



# Planting Purpose:

## Exploring the Impact of Therapeutic Horticulture in Dementia Care

*Evidence-based benefits of nature  
for residents living with dementia*

eldergrow

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# Planting Purpose: The Impact of Therapeutic Horticulture in Dementia Care

Evidence-based benefits of nature for residents living with dementia.

## I. Introduction

Care communities across North America are facing a growing challenge: how to provide meaningful engagement and emotional connection for older adults—especially those living with cognitive impairment. While medication has its place, care leaders are increasingly seeking non-pharmacological approaches that foster joy, calm, and connection.

At Eldergrow, we believe nature can be part of the solution. Our mission is simple: to bring purpose, connection, and therapeutic benefits to older adults through indoor gardening and nature-based programming. This whitepaper explores the science and real-life impact of therapeutic horticulture—specifically in the context of dementia care—highlighting how it can improve quality of life for residents while being easy to implement for staff.



Baked by peer-reviewed research and testimonials from professionals in the field, this paper provides care leaders with a clear and inspiring overview of the outcomes of horticultural therapy—and how ElderGrow can help bring those benefits to your community.

**"It's not just the outside world giving them something—it's them showing their families something."**

*– M.T., Recreation Technician, Châteaguay Day Center*

## II. The Science Behind Therapeutic Horticulture

Horticulture is more than a pastime—it's a powerful therapeutic tool. A growing body of research confirms what many caregivers already sense intuitively: gardening improves the well-being of people living with dementia. Whether it's sowing seeds, touching soil, or simply observing plant growth, these nature-based activities activate memory, reduce stress, and foster engagement.

### **Cognitive and Emotional Outcomes**

A 2020 meta-analysis by Zhao, Liu, and Wang reviewed 16 studies on horticultural therapy and found consistent improvements in cognitive function, sleep quality, and mood among older adults with dementia.



# Therapeutic horticulture is proven to:

✔ Improve motor skills

✔ Reduce agitation

✔ Improve sleep

✔ Improve self-esteem

**74%** of all U.S. households participated in lawn and garden activities.



**75%** of households age 55+ participate in some form of a garden activity.



**36%** reduction of risk factors of dementia through horticultural therapy.





Participants were more alert, better oriented, and less agitated. Additional research (Murrioni et al., 2021) supported these findings, highlighting the role of gardening in reducing depressive symptoms and increasing emotional well-being.

In a detailed case study, Mitchell and Van Puymbroeck (2019) observed a 76-year-old woman living with dementia over six weeks of regular gardening sessions. The results were powerful: improved mood, decreased behavioral disturbances, greater acclimation to her care environment, and reduced anxiety and depression.

### **Physical and Social Benefits**

Therapeutic gardening also supports motor skills, balance, and sensory stimulation. The repeated, meaningful tasks—watering, pruning, tasting—are known to enhance fine motor control and encourage movement, even among those with limited mobility.

Crucially, gardening also builds connection. Residents engage more easily with peers, staff, and family members when working toward a common, nurturing goal. This social stimulation is particularly valuable in dementia care, where isolation can quickly erode well-being.

**"Hands that were folded in laps and unable to complete simple tasks of daily living came alive when it was time for harvesting."**

*– R. , Skilled Nursing Administrator, Concordia at Villa St. Joseph*



## III, Putting Research Into Practice

To bring research into practice, Eldergrow partnered with **7 care communities** across North America over [12 months] to introduce our hydroponic garden system and track its impact. Through surveys, interviews, and weekly observations, staff shared how the garden was used, how residents responded, and whether they'd recommend the program to others.

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## Key Findings from Pilot Projects

Across dozens of responses, care leaders shared overwhelmingly positive feedback:

**100%**

said the hydroponic garden was safe to use and functioned as expected

**100%**

agreed the garden added value to their environment

**90%**

said the garden improved resident quality of life

**90%**

gave the project a rating of 9 or 10 out of 10

**100%**

of respondents would recommend the garden to other communities





In free-text responses and interviews, staff repeatedly emphasized the meaningful, tangible change the garden brought to their communities. Some noticed increased resident engagement, others highlighted the positive reactions from families, and many were surprised by how easy the garden was to implement.

**“Nature and hydroponics-related activities have a calming effect on our residents, as well as stimulating their curiosity and learning.”**

*- Community Mobilizer, PAX Habitat*

**"We were amazed by the resident participation—especially from individuals who don't usually engage. They were curious, motivated, and proud of what they helped grow."**

*- Activity staff, Saint Bruno Manor LTC*





Even residents with advanced cognitive impairment found joy and comfort in routine gardening tasks. Some communities used the garden as a launching pad for additional programming, like preparing salads, herbal teas, and food donations, creating ripple effects well beyond the garden bed.

Despite initial uncertainty about setup and maintenance, staff consistently rated the garden system as easy to install and manage. Respondents appreciated the intuitive design and ongoing support from the Eldergrow team.

**"In the same way we've seen music and singing unlock something beautiful in our residents with dementia or cognitive impairment, gardening has unlocked something special as well. Hands that were folded in laps and unable to complete simple tasks of daily living came alive when it was time for harvesting. Smiles were broad and full of life when managing the planting of seeds. The muscle memory of gardening was remarkable. I expected the garden to be fun for our residents, but I truly underestimated how life-giving it would be."**

*- R. , Skilled Nursing Administrator, Concordia Villa St-Joseph*



## Impact Beyond Measurable Outcomes

While data and surveys provide important validation, the most powerful proof comes from lived experience. Across Eldergrow pilot sites, staff and residents shared stories of transformation—some small, others profound. Together, they reveal the emotional and social dimensions of therapeutic horticulture in dementia care.



### Memory and Identity

Gardening often unlocks memories long thought inaccessible. Many residents reconnect with skills and routines from their past, sparking a sense of identity and dignity.

***"It reminds me of when I used to garden at home!"***

– Resident, Saint Brigid's Home



### Cognitive Stimulation and Curiosity

Through structured activities—like identifying plants, solving small gardening issues, or comparing growth—residents actively engage executive functions such as memory, planning, and observation.

***"They learned to distinguish between parsley and cilantro, plan harvests, and solve problems like leaf yellowing or algae buildup."***

– Elena, Educator at CHSLD Paul-Émile-Léger

***"Hands that struggled with daily tasks suddenly came alive at harvest time."***

– Rachelle, Skilled Nursing Administrator

Residents showed visible pride in learning and sharing new knowledge. One community even reported residents teaching hydroponics concepts to visiting school children—reversing traditional roles of dependency.





## Cognitive Stimulation and Curiosity

The garden quickly becomes a social hub—drawing in families, caregivers, and fellow residents. It gives residents something to talk about, share, and celebrate.

***"Families regularly came down to check on the garden's progress. One resident always ran to help when we brought it outside."***

– Staff, Humanitae

***"It's not just the outside world giving them something—it's them showing their families something."***

– Marie-Thé, Châteauguay

Some communities prepared salads together, others shared chamomile tea made from their harvest. One group even donated produce to a local food bank, turning care into contribution. traditional roles of dependency.



## Cognitive Stimulation and Curiosity

Residents consistently described feelings of peace, happiness, and satisfaction. The garden became not just an activity, but a refuge—especially for those managing emotional or behavioral challenges.

***"After gardening class, I feel calmer."***

– Anne, Resident

***"I'll never get tired of watching the plants grow."***

– Michel, Resident

***"It smells so good in the classroom—it just feels good to be there."***

– Julie, Resident




## IV. What This Can Mean For Your Community

Therapeutic horticulture represents an evidence-based, person-centered approach to dementia care that addresses cognitive, behavioral, and social needs simultaneously. The research literature supports its efficacy across multiple outcome domains, while pilot implementation data demonstrates practical feasibility in real-world care settings.

For care communities seeking to enhance resident quality of life while managing implementation constraints, therapeutic horticulture offers a promising intervention that aligns with current best practices in dementia care. The combination of individual benefits, social engagement opportunities, and staff satisfaction suggests that such programs can contribute meaningfully to comprehensive care approaches.

As the prevalence of dementia continues to rise, investments in evidence-based, non-pharmacological interventions like therapeutic horticulture will become increasingly important for maintaining quality of life and supporting successful aging in place.



 **Eldergrow has always been about growing seeds of joy, purpose, and connection. I'm so grateful to see it bloom in new ways with Eugeria."**  
- Orla Cancannon, Eldergrow founder



### **About Eldergrow**

Eldergrow's therapeutic horticulture programs are designed specifically for senior living environments, with consideration for the practical constraints of care settings. The indoor hydroponic garden system requires minimal setup and maintenance, integrating into existing programming without adding significant staff burden. Implementation support includes system setup guidance, ongoing technical assistance, and optional training resources. For communities seeking to enhance their nature-based programming, supplementary digital resources and structured activities are available through the Nature Connect platform, which provides evidence-based programming materials curated by therapeutic recreation specialists.

[Learn more on eldergrow.org](https://eldergrow.org)



### **About Eugeria**

Eugeria is a women-led company advancing dementia care through non-pharmaceutical, evidence-based solutions. Trusted by senior living communities and healthcare providers across North America, Eugeria curates and develops products that promote engagement, cognitive support, and quality of life. Our offerings—from therapeutic activities to sensory tools—are designed to integrate seamlessly into care models, helping teams deliver dignified, person-centered care.

[Learn more on eugeria.care](https://eugeria.care)

