier to build on your routine.

Remember to create a schedule that includes a variety of activity and a mix of both traditional and non-traditional exercise. Exercise doesn't have to be grueling or boring – gardening, walking your dog, and dancing are all good ways to get in your daily exercise. You could also combine exercise with social activity – you could walk with friends, for example, or join a hikir club, or a swimming class. Or, investigate the sports listed below and try to find one that you enjoy. If you are having fun, it be better for you overall (physically, mentally and emotionally), and it will be much easier to maintain.

Other tips for starting and maintaining your exercise schedule:

MOST IMPORTANT THINGS TO REMEMBER

- **Get Clearance First** Before you begin, have a check-up and talk with your doctor or healthcare practitioner about any special conditions you might have.
- IF SOMETHING HURTS, STOP DOING IT If you have a persistent pain when you exercise, take a break. If you are sick, you should go easy or skip a few days. When you resume, start slowly again. Know that there are some warning signs that mean you should stop what you are doing and consult a doctor:
 - Chest pain or pressure
 - Breathing trouble or excessive shortness of breath
 - Persistent or sharp muscle or joint pain.
 - Nausea
 - Unusual balance difficulty
 - Severe illness

OTHER IMPORTANT TIPS

- Start Slowly Start with 10 minutes a couple times a day if you can. Go slow and be consistent.
- **Be Comfortable** Wear comfortable, non-restrictive clothing, supportive shoes and layers so that you can adjust as your body temperature rises.
- **Keep It Easy** Moderation is key, don't overexert yourself.
- **Breathe** Remember to breathe consistently throughout your exercise.
- **Hydrate** Drink plenty of water before, during and after your activity.
- Warm Up & Cool Down Always ease your body into and out of exercise. Walk slowly or stretch for at least 5 minutes. (See <u>references and resources</u> for good stretching techniques.)
- **Build Up** Gradually increase the time and intensity of your activity. It will become easier as you exercise consistently.
- Mix It Up Vary the type of activity you do. Try a new sport or take a tai chi or yoga class for variation. Doing new things will help you remain interested.
- Make It Fun Get active with friends, listen to music or take up an active hobby to keep it fun and interesting.
- **Be Consistent** If you can do a little bit every day, it will eventually become part of your routine and you will automatically include it. If you only do a lot occasionally, it will be difficult to keep it up and you won't realize any of the benefits.
- **Keep an Activity Log** Write down what types of activity you do everyday. As the days go on, it will be easier to keep up the pace when you look at all of the progress you are making.
- Wear a Pedometer Some fitness plans advise wearing a pedometer and making sure you walk at least 10,000 steps a day. This can be kind of a fun challenge and may inspire you to get moving and keep moving.
- Know Your Calories Calories aren't everything, but knowing how many calories you are burning when you are exercising and performing simple everyday tasks might also motivate you to keep moving. It is also good to recognize

that traditional exercise isn't the only way you burn calories. Some sample calorie counts for different activities are below. See <u>references and resources</u> for other calorie calculators.

EXERCISE approximate calories burned per 15 minutes / 30 minutes

- Circuit Training 185 / 320
- Cycling (6 miles per hour) 75 / 130
- Dancing (swing) 110 / 205
- Elliptical Trainer 235 / 548
- Golf (walking & carrying clubs) 80 / 170
- Hiking (average incline) 105 / 190
- Swimming 130 / 250
- Tennis (singles) 110 / 225
- Walking (3.5 miles per hour) 65 / 130
- Yoga 70 / 120

Types of activity/exercise

Cardio/Endurance Exercises

You should try to do 30 minutes of cardio respiratory endurance exercise each day. This means getting your heart rate up a breathing faster. Walking, cycling and swimming are all examples of cardio/endurance exercises. It is ok to do three 10-min periods of exercise if you prefer, especially when you are just starting to exercise. At the beginning, try to get your heart rate increase 50% over your normal resting heart rate. Gradually work up to 85% increase over your normal resting heart rate.

To find your normal resting heart rate, place your fingers on a pulse point (your wrist, neck or temple usually work well) and count the beats for ten seconds. Then multiply that number by 6 for your normal resting heart rate per minute. When you are exercising, take your heart rate the same way and compare it to your resting heart rate. If you have trouble finding your hear rate, have someone help you the first few times until you get the hang of it. Some exercise equipment have heart rate sensor on them to help you determine what level you are working at; have someone show you how to use the sensors or follow the instructions on the equipment for best results.

Cardio respiratory endurance exercise increases your body's ability to deliver oxygen and nutrients to tissues and to remove waste over sustained periods of time. After exercising consistently for a few weeks, you will notice a dramatic improvement your ability to exercise and in your ability to perform everyday tasks without getting winded and out of breath.

Strength/Resistance Training

Strength training uses and strengthens your muscles with repetitive motion exercises. Strength training can be done with weights, resistance bands, nautilus machines or by using walls, the floor and furniture for resistance. There are several different types of exercise you can do (See <u>references and resources</u> for more information).

Two to three strength/resistance training workouts a week will provide you the greatest benefits. The workouts should last 3 60 minutes each with at least one day of recovery in between workouts. You should try to exercise all muscle groups by doi 1-2 sets of 10-15 repetitions at moderate intensity (usually 70% of maximum ability, less if you are just starting). Progressive increase weight in your workouts.

Strength training helps prevent loss of bone mass and improves balance. Both of these things will help you avoid falls and broken bones. Miriam Nelson, a Tufts University scientist and specialist on aging has done a lot of research on strength training, especially for women and has found it to be a crucial element in staying healthy and reducing the frailty that often comes with aging (See <u>references and resources</u> for more information about her exercise programs for women).

Stretching/Flexibility Exercises

Stretching is vital to exercise. You should always warm up and cool down when you exercise and both should include some stretching (along with a light walk). Stretching helps your muscles warm up gradually and cool down gradually. Stretching improves and maintains flexibility, prevents injury, and reduces muscle soreness and stiffness. See <u>references and resources</u> for stretching information and instruction.

You may also find that you like stretching because it can be a time of meditation and a time to appreciate how your body fer Activities like yoga or Pilates can provide a good form of stretching as well as strength training because they focus on isolat and developing different muscle groups. A number of exercise programs, like yoga and Pilates, focus on developing a stron 'core,' a term which refers to the set of muscles connecting the inner stomach to the lower back and spine (pull your belly button back toward your spine to get an idea of the muscles in your core). Because the core muscles provide the foundatior for all movement and strength, having a strong core can help with all movement, encourage better posture and reduce allow muscle pain.

Online Resources for Senior sports

Many tools are available on the Internet to help you evaluate your fitness level and identify your fitness goals. These online tools are easy to use, quick, convenient, private, and free of any cost. They include fitness IQ tests, personal fitness scoreboards, health risk assessments, fitness logs, and other resources.

Building Blocks - Presents tips for getting started on an exercise program. (AARP)

Keep Active for a Longer, Healthier Life - Discusses value of exercise and provides tips to help you get started. (AARP)

Advice for the Aging Athlete – Provides valuable information about adjusting your workouts as you age. (Healthlink-Medic College of Wisconsin)

Aging and Exercise – Technical article outlining the effects of aging on different functions of the body. Helpful for understanding specifics of exercise's influence on the aging process. (Encyclopedia of Sports Medicine and Science)

Exercise instructions and exercise plans

Strong Women – Offers different exercise programs for women specifically designed for strengthening bones (and prevent osteoporosis), staying slim or aging well. Programs are based on the well-documented work of Tufts University researcher and specialist on aging, Miriam Nelson. Commercial site aimed at selling books, but all programs offer sample exercise demonstrations which are useful for getting started. User must read and accept user agreement to have access to programs

NIA Exercise Guide – 80-page guide available in PDF format or free by mail. Outlines the importance of exercise, safety till sample exercises, target heart rate charts, and an exercise plan. Also see NIA's Exercise: Getting Fit for Life for a brief discussion of the benefits of exercise and tips to get started. (National Institute on Aging)

<u>Exercise for the Elderly</u> – Presents basics of starting an exercise program for seniors and some sample exercises. (American Academy of Family Physicians)

Exercise: The Key to the Good Life – Provides an exercise plan for seniors. Sample exercises include directions and diagrams so that you can get started on your own. (President's Council on Physical Fitness and Sports)

<u>Stretching</u> – Provides stretching do's and don'ts along with instructional diagrams for stretching all of the major muscle groups. (New York Office for the Aging)

Alzheimer's and exercise

Working Out: The Benefits of Exercise for those with Alzheimer's disease – Information and sample exercise plans for Alzheimer's patients, along with advice for caregivers about how to start an exercise plan. (Mayo Clinic)

Regular Exercise Slows an Aging Brain's Decline – Provides information about two studies showing the benefit of exerc in decreasing the risk of Alzheimer's. (USA Today)

Fitness and calorie calculators

Calorie Calculator (commercial site) - Allows you to calculate calories burned for a wide variety of activities.

Activity Calorie Calculator (commercial site) – Enter your weight and duration of time to find out how many calories you w burn doing a wide variety of activities, including traditional exercise, household work, gardening, home repair tasks, and wo activities. If you enter 1 minute for the duration of time, the chart will tell you how many calories you burn per minute for eac task. Then you can multiply that amount by the number of minutes you do it during the day.

Get Fit Fitness Calculators - Help you determine your target heart rate, caloric needs, nutritional requirements, and more

<u>Shape Up America</u> – Offers online quizzes on eating out, portion control and an exercise diary that can help you keep trace of your daily activities. Site tools are free, but registration is required to use them.

Senior sports

Sports contribute a great deal both to an individual's life and to society as a whole. Sports offer a great way to stay active ar fit. They are fun, so it is easy to keep exercising when you participate in sports. They can also help you relax and relieve stress.

And sports aren't just physical - they're also social. When you join a softball team or take an aerobics class, you meet new people who share your interests. You may also be interested in following the highest levels of competition in your sport - the PGA tour, Wimbledon, or the Olympics - and that will give you another link to a community of like-minded fans.

Whether you are currently involved in a sport or you are simply looking for a fun athletic activity, you have come to the right place.

Before you begin any type of sport, be sure to check with your doctor or healthcare practitioner.

Alexander Technique

<u>Alexander Technique and Aging Well</u> – Discussion about the benefits of the Alexander technique for seniors. Includes a link a Guide on the Alexander technique.

Aerobics

<u>Aerobics for Seniors</u> - Discusses types of aerobic exercise, as well as exercising comfortably and scheduling exercise. (SeniorSites)

Low Impact, High Performance - Provides various low-impact techniques for getting in shape. (Lifetime TV)

Water Aerobics

Water aerobics has several advantages over land-based aerobics, especially for seniors. The water reduces stress and strage on the body's joints while providing increased resistance and exercise for the muscles. Many people also like water exercise because the water is cooling, reducing perspiration and overheating.

Water aerobics will help you lose weight, too. Water aerobics enables you to burn calories more efficiently. Walking on land burns 135 calories per half-hour workout, while deep water walking burns 264 calories in the same amount of time. Jogging and other activities are also more effective when done in water.

Fitness Zone Water Aerobics - Provides information about the benefits of water exercise for weight loss and calorie burni

The Water Well – Discusses the benefits of water exercise for people with medical conditions like osteoporosis, diabetes, a

back problems. (Aquatic Exercise Association)

Bowling

Senior All-Star Bowling Association - Membership page will help you find out about participating in senior tournaments.

Bicycling

<u>League of American Bicyclists</u> - Provides news and information concerning cycling legislation and advocacy. Also include a link to help you find a <u>bicycling group in your local area</u>.

Senior Cyclists - Information about current rules and laws governing cycling. (Pedestrian and Bicycle Information Center)

Golf

<u>Golf Skills</u> – Commercial site, includes animated demonstrations and golf information (commercial site). (BBC Sports Academy)

The Shivas Irons Society - Non-profit organization that promotes the game, events, kids' instruction, and more.

Swimming

<u>Swimming Skills</u> – Commercial site, includes animated technique demonstrations and more about swimming skills. (BBC Sports Academy)

<u>The International Swimming Hall of Fame</u> – Information about the health and fitness benefits of swimming and the importance of water safety.

Tennis

<u>Tennis Skills</u> – Commercial site, offers animated technique demonstrations and tennis rules and regulations. (BBC Sports Academy)

<u>Tennis One</u> - Commercial site, offers information about the rules of tennis, tips for improving your game, and even a specia section about the Senior Circuit.

Hiking and Walking

<u>American Hiking Society</u> – Discusses current issues and concerns for today's hikers as well as information about America hiking and foot trails.

Yoga

<u>Yoga Slows the Aging Process</u> – Outlines the benefits of yoga and the many different types of yoga. The site includes extensive health information as well as an animated section showing many of the various postures and poses.

Tai Chi and Qi Gong

Tai Chi and Qi Gong are two martial arts-inspired systems of movement that are beneficial to both mind and body. A recent study has indicated that Tai Chi may help seniors maintain and improve their physical health. Seniors who participated in a Chi class twice a week for six months reported improved ability at daily activities, better balance, and increased strength. Because it improves balance and physical health, Tai Chi also helps prevent falls.

Tai Chi - Explains the basics of Tai Chi including what to expect from your classes, how Tai Chi works, and more. (*Health ε Age*)

<u>Tai Chi and Qi Gong</u> – Includes informative articles about basics of the two systems, training information, and more. (*Qi,* a martial arts web magazine)

More ideas & resources

If none of the specific sports mentioned above triggers your interest, take a look these sites to get more ideas.

<u>The National Senior Games Association</u> – Information about the Summer and Winter National Senior Games (the Senior Olympics) and sports information for older adults.

Senior Sports Page – Offers detailed articles on a variety of sports. (Senior Journal)

Gina Kemp, M.A., and Robert Segal, M.A., contributed to this article. Last modified on: 01/14/08.