Gardening Basics

Accessible, Adaptive Gardening

Gardening is a popular outdoor activity. When asked, most gardeners will say it is good for the mind, body and spirit. Many people think that when they grow older or have mental or physical limitations, they can no longer enjoy their gardening activities. Not so! It just takes a little more planning and a few changes to the techniques and tools used. The most popular approach is a methodology known as "adaptive gardening." Once you understand a person's limitations, then these techniques help you re-think how a person gardens and then develop strategies to modify procedures and devices to help ensure their safety. The two main areas for adaptation are garden design (including location, beds, paths, plants, containers) and tools.

Adapting Garden Design

Assessing Physical Abilities

First, do some assessments. How much time does the person have to spend gardening? Be aware that due to age and physical limitations, it may take longer to gather tools, get water, etc. Then, can the person get down to the ground and up again without assistance? Do they have enough arm strength to push up, grab hold, or pull themselves up? Can they drag hoses around or lift watering cans to water the plants? Do they need help walking or use a wheelchair or have problems with vision or memory?

Once any limitations are identified, then a garden design plan can be put into place to address them. If a person can get up from the ground with relative ease, then ground-level gardening will be possible, but if not, then raised beds, hanging baskets, or container gardening may be the solution. The same would be true for those who have little arm strength. If they will have trouble watering, then consider strategies to reduce watering needs, such as selecting plants that need less water and mulch around the plants to lessen evaporation. For those who need a cane or wheelchair, make sure pathways are wide enough, level, and barrier-free and allow easy access to the garden area. Raising beds or containers to wheelchair level is the best approach for those seated. Visually impaired? Select bright and contrasting colors for plants and use texture and fragrance.

Raised Beds

When selecting containers or creating raised beds, your goal is to raise the soil level within easy reach. A soil level 24 to 36 inches from the ground is best for seated gardeners. Add organic material to the soil to make it easier to dig. Larger and heavier sized containers provide stability and support without tipping. Beds should be no more than 3 feet across so plants may be reached while kneeling or 2 feet across for seated gardeners. Place hanging baskets at the proper level, depending on whether they will be accessed from a standing or seated position. Vertical gardening is another option, using a trellis or window boxes on walls or fences. An A-frame trellis could even be built to allow a wheelchair to freely pass through.



Raised Bed Gardening, image via Pixabay

Location

Locate the garden in an area that is easily accessible. If a gardener tires easily, place garden chairs or benches in strategic places. Pace yourself and spread projects out over time. Soaker hoses or automated sprinkler systems help with watering chores. To minimize watering and control weeds, use mulch. Install pathways that are firm, level, well-drained, and have good traction. Easy path maintenance is essential. A minimum of 40 inches wide is required for wheelchairs or scooters plus more space for turning around. Use straight paths and rails for those with visual problems.

Plant Selection

Use shorter plants (18 - 30 inches) in raised beds and containers so they will not grow out of reach. Plants like tomatoes should be in ground-level beds with cages for easy harvesting. For the visually challenged, besides bright and bold, choose plants with interesting tactile features such as fuzzy leaves or interesting bark and stems. Install wind chimes or fragrant plants to help the gardener find specific parts of the garden and arrange the plants in groups of three to five in straight rows for locating more easily. Planting perennials rather than annuals will reduce the work required for older or physically limited gardeners. For the memory impaired, planting favorite herbs, vegetables, or fragrant flowers that help trigger memories is beneficial.

Adaptive Tools

There are many tools on the market for ease of use, and some companies make tools specifically for physical limitations. Good tools make life easier. Some tools even have trigger grip handles and thumb rests to make them easier to grip. Lightweight tools are usually easier to handle. Those made of plastic, carbon fiber, or aluminum will be the lightest.



Ergonomic Tools, Barbara Brown, CC BY-NC-SA 4.0, Denton County MGA

Tools should also be easy to hold and not require great strength to use. Long handles are generally preferable to short, thick ones. There are some exceptions: for wheelchair or seated gardeners, shorter handled tools provide more leverage. Thicker handles help those with arthritic hands and/or can be made easier to grip by adding foam around the handles. Gardening with the right tool will reduce strain on the body and be less tiring. If you can kneel, then a foam pad will make gardening more comfortable. Get tired easily? Try a rolling cart with a padded seat. Transport tools in a garden cart or a plastic wheeled garbage pail. For the memory impaired, skip the sharp tools. Paint tools bright colors to minimize losing them. Label them for use and store them in the same place.

Preparing the Body to Garden

For older adults and to save wear and tear on the body, before gardening stretch your back by bending at the waist and stretch your arms by reaching over your head to the extent that is comfortable. When actively working the soil, keep your elbows close to your body for digging or raking and be sure to avoid long periods bent over. Keep the work area close to your body and avoid reaching and twisting. It is better to move closer to the work area.

For those with back and hip problems: keep your back straight when digging, use long-handled tools, and garden in raised beds or containers. Leg and knee problems? Garden from a chair using long-handled tools, and use a luggage cart to move the tool container and garden materials. For those with heart and lung or stamina issues, warm up with lighter tasks first, work at trunk level rather than reaching or bending, avoid lifting or holding things for long periods, use electric equipment instead of manual, and minimize walking distance between house, garden, and tool storage. A pulley system to raise and lower hanging plants is helpful.

For those suffering from dementia, make gardening more accessible with raised beds, use non-toxic plants, create a garden in a circle or figure eight so there are no confusing dead-ends, and keep the activity lighthearted.

Of course we want to garden smarter, not harder. Gardening gives your mind a rest from worrying, but pace yourself and delegate tasks that are too difficult. Ask for help when needed. Be organized and vary your tasks. Take time to enjoy yourself, take pleasure in viewing the plantings, and "be a kid," no matter what your age!

Resources

"Adaptive Gardening: Tips for Stroke Survivors", NCHPAD (National Center on Health, Physical Activity and Disability), University of Alabama-Birmingham, video, (accessed 28 April 2026), https://www.nchpad.org/news-updates/adaptive-gardening-series/

“Child Friendly Native Plants of Texas”, Texas Parks & Wildlife, (accessed 28 April 2026), https://tpwd.texas.gov/education/bioblitz/tpwd-child-friendly-plant-flyer-final.pdf

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Stewart, Michelle, “Horticulture Therapy Workbook”, Antioch University-New England, (accessed 28 April 2026), https://www.antioch.edu/wp-content/uploads/2020/11/0411953horticulture-therapy-workbook.pdf

“Therapeutic Horticulture Activities Database (THAD)”, University of Florida, (accessed 28 April 2026), https://hos.ifas.ufl.edu/therapeutic-horticulture-activities-database/senior-and-dementia/

“Therapeutic Horticulture: Adaptive Gardening Tools”, North Carolina Botanical Garden, University of North Carolina at Chapel Hill, (accessed 28 April 2026), https://ncbg.unc.edu/engagement/therapeutic-horticulture/adaptive-tools/

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