





The SilverSneakers® Fitness Program's Group Exercise Program



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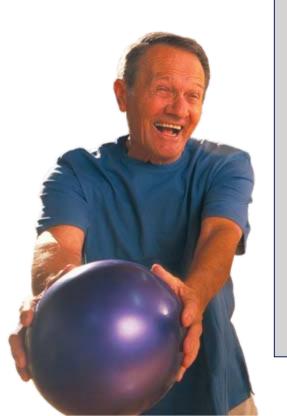


The SilverSneakers® Fitness Program's Group Exercise Program

Lesson Number One SilverSneakers – "the nation's leading fitness program designed exclusively for older adults"



What is SilverSneakers?



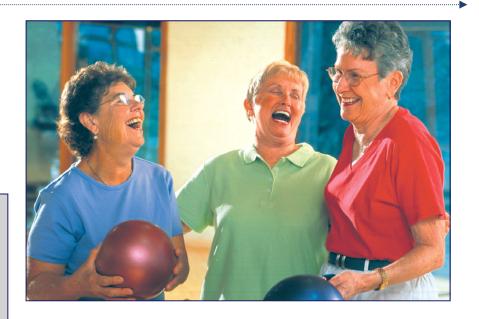
The SilverSneakers Fitness Program is the nation's leading fitness program designed exclusively for older adults and is a trademarked ® product of Healthways. The purpose of the SilverSneakers Fitness Program is to provide a <u>universal</u> fitness benefit for managed care organizations' Medicare members through an exclusive network of contracted participating locations. Eligible health plan members (adults 65 years of age or older and individuals declared Medicare-disabled) receive a basic membership at no extra charge and may participate as a guest through Healthways reciprocity policy in any SilverSneakers fitness location nationwide.



The SilverSneakers Solution

...a high touch program that promotes social interaction and encourages participation in healthy lifestyle activities, showing that it's easy to

- ✓ Get fit
- ✓ Have fun
- ✓ Make friends





SilverSneakers Fitness Program Goals:

- ❖ To improve physical and mental health and minimize age-related physical degeneration.
- ❖ To improve all 9 health and skill-related fitness components: cardiovascular endurance, muscular strength and endurance, body composition, flexibility, speed, power, agility, balance, and coordination.
- ❖ To encourage participants to become more aware of their <u>personal</u> <u>health status</u> including the importance of fall prevention.
- ❖ To provide a group exercise environment that encourages <u>"Fitness, Fun & Friends"</u> for <u>peer socialization</u> and increase each individual's sense of well-being.
- ❖ To encourage exercise <u>participation in a variety of fitness center</u> <u>activities</u>, including other group exercise programming, utilization of weight room equipment, and/or use of fitness center equipment.
- ❖ To <u>utilize the group setting</u> for health education events, promotional events, community and health fair seminars.



SilverSneakers Group Exercise Classes

- ❖ Muscular Strength & Range of Movement is the core class for Healthways group exercise programming. It is designed to increase strength, range of movement, agility, balance, and coordination and to improve participants' functional capacities, physical fitness level, and sense of wellbeing.
- ❖ Additional group exercise programming includes SilverSneakers Cardio Circuit, YogaStretch and SilverSplash®.





SilverSneakers = Fitness, Fun & Friends

- ❖ SilverSneakers Muscular Strength & Range of Movement is customized to accommodate ALL participants and offers an easy to follow format to include six segments: warm-up, rhythmic range of movement stretching, "work", cool down, final stretch and relaxation.
- ❖ The SilverSneakers group exercise classes are multi-level, equipment-based, total body conditioning classes. Choreography is performed from a seated and/or standing position.
- Muscular Strength & Range of Movement class is taught with a chair, elastic tubing with handles, hand-held weights and a SilverSneakers ball.
- ❖ NOTE: Participants are not required to use resistance tools if uncomfortable with the weight, angle of resistance or ability required to manage a tool.



SilverSneakers = Safe & Effective

SilverSneakers classes are appropriate for individuals who are fit and active as well as those who are sedentary, intimidated, unfamiliar with exercise, or entering post-rehabilitation programs, and/or those who enjoy a positive social environment.

Participants entering the group exercise classes and/or any other fitness center program options will have been "cleared for exercise" following successful completion and clearance of the Activity Readiness Assessment (ARA) questionnaire.





Group Exercise Program Scope

- **❖**49 States and Puerto Rico
- **♦** Average age: 73
- **❖** Average class size: 24 participants, with 39% men in attendance

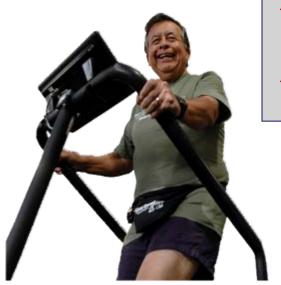




Members Report Improved Health

Since joining SilverSneakers:

- **❖** 55% of members report that their diet is healthier
- About 40% of members report losing an average of 8 pounds within the first year of joining the program
- ❖ 80% of all members say their health has improved
- 60% report less severe arthritis pain
- ♦ 60% report less interference with their usual daily activities from lower back pain
- 79% report less frequent leg pain, numbness or tingling





The SilverSneakers® Fitness Program's Group Exercise Program

Lesson Number Two
Effects of Aging and the Benefits of
Exercise



Effects of Aging & the Benefits of Exercise

Strive to gain additional knowledge regarding the benefits of exercise and the following: effects of aging, chronic diseases, orthopedic disorders, effects of drugs on exercise intensity, and nutritional requirements. William Evans, Ph.D., and Irwin Rosenberg, M.D., have identified the following ten "biological biomarkers" that can be altered by exercise when combined with good nutrition.

- Muscle Mass declines with age. Sarcopenia is age-related loss of muscle mass and is characterized by a decrease in metabolic rate, protein synthesis, fast-twitch muscle motor unit re-modeling combined with a 3 to 5 percent loss of muscle mass per decade due to hormone changes. Studies have shown that significant gains in muscle mass can be attained from muscular strength and endurance training.
- Strength is lost due to a decrease in muscle cell number, size, and type. It is estimated there is a 30 percent decrease in total muscle cells between the ages of 20 and 70. Muscle cell atrophy results in muscles contracting with less force and a decrease in fast twitch muscle fibers. Studies have proven dramatic strength gains for men and women following progressive strength training principles.



Effects of Aging & the Benefits of Exercise

- <u>Basal Metabolic Rate (BMR)</u> is the rate at which energy is produced while a body is at rest. A gradual decline of basal metabolic rate is largely a result of reduced muscle mass. Food calorie intake should be reduced to avoid weight gain. Studies have proven that regular exercise combined with strength training helps elevate metabolism and control body weight.
- <u>Body Fat Percentage</u> increases and lean body mass decreases with age. Exercise and a moderate reduction in caloric intake can keep overall body fat within a healthy range.
- Aerobic Capacity is the body's ability to process oxygen and pump blood through your heart, lungs, and circulatory vessels. Research shows that older adults can increase their aerobic capacity with strength training. An increase in muscle mass requires an increase in oxygen utilization, thereby increasing aerobic capacity.
- <u>Blood Sugar</u> uptake in the body's cells decreases with age, and the risk of Type II Diabetes increases. A well balanced diet and regular exercise will produce a positive effect on blood sugar absorption rates.



Effects of Aging & the Benefits of Exercise

- <u>Cholesterol</u> in the blood should be below 200. With age, total cholesterol increases while High Density Lipoproteins (HDLs) remain the same. A diet low in cholesterol and saturated fat combined with regular exercise will help increase HDLs.
- ▶ Blood Pressure is the gradient pressure of blood on the artery walls (systolic) in combination with the pressure exerted while the heart is at rest and filling with blood (diastolic). With age and/or a sedentary lifestyle, a decline in major blood vessel elasticity and thickened vessel walls contributes to increased resting and exercise heart rates. Research shows that regular exercise can lower blood pressure.
- Bone Density decreases normally in men and women. Postmenopausal women experience a rapid rate of decline in bone mineral density. A highcalcium diet, weight-bearing exercises, and progressive resistance training have proven to significantly help maintain and increase bone density.
- Thermoregulation mechanisms decline in efficiently recognizing thirst and the ability to maintain a safe internal temperature. Dehydration and a lower rate of sweating are common. Consistent hydration and strength training exercises to increase aerobic capacity will help a body adjust to temperature changes.



The SilverSneakers® Fitness Program's Group Exercise Program

Lesson Number Three SilverSneakers Signature Choreography



The SilverSneakers Signature Choreography

SilverSneakers
Muscular Strength &
Range of Movement
classes offer an
individual workout in
a group setting by
varying resistance
and anchor support
options.





SilverSneakers Resistance Tool Use

Resistance Tool Safety Guidelines:

- ❖ Resistance tools should be stored "out of harm's way" when not in use. During class place resistance tools and water bottles under the chair.
- Use one resistance tool at a time. Avoid too many changes and time-consuming transitions. Minimize repetitive bending at the waist to retrieve water and resistance tools from under chair.
- Avoid too many repetitions of an exercise. Cue specifically for the number of repetitions to be completed.





ADL Functional Choreography

The definition of physical fitness is the ability to perform all daily work and leisure activities. Follow fitness industry guidelines to maximize the benefits of exercise by designing your workout to improve activities for daily living (ADL) through all 9 health and skill-related fitness components.

Recommend an additional emphasis on the importance of hydration, eating well balanced meals and the ABC's of fitness (agility, balance and coordination) for improved overall conditioning to prevent falls. The SilverSneakers FITT Principle for Older Adult Exercise is based on the latest recommendations from "Physical Activity and Public Health in Older Adults: Recommendation from the American College of Sports Medicine and the American Heart Association", 2007.

Follow the SilverSneakers FITT Principle for regular exercise:

- **Frequency** = 3 to 5 times per week or daily as prescribed by a physician
- Intensity = 5 to 8 on the SilverSneakers Perceived Exertion Chart
- ★ <u>Time</u> = Continuous <u>vigorous</u> activity for at least 20 minutes per day, or 30 minutes per day of <u>moderate</u> intensity performed continuously or in sessions of a minimum 10 minutes each.
- **Type** = "heart healthy" cardiovascular workouts as prescribed for chronic diseases and/or a sedentary physical activity history, muscular strength exercises a minimum of two times per week including 8-10 exercises involving all major muscles groups with a range of 8 to 15 repetitions for each, flexibility and balance training (minimum 2 x per week).

Inc:



ADL Functional Choreography

Specific to Fall Prevention:

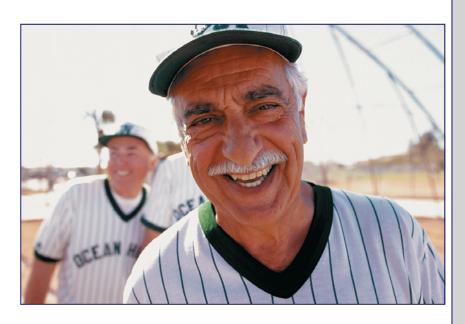
- ❖ Falls account for 87 percent of all fractures and are a contributing factor in many community residence admissions. Exercise programs focusing on specific groups of at-risk persons (women age 80+ and/or those identified with gait or balance deficiencies) have proven to be effective as reported by Gardner, Robertson, and Campbell, 1997.
- ❖ It is estimated 30 percent of those age 65 years or older will fall approximately one time per year (Tinetti ME, New England Journal of Medicine, 2003). Improving functional skill-related fitness components will minimize the risk for falling and help maintain an individual's independent lifestyle.
- ❖ With increasing age there is a normal decrease in sensory function, muscular strength, reaction time, flexibility and cognitive processing. Research findings specific to older adult exercise programs (Rogers et.al, 2003) have indicated significant improvement in static and dynamic balance skills, as well as improved limits of stability when leaning and reaching for an object.



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Lesson Number Four Class Format Choreography





Class Format – Muscular Strength & Range of Movement Conditioning:

- 1. Warm-Up
- 2. Rhythmic Range of Movement Stretching
- 3. Muscular Strength and Endurance "Work"
- 4. Cool-Down
- 5. Final Stretch
- 6. Relaxation

Warm-Up

❖ Warming up the large muscles helps to increase circulation to the extremities, thus improving temperature variations and nerve conduction inconsistencies in the hands and feet. An increase in core body temperature promotes joint elasticity and helps release oxygen from the blood.



Rhythmic Range of Movement Stretching:

- ❖ Initiate the rhythmic range of movement stretching through the two ball and socket joints (hips and shoulders) followed by joints with lesser mobility (neck, elbows, ankles, wrists, and fingers). An increase in range of movement will improve posture and provide a rehearsal for improved form during the muscular strength and endurance segments.
- ❖ Rhythmic range of movement stretching is slow and purposeful. Allow time for the participants to set their own pace through a full range of movement.



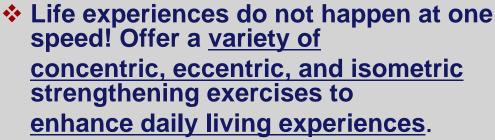
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Muscular Strength and Endurance

For older adults, years of a sedentary lifestyle, poor posture, injury, disease, and/or occupational demands exaggerate muscle imbalances. Encourage participants to <u>breathe</u> and continuously <u>use their muscles</u> while performing muscular conditioning exercises. This segment is performed from a seated and/or standing position.





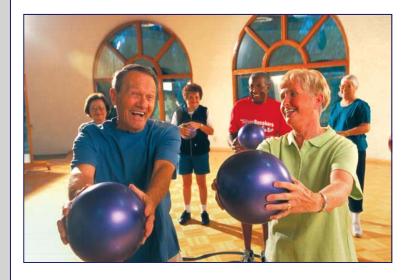
- ✓ Concentric Picking up a child
- ✓ Eccentric Lowering groceries into the car
- ✓ <u>Isometric</u> Holding open a door for the ladies
- ❖ Teach concentric and eccentric exercises in a slow, controlled manner through a full range of motion to gain maximum strength benefits.
- ❖ Teach modified isometric exercises by demonstrating a muscle contraction through a small range of motion quickly. Cue for regular breathing during a muscle pulse to maintain a continuous flow of blood and oxygen to the muscles.





Cool-down

Cue participants to "keep moving." A cool-down is important for those participants with chronic diseases. A gradual cooldown redirects oxygenated blood from the working muscles to a normal circulation pattern. The adrenal glands produce two natural stimulants: epinephrine (adrenaline) and nor-epinephrine. These substances continue to increase immediately following exercise and may cause potentially dangerous irregular heartbéats.





Final Stretch

- Final range of movement stretching is enhanced by increased joint elasticity following a workout.
- **❖** Lead class in a slow, controlled, total body static stretch.
- Use the chair as an anchor for maximizing and/or stabilizing a stretch that might be beyond the normal range of movement.
- ❖ Stretch all major muscle groups and hold each stretch from five to 30 seconds. Each participant's ability and/or comfort level to maintain a stretch without stress to a joint will determine the length of time for a static stretch.





Relaxation

❖ Current research in older adult depression has scientifically measured the benefits of peer group socialization and relaxation techniques for managing stress. A perceived sense of well-being is important to improving overall health.



SilverSneakers Leadership Skills

Large Group Leadership:

❖ The SilverSneakers classes are designed to incorporate exercise options to avoid overuse and/or injury. However, even the most attentive instructor may be challenged by an unforeseen event while teaching a large group of older adults. Honest, continual communication is necessary to prepare for or anticipate an incident.



SilverSneakers Leadership Skills

- ❖ Create and maintain a controlled environment. Uneven floor surfaces, poor lighting, slippery surfaces and extreme temperatures present risks that should be avoided. Older adults should not exercise in extremely hot, humid, or cold environments.
- ❖ Increase verbal and non-verbal communication skills: speak well with precise and specific directives without "echo cues" or filler conversational speech. Enunciate and physically present movements in a visual manner.
- ❖ Large group leadership is improved with the use of music and creating an upbeat experience around the identity of that music.



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Lesson Number Five Exercise Safety Guidelines



Safety Guidelines:

- Do not teach fitness industry contraindicated movements and/or exercises demonstrating unsafe biomechanical execution as an exercise. Every instructor is responsible for making "risk versus benefit" decisions regarding exercise selection.
- ❖ A good "rule to follow" is if you think an exercise or movement will be too risky for the participants, then it probably is!
- Movements and specific exercises contraindicated for the older adults include, but will not be limited to, the following:
 - ✓ Forward flexion at the hip greater than 45 degrees (while seated)
 - × while seated "reach down and touch your toes"
 - × while seated "wrap your arms around your legs and hug your chest"
 - ✓ <u>Uncontrolled momentum</u> as it relates to a full range of movement
 - × following music faster than 124-128 bpm
 - × cueing to swing the hand-held weights in a large range of movement
 - ✓ <u>Inversions</u> requiring the head to go below the heart
 - × reach down (from a standing position) and pick up water from the floor



- Overuse of a joint or muscle group
 - × excessive marching from a seated position
 - ➤ group of upper body arm exercises all requiring sustained abduction of the shoulder joint coupled with more exercises requiring additional abduction/adduction shoulder work
- Double leg lifts = seated exercises with both feet (unsupported) off the floor
 - × scissor cross kicks in front of the body
 - × seated jumping jacks
- Excessive or forced hyperextension and hyper-flexion of a joint (s)
 - x neck, wrist and knees = neck extension greater than 30 degrees, bending the wrist forward or back with the other hand, triceps dips using the chair as support, holding the knee (fully flexed) on the outside of the leg, quadriceps stretch with the foot held in place behind the body
 - × Double arm overhead triceps extension with hand-held weights
- NOTE: Degrees of movement and joint angles are determined from anatomical position.



Group Exercise Health and Safety Guidelines:

- Be aware of common warning signs: pain, swelling, muscle weakness, discoloration, disorientation, slurred speech, dizziness, numbness, and profuse sweating.
- Many participants will need clearance from a physician. Follow all directives from a physician regarding medication prescriptions.
- ❖ Do not prescribe medical treatment. Encourage participants to seek the advice of their physician for any problem existing for longer than two or three days.





Emergency Procedures:

- Any injury, however slight, needs attention and written documentation.
- ❖Review and practice your fitness center's emergency plan. Know your fitness center's address! Know the exact location of the first aid kit, ice, CPR masks, fire extinguishers, intercom systems and telephones.
- ❖Practice an injury/crisis scenario with your participants. Review the steps that will be taken for a 911 phone call managing an "immediate response" situation.



The SilverSneakers® Fitness Program's Group Exercise Program

Lesson Number Six Review & Summary



Review of Instruction Goals:

- To improve functional capacities and sense of well-being.
- **❖** To encourage social interaction in a <u>fun</u> and motivating manner.
- **❖** Demonstrate exercises to improve all 9 fitness components.

Health-related Fitness Components:

- ✓ Cardiovascular Endurance continuous movement throughout
- ✓ Muscular Strength and Endurance resistance tool intensity changes
- ✓ Flexibility range of movement
- ✓ Body Composition nutrition information on hydration

Skill-related Fitness Components:

- **✓** Speed utilize pace changes: half-time, tempo, double-time
- Coordination simultaneous movement in the upper and lower body
- ✓ Power "squats," standing up, sitting down
- ✓ Agility responding to a change in center of gravity
- ✓ Balance static/dynamic movements



- Cue during the class:
 - ✓ Correct postural alignment
 - ✓ Proper breathing techniques
 - ✓ Hydration
 - ✓ Using perceived exertion (1-10) is recommended. This scale measures exercise intensity according to "how you feel" and provides the instructor instant feedback.
- ❖ Scientific studies have proven perceived exertion to be an accurate assessment of heart rate intensity when correlated to actual heart rate measurements.
- ❖ Be aware of the following factors that affect heart rate monitoring: age, fitness level,_duration of exercise, medications, time of day and time of last meal.



The SilverSneakers Fitness Program

Inspiring individuals to lead healthier lives

