BALANCING Act

Why this unrated aspect of fitness remains key to healthy aging and long-term mobility.

By Lindsey Galloway

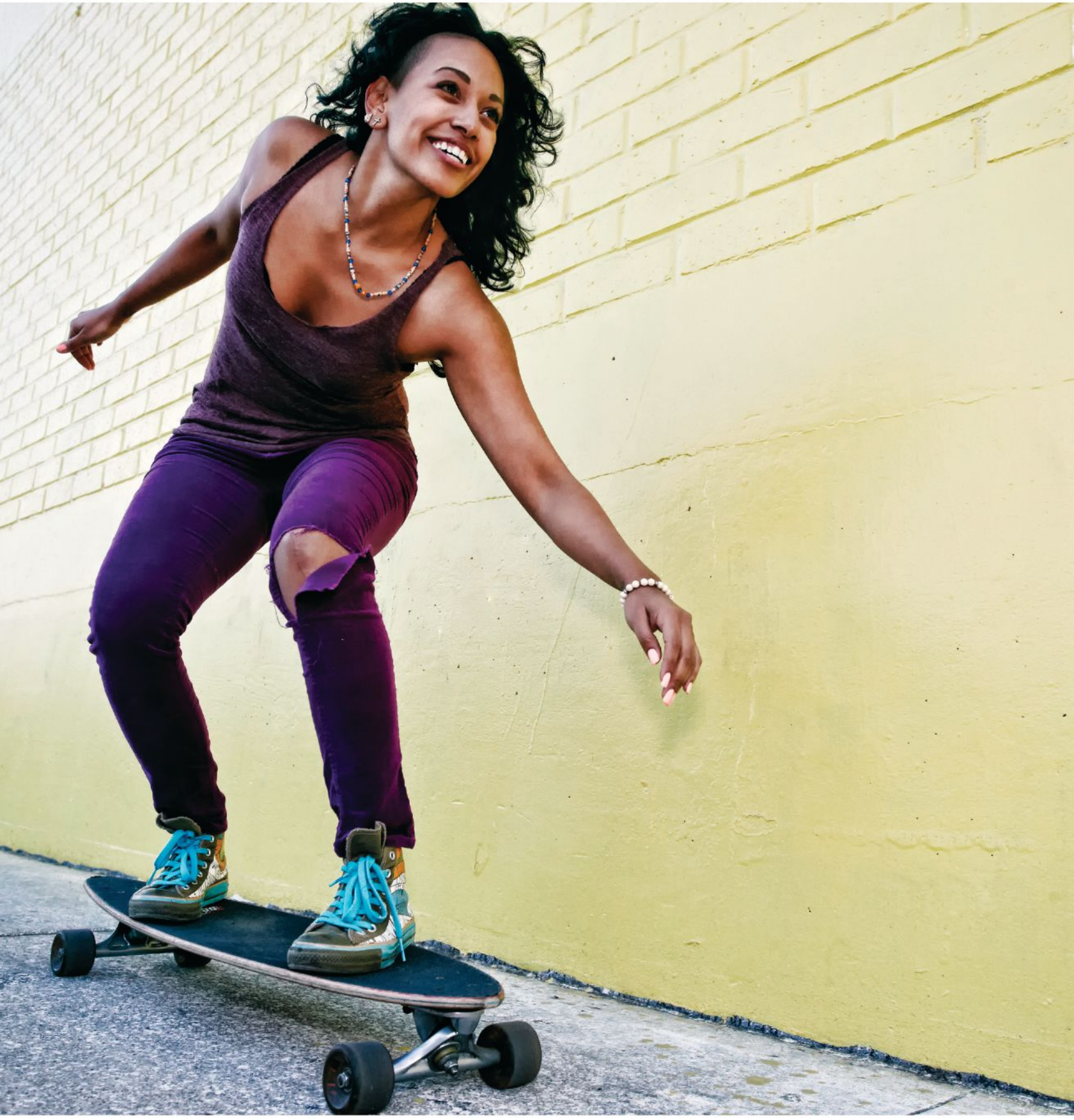
When we think about optimal health and fitness, we tend to prioritize strength, endurance, and flexibility. But we often overlook balance—a critical aspect of physical wellness that helps us complete everyday activities, prevent serious injuries, and maintain long-term independence. "From walking to cleaning the house to riding a bike, balance plays a role in all we do," says Kathleen Pollan, PT, DPT, a physical therapist with SporTherapy in Dallas. "Our balance impacts our safety in our homes and in our community."

Generally, when the body's systems are working and communicating as they should, we don't put a lot of conscious thought into how we stay upright. But in truth, even the simple act of walking relies on a carefully coordinated collaboration of body systems designed to keep us steady. "Balance requires feedback and input from various systems within the body," explains Pollan. "This includes your inner ear, brain and nerves, muscles, joints, and eyes." When these systems work together harmoniously, we maintain stability and perform activities safely.

However, when any one of these functions becomes impaired—increasingly common as we age—our ability to do even simple tasks can be compromised, and we may face an increased risk of falls and other injuries. But these impacts can be minimized by better understanding balance and working to strengthen its complex systems like we might engage in cardio to strengthen the heart. Here's how movement experts suggest we stay in balance for the long haul.

A SENSE OF STABILITY

As we age, our balance naturally declines due to changes in our bodies. "As we get older, several factors contribute to changes in our balance," explains Linda Borgmeyer, MSK, OTR/L, an occupational therapist and founder of occupational and physical therapy firm Novoleo. "Muscle mass and strength tend to decrease; joint flexibility can diminish; and our inner ear, which plays a significant role in maintaining balance, may not function as effectively."



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Vision impairment and a decrease in proprioception (your own sense of body awareness) also contribute to the deterioration of balance, says Pollan. Decline doesn't have to be inevitable, however; it often means we have to work a little harder at maintaining strength and stability.

One study published in *Osteoporosis International* found that a 12-month Balance Training Program significantly improved balance and mobility and reduced falling frequency in women who had osteoporosis, while one recent study found that older adults who could stand on one leg for 10 seconds lived longer than those who could not. "Like any other part of the body, balance needs to be trained and can be improved," says Pollan. "Working on support postures helps challenge this system and can be easily incorporated into what we do every day." Exercises don't have to be overly complicated and can often fit into your everyday routine and existing fitness regimens.

By incorporating daily exercises across each of the systems that keep the body in balance, you can keep each one of them in top shape. Here are a few ideas and easy exercises to start:

Vestibular system

Think of this as your body's internal GPS or gyroscope. Located in your inner ear, it helps you sense head position and motion, allowing you to maintain balance and avoid getting dizzy.

- Practice gaze stabilization exercises, such as focusing on a stationary object while turning your head side to side or up and down.
- Perform balance exercises with head movements, like walking heel to toe while turning your head left to right.
- Engage in activities that challenge your vestibular system, such as dancing, tai chi, or yoga.

Somatosensory system

Acting like your body's built-in radar, this system consists of sensors in your muscles, tendons, and joints that provide information about your body's position, movement, and the surfaces you're in contact with. This system helps you understand where your body is in space and make necessary adjustments to maintain balance.

- Incorporate balance exercises that challenge your proprioception, such as standing on one leg, using a balance board, or practicing yoga poses like Tree Pose or Warrior III.
- Walk barefoot on various surfaces like grass, sand, or textured mats to stimulate the sensory receptors in your feet.
- Use foam pads or balance discs during strength-training exercises, which works to engage this system.

Visual system

As an always-on camera, your eyes send visual cues to your brain, helping you orient yourself in the environment so you can maintain balance in your surroundings.

- Practice balance exercises with your eyes closed to reduce reliance on visual cues and enhance the use of other sensory systems.
- Perform exercises that involve tracking moving objects, such as tossing and catching a ball or following a moving target with your eyes while maintaining balance.
- Engage in outdoor activities like hiking or trail running, which require you to navigate uneven terrain and adjust to changing visual cues.

Musculoskeletal system

Your bones provide your body with a sturdy framework, while your muscles, tendons, and ligaments work to support your body, generate movement, and make necessary adjustments to maintain balance and stability.

- Incorporate strength-training exercises that target the legs, hips, and core muscles, such as squats, lunges, bridges, and planks.
- Practice single-leg exercises, like single-leg squats or single-leg deadlifts, to improve leg strength and stability.
- Engage in functional exercises that mimic daily activities, such as sit-to-standing or step-ups, to enhance muscle coordination and balance.

Cognitive system

As the body's balance control center, your brain acts as a communication hub, processing and integrating information from your senses, allowing you to anticipate and react to changes in your environment. It helps you maintain focus, adapt to new situations, and make split-second decisions to maintain balance and avoid falls.

- Engage in dual-task exercises that challenge both physical balance and cognitive function, such as walking while counting backwards or reciting the alphabet.
- Practice mindfulness and meditation to improve focus, concentration, and body awareness.
- Participate in mentally stimulating activities, like puzzles, brain teasers, or learning a new skill, to keep your brain active and adaptable.

Activities like dancing or yoga will incorporate multiple or all of these coordinating systems, so you can get the most out of your workouts. "To keep balance front and center, it's important to include exercises that challenge and improve our stability," says Borgmeyer. "Look for activities which focus on core strength, flexibility, and mindful movement." (See sidebar)

No matter how you engage your body's balance system, the benefits pay off in both quality and quantity of life. With a few small tweaks to your daily routine, you can restore your balance and reliably find your footing.

Balancing Alternatives to Yoga

While yoga tends to be a go-to recommendation for those looking to improve their balance, it's not the only exercise that can provide better body equilibrium. If tree pose isn't for you or you're looking for a way to complement your other balance work, try one of these modalities:

➜ **Tai Chi.** Slow, graceful movements combine with deep breathing in this ancient practice. The flowing, meditative nature of Tai Chi helps develop body awareness, coordination, and mental focus. Regular practice can improve flexibility, lower body strength, and overall stability, making it an excellent choice for people of all ages and fitness levels.

➜ **Boxing.** This high-energy sport requires quick footwork, agility, and coordination, all of which contribute to improved balance. The constant shifting of weight from one foot to the other as you throw punches and defend against incoming strikes helps develop a strong sense of body awareness and stability.

➜ **Pilates.** Other fitness modes tend to neglect strengthening the side body, a crucial practice in Pilates. Its focus on asymmetrical exercises can also provide an early warning sign on imbalances. "By alternating between the weaker and stronger sides during exercises, practitioners can address weaknesses and foster overall equilibrium," says Lesley Logan, founder of onlinepilatesclasses.com. "This approach not only enhances physical symmetry but also contributes to improved coordination, a key element in preventing falls and injuries."

➜ **Hiking.** Navigating uneven terrain on trails strengthens your legs and core, improving overall balance. Hiking also offers the added benefits of fresh air and scenery, making it an ideal activity for physical and mental well-being. Start with easier trails and gradually progress to more challenging routes as your balance improves.

➜ **Paddleboarding.** As you maintain equilibrium on the board, you'll engage your core and leg muscles. The constant adjustments required to stay upright on the water provide an excellent workout for your stabilizer muscles. As you become more comfortable, try incorporating gentle stretches on the paddleboard for an extra challenge.