





SilverSneakers® Fitness

CIRCUIT TRAINING MANUAL







TABLE OF CONTENTS

Program Overview	2
SilverSneakers Circuit Workshop Goals	3
SilverSneakers Circuit Objectives	4
The SilverSneakers Circuit Format	4
SilverSneakers Circuit Choreography Criteria and Class Guidelines	7
SilverSneakers Circuit: Assessing Participant "Readiness"	9
Bibliography	.12





Program Overview

At Healthways, our mission is to improve the health and well-being of everyone we touch. We do this by providing unique older adult fitness programming to eligible health plan members nationwide. These members receive basic access to any participating location in our SilverSneakers network, most of which offer our signature classes.

SilverSneakers signature group exercise classes are multi-level and equipment-based. They are designed to be appropriate for both sedentary and active Medicare-eligible individuals, and welcome persons of all skill levels and abilities while fostering a safe and positive social atmosphere. The true goal of our class formats is to help participants to perform better and more confidently the necessary activities of daily living (ADLs). We achieve this goal by targeting increases in muscular strength, cardiovascular endurance and flexibility.

We are glad that you have decided to learn more about SilverSneakers and hope that you'll continue to share your passion for healthy living with the eligible members who visit your location. We welcome you to a nation-wide community of instructors committed to maintaining the highest standards of exercise participation and retention in the fitness industry.







SilverSneakers Circuit Workshop Goals

Program goals for SilverSneakers Circuit are to:

- Expand **enrollment** through SilverSneakers classes by offering a range of "older-adult" group exercises classes that prepare participants for lifestyles that may include continuing to work, caring for older parents and participating in recreational activities.
- Maximize participation by providing members with additional fitness knowledge and opportunities for more variety in physical activity choices that can be modified for a range of skill levels and condition-specific challenges.
- Impact **retention** goals by offering additional safe and effective physical activity options that may increase adherence to multi-level training and conditioning techniques.

Health and fitness goals for SilverSneakers Circuit are to:

- Improve cardiovascular, muscular, metabolic and neuromuscular systems.
- Increase an individual's overall confidence (i.e., self-efficacy) and sense of well-being in a fun and social environment.
- Improve the five skill-related fitness components agility, balance, coordination, power and speed through specific endurance training techniques that manipulate the **intensity, complexity and volume** of work and increase overall functional capacities for maintaining an independent lifestyle.

SilverSneakers Circuit Objectives

SilverSneakers Circuit offers standing, low-impact choreography alternated with standing upper-body strength work with hand-held weights, elastic tubing with handles and the SilverSneakers ball. By focusing on the benefits of a circuit-interval format, this class improves cardiovascular and muscular strength and endurance without increasing risk.

Although Circuit is designed for those who demonstrate consistent skills in **agility, balance and coordination**, the signature SilverSneakers chair is used for optional standing support, storage for resistance tools, and seated support for the workout's Final Stretch and Relaxation segments.

Your participants' skills and desires play an important role in deciding to add SilverSneakers Circuit to your class schedule. While not required by contract, Healthways recommends all participating locations offer one or more SilverSneakers Circuit classes per week (in addition to SilverSneakers Classic) as well as other SilverSneakers classes.

The SilverSneakers Circuit Format

SilverSneakers Circuit is a 45 to 60 minute class consisting of five segments: 1. Warm-Up and Range of Movement Conditioning (10 minutes)

- Warm-Up and Range of Movement Conditioning stimulates and increases oxygenated blood flow through the body. A gradual, rhythmic warm-up and range of movement stretching period helps to increase core temperature and joint elasticity.
- Warm-up exercises should progress from the larger to smaller muscles of the body: i.e., chest, back, glutei, quadriceps, hamstrings, biceps, triceps, wrists, ankles, fingers, and toes.
- Range of movement "exercises" are actually dynamic stretches. Progress slowly from low or moderate joint movement to the joint's fuller range of movement.
- Healthways does not recommend using hand-held weights or elastic tubing with handles during the Warm-Up and Range of Movement segment.

2. Circuit-Interval Conditioning (20 minutes)

This segment increases the cardiovascular and muscular strength and endurance required to improve fitness skills and activities for daily living.

 Muscular conditioning segments consist of three routines, lasting approximately three minutes each, performed with a resistance tool and focusing on upper-body strengthening. t

The SilverSneakers Circuit Format (cont.)

2. Circuit-Interval Conditioning (cont.)

- Low-impact aerobic conditioning segments include three routines lasting approximately three minutes each and mainly require use of the muscles of the lower body.
- Segments alternate to allow one area of the body to rest while the other works.
- Offer a variety of movements exercising all upper- and lower-body major muscle groups.Be creative while progressively and gradually increasing participants' skills. Choose functional movements for everyday activities like driving, lifting and reaching, or have some fun with sports-oriented movements to improve performance in recreational activities like golf and swimming.
- Choreography options for the three low-impact aerobic segments include:
 - > Teaching choreography using different levels (space) and speeds (pace).
 - > Teaching simultaneous upper- and lower-body choreography. By changing one movement at a time (upper to lower or vice versa), you can create a continuous, fun and easy-to-follow routine.
 - > Teach the same low-impact routine for each aerobic segment. Teach "block" choreography: three or four base moves linked together that can be repeated multiple times. (See the Choreography Design handout in the Resources tab in the online module.)

NOTE: **Fall Prevention Tip** -- Avoid 360 degree turns and multi-focal choreography. Minimize the need for participants to look down to the floor and up to view the instructional cues. (e.g., pivot turn, grapevine)

3. Cool-Down (5 minutes)

- Cool-Down choreography moves at a slower pace to gradually re-direct blood flow from the working muscles and return respiration to normal patterns.
- Participants may sit or stand during this segment.
- Cool-Down Choreography Tips:
 - > Consider using the SilverSneakers ball, but not for resistance.
 - > Select exercises and rhythmic patterns like those performed in the Warm-Up.
 - > Introduce the base moves for a new upper- or lower-body movement segment.

(cont.)

The SilverSneakers Circuit Format (cont.)

4. Final Stretch (5 minutes)

- The Final Stretch begins a participant's return to a pre-exercise state and provides an opportunity for static stretching and flexibility gains.
 - > Participants may sit or stand during Final Stretch, with the chair for support.
 - > Incorporate PNF stretching techniques using the SilverSneakers ball.
 - > Allow time for deeper stretching.
 - > Progress through all major and minor muscle groups and joint articulations in a slow, static stretch. Allow each student to determine the length of a stretch according to individual comfort. Strive to hold each stretch for longer than five seconds.

5. Relaxation

- All participants must be seated for the relaxation segment.
- Relaxation Choreography Tips:
 - > Encourage participants to gently massage each major muscle group.
 - > Offer breathing exercises in combination with words of encouragement to relax, recover, and refresh!

SilverSneakers Circuit Choreography Criteria and Class Guidelines

- SilverSneakers Circuit is a **standing** class, however, the SilverSneakers chair is used for:
 - > Securely storing resistance tools and water within easy reach by placing them on the seat.

 Also prevents contraindicated standing inversions since participants do not bend over, allowing the head to go below the heart, to retrieve equipment.
 - > Standing support from behind or to the side of the chair.
 - > Seated support for the Cool-Down, if participants need additional stability.
 - > Seated support for Final Stretch and Relaxation segments.
- SilverSneakers Circuit does not offer floor work options.
- The Circuit-Interval segment includes six intervals of approximately three minutes each.

 Music speed should be in the range of 124 128 beats per minute.
- Resistance tool guidelines and tips:
 - Hand-held weights ranging from one to eight pounds are appropriate for strength work. Most participants begin with lighter weights and progress quickly to heavier weights. Encourage participants to use 3- to 8-pound hand-held weights.
 - Selecting the proper hand-held weights: Look for a complete muscle contraction through a full range of movement. Weights that cause a wrist alignment "break" or failure to return to the starting position are too heavy. Weights that allow a participant to perform an exercise without any discernible muscle contraction are too light.
- Elastic tubing with handles increases in resistance from yellow (3-5 pounds of resistance) to green (8-10 pounds of resistance), red (12-14 pounds of resistance) and blue (16-18 pounds of resistance). Encourage participants to use red and blue elastic tubing with handles.
 - Selecting the proper elastic tubing with handles: Hold the elastic tubing with both hands at shoulder-width distance and at shoulder height. If a participant can stretch the tubing 2½ times beyond its original length multiple times, it is too light and the instructor should recommend a heavier resistance.
- Circuit uses a six- to nine-inch, semi-soft SilverSneakers ball to increase strength and range of movement in the smaller muscles of the body. The ball's diverse uses include fun, hand-eye coordination activities, as an anchor for multi-muscle coordination, and options in both the upper and lower body to increase muscular endurance.

NOTE: The ball's versatility coupled with an instructor's ability to create fun and interesting choreography can enhance both the aerobic and resistance segments. In addition, the ball may be used in the Warm-Up, Cool-Down and Final Stretch.

(cont.)

SilverSneakers Circuit Choreography Criteria and Class Guidelines (cont.)

■ While most participants are eager to use resistance tools, they are not required to use them. Encourage a participant to choose resistance tools and perform exercises within one's skill level, which includes choosing body weight as a resistance option. Resistance tool choreography examples for SilverSneakers Circuit include:

Hand-held Weights

- > Wrist rolls in all directions
- > Biceps curls
- > Lateral raises (deltoids)
- > Rotator cuff "lift and pour"
- > Single or double arm shoulder presses (up & in front of the body)

Elastic Tubing With Handles

- > Abdominals transverse muscle group
- > Chest press double or single arm
- > Triceps extensions
- > Middle Back "Bow and Arrow"

SilverSneakers Ball

- > Wrists, hands, fingers be creative!
- > Ball in hands "Orbit" the ball around the body.
- > Horizontal shoulder abduction/adduction with the ball held in place under the arm (at below shoulder height), roll the ball on the body by moving the shoulder forward and backward.
- > With the ball placed between the thighs, squeeze the muscles together, hamstring curls (lift each heel up to the buttocks), hip rotations (tap toes inward and outward), squats (bend the hips and knees to squat).

SilverSneakers Circuit: Assessing Participant "Readiness"

If you currently teach SilverSneakers Classic, observing and assessing your participants based on the following functional criteria is instrumental in determining whether individuals are ready and able to handle the challenges presented in Circuit's choreography. These criteria are also useful to instructors who do not teach Classic but need to determine whether Circuit is appropriate for their participants.

Strength – sufficient muscular strength and endurance to exercise from a standing position for a minimum of 30 minutes

Circuit is a standing class with the chair available for optional standing support. We place equipment on top of the chair in Circuit, so sitting prior to the end of the Circuit- Interval is not an option. Therefore, a participant must be able to stand during exercise for a minimum of 30 minutes. Observe your Classic participants – those who are standing at every possible opportunity and moving freely are potentially ready for Circuit. Those who do stand but never let go of the chair may not be ready.

■ Walking gait: "Think 30" - simultaneous flexion/extension of the leg and arm at the hip and shoulder joint, respectively

A functional gait with proper mechanics is more than being able to walk unassisted. The following are a list of questions to consider when evaluating a participant's gait:

- O During stride, is there 30 degrees of flexion and extension at the hip and shoulder?

 Do the arms and legs move in opposition? An individual's arms and legs should flex and extend approximately 30 degrees from anatomical neutral during stride. Arms and legs move in opposition in a coordinated manner to maintain balance and stability.
- Is the individual's foot strike "heel to toe", requiring the foot to completely come off
 the ground during stride? If the answer to this question is "yes", the gait is functional. Is the
 individual shuffling her feet? Shuffling presents a trip hazard.
- Are the individual's feet placed at hip width? A wider foot placement during stride creates a larger base of stability, but also indicates that balance may be an issue.
- Seated posture "forward with chest up"

Is your participant able to sit forward in the chair, unsupported, and maintain proper curvatures of the spine, with chest lifted and chin parallel to the ground? This demonstrates the necessary core strength and postural control required for successful participation in Circuit. A participant who cannot maintain an unsupported, seated posture or needs constant postural cues needs to work on this functional criteria in Classic.

(cont.)

SilverSneakers Circuit: Assessing Participant "Readiness" (cont.)

Agility – ability to transfer weight without support

Does the participant demonstrate sufficient ability to transfer weight and safely perform movement when standing in Classic? Participants who appear unsteady or unsure when performing standing choreography that requires weight to shift side to side or forward and back, and need to hold onto the back of the chair would find Circuit's choreography challenging and perhaps frustrating.

■ Balance – equal in both the sagittal and frontal planes (static/dynamic)

Observe your Classic participants during balance exercises. In a *static* or stationary balance, can the participant stand still with one leg lifted to the front or back? What if she lifts her leg to the side? How strong is your participant's *dynamic* or moving balance when performing a front kick (in the sagittal plane) or a pendulum swing with arms and legs (in the frontal plane)? Balance ensures stability during standing exercise and is a key competency when considering Circuit readiness.

Space - high/mid/low

A participant who is ready for Circuit uses the entire space surrounding her chair.

- O Can she easily and safely retrieve her equipment from *under* the chair? (the "low" space)
- O Can she maintain balance and proper seated posture while performing exercises and movements in the chair? (the "mid" space)
- O Does she exercise in a standing position at every opportunity, using the back of the chair for minimal support? (the "high" space)

Pace - half-time/at tempo/double-time

Life does not happen at one speed, just as it does not happen in one direction or plane of movement. **How quickly and successfully do your participants adapt to pace changes in choreography?** "Simon Says" is a fun game to play with pace changes, but it's also a great test of reaction time.

Coordination – simultaneous choreography utilizing the upper and lower body

Circuit's choreography challenges upper and lower body coordination during much of the class through integrated, compound exercises When observing your participants, **can they follow cues for simultaneous arm and leg movements?** If you begin with footwork and add arms, do they stop moving their feet? How well do they move the upper and lower body in opposition?

Be prepared to take the need for safety and injury prevention to the next level in your SilverSneakers Circuit class. Here are some additional tips and considerations.

SilverSneakers Circuit: Assessing Participant "Readiness" (cont.)

Perceived exertion and hydration

Participants will be working harder and sweating more. Although you are required to cue a *minimum* of three times for hydration, encourage **more water breaks** (just keep those feet moving!)

Frequent perceived exertion checks help participants to monitor intensity. We want everyone to "finish the marathon" rather than "sprint", overexert and become discouraged, and that may mean individual choices to lower the intensity of exercise.

PE checks also **provide feedback** that instructors need to fine tune choreography, modifications and cueing. If the first cardio segment produces very low or high numbers, perhaps the instructor needs to change the pace or complexity of movement.

■ Vision challenges – "maintain line of sight"

It is much easier to see your participants when they're sitting. All of your participants will stand in this class and you need to "see and be seen". Move across the front of the room frequently when choreography allows. Decreased line of sight or age-related vision changes also require extremely practiced and precise verbal cueing.

Hard of Hearing Members

Hard of hearing members will rely heavily on your visual cues. Since "traveling" choreography is a popular option, make sure that you provide clear, visible visual cues whenever possible.

Exercise modifications to increase/decrease intensity

Consider that although your participants may meet the functional criteria necessary for participation in Circuit, they will still represent a wide range of skills and abilities. Everyone can find a safe and challenging workout in Circuit – it is the instructor's responsibility to plan for modifications for more- and less-skilled participants.

Practice/rehearsal time

This means you! As instructors, we often have classes that we've taught for so long that we can make choices "on the fly" and improvise. A successful Circuit class requires that you **prepare** your class in advance, **practice** your combinations and transitions with visual cues, and **plan** your verbal cues to make them as concise and precise as possible. Rehearse, rehearse, rehearse when launching a new class or new choreography.

■ The environment: floor surfaces, lighting, temperature.

Ensure that participants will have adequate room for movement and check for any uneven surfaces. Temperature control and proper lighting are critical to maintaining a safe environment.

NOTE: Participants must wear fitness shoes with good lateral support and shock absorption qualities.

Bibliography

American Council on Exercise (ACE) Aerobics Instructor Manual.

American Council on Exercise (ACE) Exercise For Older Adults.

Cisar, Craig & Kravitz, Len, "Interval Training", IDEA Today.

Yacenda PhD, John, "Speed and Power Sports Conditioning", Fitness Management.

Jones, C. Jessie and Rose, Debra J. Physical Activity Instruction for Older Adults.

ACE Lifestyle & Weight Management Manual.

Journal of Aging and Physical Activity, Volume 14/Number1. "Endurance Exercise and Leg Strength in Older Women".

Journal of Aging and Physical Activity, Volume 12/Number 4. "Effects of Multicomponent Training on Functional Fitness in Older Adults".

Takeshima, Tanaka, Kobayashi, Watanabe and Kato: "Effects of Aerobic Exercise Conditioning at Intensities Corresponding to Lactate Threshold in the Elderly".

Adams: "The Art of Endurance Training".

Karp, Jason, Ph.D.: "The Science of Endurance".

Signorile, Joseph Ph.D.: "Translational Training, Turning Fitness Gains into Functional Fitness".

Kravitz, Len Ph.D.: "New Insights into Circuit Training".

Ortega, Toral, Cejudo: "Effects of Strength and Endurance Training in Patients with Chronic Obstructive Pulmonary Disease".