

Consumer Horticulture Benefits for Individuals and Families



Horticulture and plants can benefit individuals and families by supporting health and well-being

- Gardening provides a source of physical exercise
- Gardening can provide nutritious food
- Gardening is relaxing, providing stress relief and restoration
- Gardening helps create a sense of belonging and connectedness



Physical and Nutritional Benefits of Consumer Horticulture

The busy hustle and bustle of everyday life makes it a challenge to balance professional demands and family obligations with physical activity and planned and healthy diets. Even though numerous studies have linked regular physical activity with improvements in the function of muscles and joints, good bone mass, improved metabolism, immunity to disease, and enhanced mental health, it is still a challenge to fit in regular physical activity on a daily basis. It would be great to incorporate these things into one activity. Gardening can do just that, meeting our needs for physical, nutritional, mental, and social health and well-being.

Gardening offers exercise for upper and lower body strength:

- *digging*
- *weeding*
- *planting*
- *raking*
- *staking plants*



Gardening activities are well suited to meet recommendations for daily physical activity, such as those recommended by the American Heart Association (AHA)¹. Gardening tasks using both upper and lower body strength, such as digging, fertilizing, weeding, raking, and tying plants to stakes, offer moderate-intensity physical activity, comparable to a brisk walk, swimming, dancing, and biking. Other gardening tasks that use the upper body strength while standing or squatting, such as pruning, mixing soil, planting seedlings, sowing, watering, and harvesting, are low-intensity physical activities, as are filling containers with soil and washing harvested produce. Together, these activities satisfy AHA's weekly physical activity guidelines, such as 150 minutes of moderate-intensity aerobic activity, 75 minutes of vigorous aerobic activity, or a combination of both for adults. For children ages 6 to 17, gardening can meet the recommended 60 minutes per day of moderate-intensity aerobic activity and strengthening activities at least three days per week¹¹.

Gardening can also contribute to good health by providing healthy fruits and vegetables for adequate nutrition. When a household grows fresh fruits and vegetables, the entire household tends to eat more fruits and vegetables. Children who participate in growing vegetables are more likely to try or eat a broader selection of vegetables. It is well-known that plants are an excellent source of fiber, vitamins, and minerals essential to health. Many plants have been used not only for food, but also for healing. Most drugs used today have roots in plants, pun intended. Herbal medicines have been used by humans throughout our natural history. Pharmaceutical companies utilize plant compounds to develop new therapeutic drugs and have derived many medicines, such as aspirin, anti-inflammatory, anti-diabetic compounds, and chemotherapeutic compounds.

Activities like gardening help us remain active and help make healthy food choices easier so that we minimize our risk for diseases, such as diabetes, heart disease and stroke, osteoarthritis, and many types of cancers that have been directly linked to obesity that has reached epidemic proportions globally⁷. Growing a vegetable garden or tending gardens and landscapes offers physical activity and nutritious, low-calorie foods essential for maintaining a healthy weight. Benefits are not limited to food gardening, but also extend to any type of gardening that involves physical activity.

Gardening keeps us active and healthy so that we minimize our risk for chronic diseases.



Mental and Emotional Benefits of Consumer Horticulture

In addition to physical and nutritional health benefits, gardening uniquely provides important mental well-being benefits². The repetitive tasks associated with gardening are reported to be relaxing and offer mental restoration and focus recovery. Many gardeners report “stress relief” and therapeutic benefits resulting from the emotional processing that comes while tending gardens and plants. Gardeners listed mental benefits from gardening such as a sense of purpose, relaxing, and forgetting worries². Studies have shown that exposure to plants while recovering from surgery or being in the hospital has improved recovery¹⁴. Gardening can enhance the ability to respond and rebound after difficulties, such as stress or illness.

•Gardens give us pride and a sense of purpose.



Gardening can meet our need for personal choice, mastery and competence, and a sense of relationship to others.¹² Designing a garden space, selecting which plants to grow or even their flower color are examples of personal choice. Selecting a preferred garden tool may meet that need for a child in the garden. Growing edible plants or those that are purely ornamental is entirely up to the gardener.

Opportunities to achieve success and demonstrate competency abound in the garden. A sense of pride and purpose results from growing and harvesting that first radish or tomato or from arranging a vase of cut flowers.¹⁵ Though success in the garden leads to an increase in self-esteem for both adults and youth, they should not worry about straight lines or perfection in the garden, or even plant death. Plants teach youth and adults alike about patience, delayed gratification, and nurturing. The garden and its related tasks provide opportunity to teach work habits by helping in the garden and understanding what it takes to produce food.⁵

Garden tasks, such as watering and fertilizing our plants or those of a neighbor, help us observe growth and realize what it means to be needed. Tending the garden offers valuable focused time for our families to converse, share, and interact,⁵ supporting feelings of relatedness and belongingness¹² and creating family traditions.⁵ A family’s gardening example often encourages other families to start gardens, and sharing knowledge and experiences encourages fellowship.³

Gardens provide safe areas for exchange and social events, such as conversing with neighbors or even having a neighborhood picnic⁵. Creating personal connections through gardening can help reinforce healthy food choices and regular physical activity. Community benefits, such as a sense of mutual appreciation and support, pride of place, and development of social networks, often result from gardening, offering opportunities for neighbors to connect.² The garden offers a place for newcomers to settle in and establish a new home or place of their own that reflects their cultural practices, such as specific plants and foods that remind them of home.¹³

Growing plants can make our neighborhoods safer places to live. Routinely taking care of plants gets us outside, talking with others, and becoming more aware of our neighborhood, resulting in an increased sense of community, stronger social connections, and reduced crime, such as less graffiti, litter, and verbal aggression among residents.^{8,9,6,11} The plants we cultivate in the places we live send a message that someone cares and that a property is valued. The plants and gardens that we tend matter for our personal health. They can enhance our homes, making them a haven for rest and well-being. They provide much-needed exercise, nutrition, and diversion while also providing the space to make important community connections.

Plants and gardens matter for:

- personal health
- beneficial exercise, nutrition, and mental diversion
- making our homes a haven for rest and well-being
- space to make important community connections.



This publication was written to educate residents about the beneficial roles of Consumer Horticulture. It was collaboratively developed by the Consumer Horticulture Extension, Research, and Education Coordinating Committee (SCC-85) organized through the Southern Association of Agricultural Experiment Station Directors. SCC-85 includes members from Auburn Univ., Clemson Univ., Univ. of Kentucky, Univ. of Georgia, Univ. of Hawaii, Louisiana State Univ., The Ohio State Univ., Univ. of Minnesota, Mississippi State Univ., Univ. of Nebraska, North Carolina State Univ., Univ. of Tennessee, and Virginia Tech. SCC-85 also operates as the NICH Academic/Government Council and serves to connect the academic horticulture community to NICH.

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The National Initiative for Consumer Horticulture (NICH) is a consortium of industry leaders who are promoting the benefits and value of horticulture. NICH brings together academia, government, industry, and nonprofits to cultivate the growth and development of a healthy world through landscapes, gardens and plants – indoors and out. The Mission of NICH is to grow a healthy world through plants, gardens, and landscapes.

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