

Benefits of Horticultural Therapy Techniques for People Living with Dementia

Presented by



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Alzheimer's Texas

A privately funded voluntary health organization formed in 1982 to serve Central Texans with Alzheimer's disease and their caregivers.

MISSION

To eliminate Alzheimer's disease and related disorders through the advancement of research and to enhance care and support for individuals, their families, and caregivers.

VISION

To create and sustain a dementia capable Texas in which persons with Alzheimer's and related disorders, and their families, receive quality care, effective treatments, and meaningful support.



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Learning Objectives

- Define and understand horticulture activities and Horticultural Therapy, especially in terms of supporting those living with dementia and their caregivers.
- Identify the potential benefits and limitations of Horticultural Therapy techniques for people living with dementia and their caregivers.
- Learn strategies for applying Horticultural Therapy techniques to positively impact the lives of people living with dementia.
- Think about and share ways we can apply and educate others about these strategies.



Horticulture Activities & Horticultural Therapy

- Horticulture: the art or practice of garden cultivation and management
- Horticultural therapy combines horticulture and rehabilitation disciplines.
- Horticultural therapy (related to the fields of eco-therapy and green care) is a process that engages a client in horticultural activities, facilitated by a trained therapist, to achieve specific and documented treatment goals.
- Employs plants, gardening activities, and the natural environment into therapeutic and rehabilitation activities to improve human wellbeing.
- Usually involves participant interaction and engagement with plants, gardening tools, landscapes, seeds, soil, or various aspects of nature in a structured activity.

What is the History of Horticultural Therapy?

- Historically, the use of horticulture to calm the senses dates as far back as 2000 BC in Mesopotamia.
- In the United States, the therapeutic benefits of peaceful garden environments have been understood since at least the 19th century. Dr. Benjamin Rush, considered to be the "Father of American Psychiatry" in the United States, reported that garden settings held curative benefits for people with mental illness.
- Horticulture was utilized to improve the care of veterans during WWI. This led to the start of horticulture use in clinical settings, including occupational and recreational therapy within psychiatric rehabilitation.
- Now research is also showing benefits for a wide range of people living with various health and mental health challenges, including Alzheimer's Disease and other dementias.



Therapeutic versus Social

Therapeutic Horticultural Therapy:

- Happens in a number of settings including psychiatric hospitals, nursing facilities, assisted living facilities, or physical rehabilitation centers
- A therapist co-designs (with input from other members of treatment team and/or the client) treatment plans to meet the needs of a client.
- Treatment goals or outcomes might include development in cognitive, psychological, social, and physical capacities—and typically include institutional collaborations or interventions.

Social Horticultural Therapy:

- Focused on leisure activity and enhancement of life quality
- Unlike therapeutic horticultural therapy, social horticultural therapy is more likely to be activity based in groups
- Works to create a community that focuses on fostering self-worth and providing a support system.



What are the Practical Benefits of Horticultural Therapy Techniques for People Living with Dementia



- Widely accepted for most people living with dementia because it invites them to watch, touch, and become close to the natural world.
- Can be incorporated into the daily activities schedules of any care setting and easily woven into the living environments of people living with dementia to improve their emotional well-being.
- Disability Appropriate: Many populations including those with cognitive, emotional, physical, mental, and substance use issues can benefit from Horticultural Therapy techniques
- Evidence Based: Studies have shown the benefits of using Horticultural Therapy for various groups.
- Budget Friendly: A greenhouse or landscaped garden isn't cheap, but many activity ideas are not costly.

Health/ Mental Health Benefits of Horticultural Therapy Techniques for People Living with Dementia?

- Broadly, recent research has shown Horticultural Therapy programs to be effective in increasing the engagement, mental well-being, and sense of meaningfulness and accomplishment for people living with mental health challenges. (Siu et al., 2020).
- Recent systematic review included 14 studies of Horticultural Therapy involving 411 people with dementia. This review supported the effectiveness of participatory horticultural therapy on cognitive function, agitation, positive emotion and engagement. (Zhao et al., 2020).
- Other recent studies have also shown reduced apathy, inactivity, and agitation. (Yi Yang et al., 2022)

Benefits of Horticulture Activities for Caregivers

A recent study confirmed the effectiveness of Horticultural Therapy in reducing:

- The burden of caregiving
- The deterioration of quality of life for caregivers.

(Yong Hyun Kim, 2020)

General Benefits:

- Learning new skills
- Building self-confidence
- Increased feelings of empowerment
- Creating a sense of responsibility/accomplishment
- Promoting enthusiasm/interest in the future
- Sensory stimulation
- Developing and improving motor skills
- Physical activity
- (Re)connecting with the outdoors
- Decreased depression
- Stress reduction





Simple Horticulture Activities

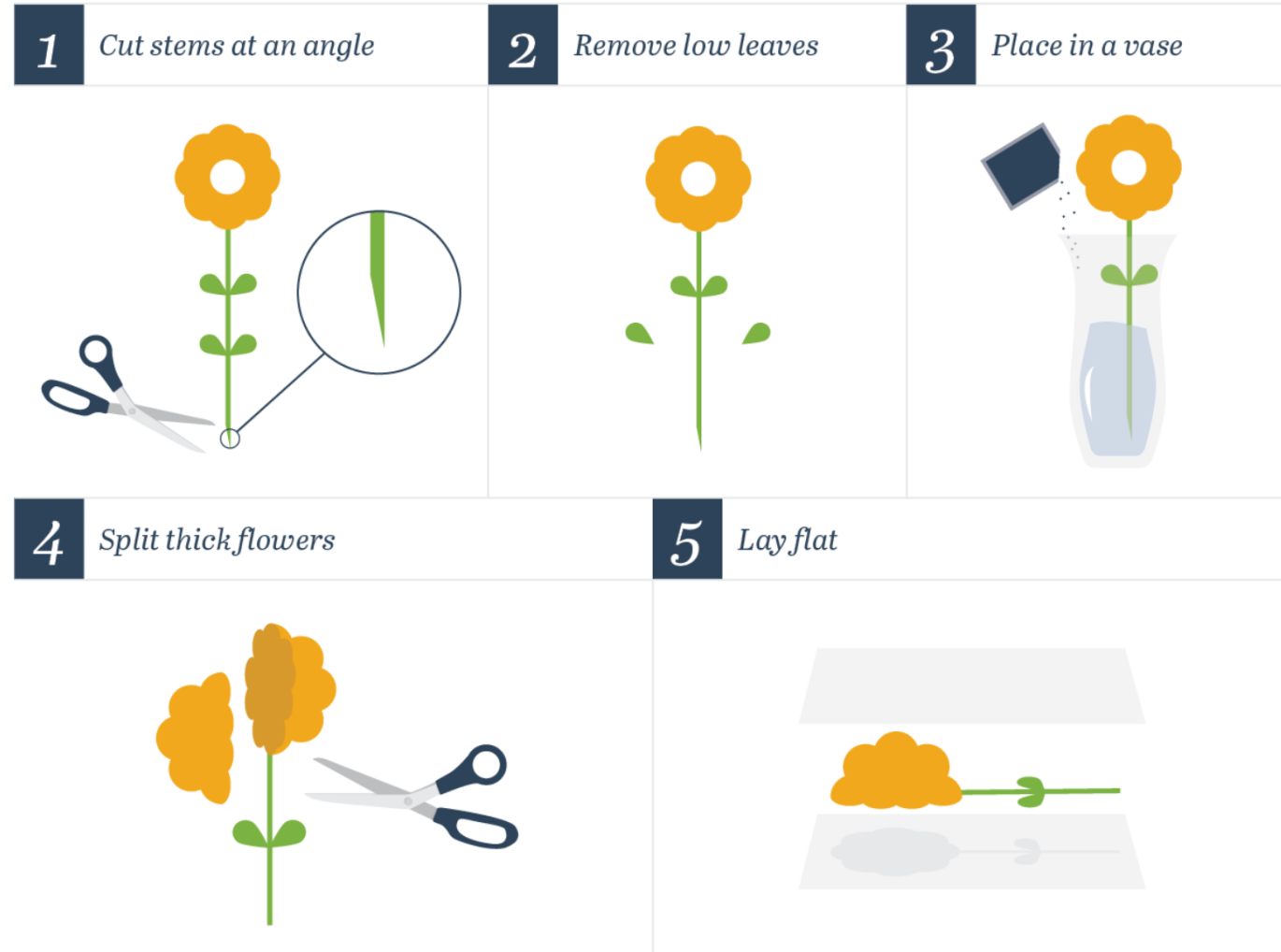
Growing Plants from Seeds

- Harvest the seeds from the fruits and vegetables your participants' meal or consider running an activity where participants snack on fruits such as oranges, apples, cucumbers, or whatever is available.
- Participants can find seeds and set them aside for the second half of the activity. Discuss healthy eating, how a simple seed becomes a bush/plant/tree, or the responsibility of caring for plants.
- After the snack, everyone washes their hands and plants a few seeds into a container filled with potting soil. Plant the seeds about a half to a quarter inch into the soil then lightly cover them. Regular watering and plenty of sunlight will allow the seeds to sprout to the delight of everyone invested in the activity.
- Do some research on the seeds you use—some may take weeks before sprouting, and others require special conditions.
- Facilitators could also purchase seed packets or starter kits for an easier option.

Pressing Flowers

- To allow for maximum water absorption, hold the stems under water immediately after cutting. Then, recut the stems at an angle.
- Remove any leaves that will be below the waterline in the vase. If left on, those leaves will rot and can create bacteria that shortens the life of a flower.
- Place flowers in a clean vase with water and flower food, or a teaspoon of sugar. Keep them in a cool, ventilated place out of direct sunlight. You only need to hydrate your flowers for a few hours.
- One thing to note is that flowers with naturally flat faces are the easiest to press. To press thick flowers like orchids or roses, you should split them down the middle with scissors or a knife.
- Lay the flat face of the flower on your paper and you are ready to press.

*Participants should be observed and assisted with using scissors or a knife.



<https://www.proflowers.com/blog/how-to-press-flowers>

Succulent Gardens:

Choosing containers: Succulent roots can thrive in a shallow container. Ensure that the container has drainage holes. If the container doesn't have drainage holes, drill some holes at the bottom. Standing water can kill a succulent.

Using the right kind of soil: You can use any potting mix designed for succulents. Look for words such as "cactus mix" or "succulent mix" on the packaging. You can also make your own succulent potting mix. Blend equal parts regular potting soil, coarse sand, and perlite or pumice for an ideal mix.

Selecting plants: When choosing your plants, be aware they might have varying light and care requirements. Check the plant tags for specific requirements to group succulents with similar needs in your container.



Other Horticulture Activities . . . There are hundreds!

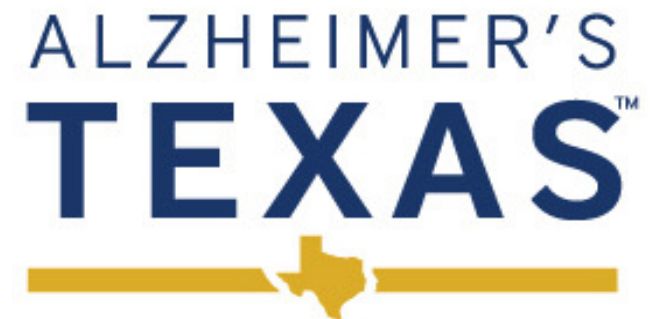
- Learn how to prune shrubs.
- Design your dream garden.
- Experiment planting seeds, bulbs, and sprouted plants.
- Identify and journal varieties of flowers.
- Put together a salad using garden vegetables only.
- Make cards using pressed flowers.
- Season with freshly cut herbs and freeze herbs for later use.
- Learn how to arrange flowers in a vase.
- Observe bees and butterflies doing their work.
- Have a garden party.



Limitations

- Small sample size of some horticultural therapy studies.
- Some positive effects, such as effects on quality of life and functional capacity, have not been consistent across studies.
- More research is needed to fully understand the benefits for people living with dementia and their caregivers.





Questions?

What do you want us to know?

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