Florida Horticulture for Health Network – Resource Hub

CATEGORY: HORTICULTURAL FOR HEALTH OVERVIEW

Gardening Health Benefits

Gardening is an integral component of horticulture for health. This very broad subject spans many related topics. These resources focus on the health benefits of gardening with more recent research examining psychological, physiological and neurophysiological benefits like using fMRI analysis, impacts on sleep and cognitive decline (Chang & Lee, 2021; Wang et al., 2024; Wang et al., 2024; Borella et al., 2023). Other topics include gardening as a healthy lifestyle including nutrition (Beavers et al., 2020), motivations and attitudes about gardening, and gardening impacting a variety of populations—children, elderly, disabled and indigenous populations, community and home gardeners. Studies on urban agriculture-health connections (Soga et al., 2022), staff gardening breaks (Christie et al., 2020), gardening contributing to ecospirituality (Harvey et al., 2021), wildscape gardening (Jones, 2020), and Covid-19 impacts (Wu, 2023; Fleming, 2024) are part of the body of literature.

Refer to other categories in the Resource Hub for related resources.

Key Organizations

American Community Gardening Association
American Horticultural Society
National Initiative for Consumer Horticulture
National Institutes of Health
North Carolina State University Plants for Human Health
The National Gardening Association

Books, journals & epublications on gardening health benefits

BMJ Open
Greenleaf, A.T. (2024). Gardens and well-being. In *Encyclopedia of quality of life and well-being research* (pp. 2643-2648). Springer International Publishing.
Gross, H. (2018). *The psychology of gardening.* Taylor Francis.
Horticultural Science & Technology (Korea)
Journal of Environmental Horticulture
Stuart-Smith, S. (2020). *The well-gardened mind: The restorative power of nature.* Discover Books.
The American Gardener magazine: American Horticultural Society.

Research & articles on scope of gardening health benefits

Recently published selected research & articles:

Ai, L., Wang, H., Feng, Y. et al. (2025). The healing power of *Camellia japonica* L.: How flower types influence urban residents' physiological and psychological wellbeing. *Front Psychol.*
Allison, A.L., Frost, R., & Murtagh, N. (2024). Promoting planting in front gardens: A systematic approach to intervention development. *UCL Open Environment*, 6.
Ambrose, G., Das, K., Fan, Y., & Ramaswami, A. (2020). Is gardening associated with greater happiness of urban residents? A multi-activity, dynamic assessment in the Twin-Cities region, USA. *Landscape and Urban Planning*, 198.

Bahamonde, A. (2019). Mental health through the art of gardening. *Journal of Therapeutic Horticulture, 29*(2).

Bailey, A., & Kingsley, J. (2020). Connections in the garden: Opportunities for wellbeing. *Local Environment*, *25*(11-12).

Barron, S., Lee, K., Miller, M., & Rugel, E. (2023). Tending more than gardens: Engaging residents in public landscapes to cultivate urban nature. In Marsh & Williams (Eds.), *Cultivated therapeutic landscapes*. Routledge.

Beavers, A. W., Atkinson, A., & Alaimo, K. (2020). How gardening and a gardener support program in Detroit influence participants' diet, food security, and food values. *Journal of Hunger & Environmental Nutrition*, *15*(2).

Bell-Williams, R., Irvine, K., Reeves, A., & Warber, S. (2021). Digging deeper: Gardening as a way to develop non-human relationships through connection with nature. *European Journal of Ecopsychology, 7.*

Blum, W.E.H., Zechmeister-Boltenstern, S., & Keiblinger, K.M. (2019). Does soil contribute to the human gut microbiome? *Microorganisms, 7*(9).

Borella, E., Melendugno, A., Meneghetti, C. et al. (2023). Effects of an outdoor horticultural activities program on cognitive and behavioral functioning, mood, and perceived quality of life in people with dementia: A pilot study. *Frontiers in Psychology*, *14.*

Botts, B. (2020). Gardening and wellness. *The American Gardener, 99*(6).

Briggs, R., Morris, P.G., & Rees, K. (2023, Aug.). The effectiveness of group-based gardening interventions for improving wellbeing and reducing symptoms of mental ill-health in adults: A systematic review and meta-analysis. *J Ment Health., 32*(4).

Centers for Disease Control and Prevention. (2021). Mental health and gardening: A tool for public health intervention.

Centers for Disease Control and Prevention. (2022). Community resilience through gardening initiatives.

Čepić, S., Tomićević-Dubljević, J., & Pálsdóttir, A.M. (2024). Unveiling human-nature interaction: Qualitative exploration of perceived benefits of urban gardening. *Health & Place.*

Chalmin-Pui, L.S., Griffiths, A., Roe, J. et al. (2021). Why garden? Attitudes and the perceived health benefits of home gardening. *Cities, 112.*

Chang, Y.S., & Tu, P.C. (2021). Healthy horticulture for senior citizens. *ISHS Acta Horticulturae 1313: International Symposium on Horticultural Therapies: Past, Present and Future.*

Chang, C.Y., & Lee, A.Y. (2021). Using functional magnetic resonance imaging (fMRI) technology to analysis the benefit of horticultural activities. *ISHS Acta Horticulturae 1330: XV International People Plant Symposium and II International Symposium on Horticultural Therapies: The Role of Horticulture in Human Well-being and Social Development.*

Chwa A, Vasudevan A, Chan SKM. Et al. (2025). The association of daily gardening and healthy ageing in Singapore. *Sci Rep., 15*(1).

Chu, H.Y., Chan, H.S., & Chen, M.F. (2021). Effects of horticultural activities on attitudes toward aging, sense of hope and hand-eye coordination in older adults in residential care facilities. *International Journal Environ Res Public Health, 18*(12).

Christie, M., Hulse, L., & Miller, P.K. (2020). Time for a (gardening) break: Impacts of a "green exercise" initiative for staff health and wellbeing in a corporate environment. *Journal of Therapeutic Horticulture*, *30*(1).

Daněk, P., & Jehlička, P. (2024). Gardening as a responsible leisure activity: The geography of Central European food self-provisioning. *Erdkunde*, *78*(4).

de Bell, S., White, M., Griffiths, A. et al. (2020). Spending time in the garden is positively associated with health and wellbeing: Results from a national survey in England. *Landscape and Urban Planning*, *200*.
de Vries, S., Baliatsas, C., Verheij, R., & Dückers, M. (2025). Domestic gardens and morbidity: Associations between private green space and diagnosed health conditions in the Netherlands. *Environment international*, *199*.
Dhurve, R., Jat, A., Swain, B. et al. (2024). A comprehensive overview on sustainable vegetable gardening: Eco-friendly approaches to home grown production. *Journal of Scientific Research and Reports*, *30*(10).
Egerer, M., Lin, B., Kingsley, J. et al. (2022). Gardening can relieve human stress and boost nature connection during COVID-19 pandemic. *Urban For Urban Green, 68.*
Elton, S., & Cole, D. (2024). Is a vegetable garden essential? Toronto gardens as culinary infrastructure. *Food, Culture & Society*, *27*(1).
Fernández-Salido, N., Gallego-Valadés, A., Serra-Castells, C. et al. (2025). Cultivating well-being: An exploratory analysis of the integral benefits of urban gardens in the promotion of active ageing. *Int J Environ Res Public Health., 22*(7).
Fjaestad, S.L., Mackelprang, J.L., Sugiyama, T., & Kingsley, J. (2020). Mental health outcomes associated with gardening: A scoping review. *Cultivated Therapeutic Landscapes.*
Fjaestad, S.L., Mackelprang, J.L., Sugiyama, T. et al. (2023). Associations of time spent gardening with mental wellbeing and life satisfaction in mid-to-late adulthood. *Journal of Environmental Psychology*, *87*.
Fleming, L. (2024). COVID-19 and horticulture for health: Positive impacts on gardening, urban agriculture, food security, green spaces, plant trends and horticultural therapy. *Journal of Therapeutic Horticulture 34*(1).

Fleming, L. (2024). University students' health & well-being supported by nature engagement & campus gardens. *Digging In, 10*(2).
Fleming, L., & Sterling, S. (2024). School gardens: Platforms for learning, therapy & community involvement. *Cultivate 4*(2).
Fleming, L. (2023). Garden engagement. *Digging In 9*(4).
Fleming. L. (2023). Gardening's social side. *Cultivate,* 3(1).
Fleming, L. (2022). Health benefits of food gardening – more expansive than improved nutrition. *Cultivate, 2*(3).
Fleming, L. (2021). Nine ideas to make gardening easier. *Digging In, 7*(3).
Foley, R. (2023). Horti-cultural geographies: Situating the garden as an assemblage of health and wellbeing. In Marsh & Williams (Eds.), *Cultivated therapeutic landscapes*. Routledge.
Gangamma, R., Walia, B., Minkoff-Zern, L.A., & Tor, S. (2024). Role of gardening in mental health, food security, and economic well-being in resettled refugees: A mixed methods study. *Journal on Migration and Human Security*, *12*(1).
Frost, R., & Murtagh, N. (2024). Understanding how we can encourage front gardening: Analysing capability and opportunity factors from a nationally representative survey. *Urban Forestry & Urban Greening*, *96*.
Furlong, R., Harvey, C., Holland, F., & Hallam, J. (2025). "I came here and it flows": An interpretative phenomenological analysis of low-income residents' experiences with allotment gardening. *Urban Forestry & Urban Greening*, *104*.
Gregis, A., Ginevra, MC., & Todaro, L. (2021). Gardening as an intervention for stress reduction: Evidence from Italy. *Urban Forestry & Urban Greening.*

Hall, C.R., & Knuth, M.J. (2019). An update of the literature supporting the well-being benefits of plants: Part 2 physiological health benefits. *Journal of Environmental Horticulture, 37*(2).
Hall, C.R., & Knuth, M.J. (2019). An update of the literature supporting the well-being benefits of plants: A review of the emotional and mental health benefits of plants. *Journal of Environmental Horticulture, 37*(1).
Haluza, D., Ortmann, J., Lazic, T., & Hillmer, J. (2025). Urban gardening and public health—A bibliometric analysis. *Sustainability*, *17*(3).
Harvey, M.L., Bowman, K., & Karr, A. (2021). The gardening spirit: Evidence that frequency of gardening precisely predicts ecospirituality. *Journal of Therapeutic Horticulture, 31*(1).
Hassan, A., & Deshun, Z. (2023). Promoting adult health: The neurophysiological benefits of watering plants and engaging in mental tasks within designed environments. *BMC Psychol., 11*(1).
Hassan, A., Qibing, C., & Tao, J. (2018). Physiological and psychological effects of gardening activity in older adults. *Geriatrics & Gerontology International, 18*(8).
Howarth, M., Brettle, A., Hardman, M., & Maden, M. (2020). What is the evidence for the impact of gardens and gardening on health and well-being: A scoping review and evidence-based logic model to guide healthcare strategy decision making on the use of gardening approaches as a social prescription. *BMJ Open, 10*(7).
Jueng, R.N., Lin, C.Y., & Huang, Y.H. (2023). Systematic review on the positive mental health impact of older adults participation in horticultural activities in long term care facilities. *Horticulturae*, *9*(10).
Jones, M.S., & Niemiec, R.M. (2020). Social-psychological correlates of personal-sphere and diffusion behavior for wildscape gardening. *Journal of Environmental Management*, *276.*
Kairios, R., Poola, M., & Jones, V. (2025). Cultivating mental wellness: The impact of community gardens on emotional resilience. *New Jersey Agricultural Experiment Station.rutgers.edu.*
Kanosvamhira, T.P. (2024). Sustainable urban agriculture: Unlocking the potential of home gardens in low-income communities. *The Professional Geographer*, *76*(5).

Kim S.O., Son S.Y., Kim M.J. et al. (2022). Physiological responses of adults during soil-mixing activities based on the presence of soil microorganisms: A metabolomics approach. *J. Am. Soc. Hortic. Sci., 147*.
Kim, S.O., Jeong, J.E., Oh, Y.A. et al. (2021). Comparing concentration levels and emotional states of children using electroencephalography during horticultural and nonhorticultural activities. *HortScience, 56*(3).
Koay, W.I., & Dillon, D. (2020). Community gardening: Stress, well-being, and resilience potentials. *International Journal of Environmental Research and Public Health, 17*(18).
Kunpeuk, W., Spence, W., Phulkerd, S. et al. (2020). The impact of gardening on nutrition and physical health outcomes: A systematic review and meta-analysis. *Health Promot Int., 35(2).*
Lampert, T., Costa, J., Santos, O. et al. (2021). Evidence on the contribution of community gardens to promote physical and mental health and well-being of non-institutionalized individuals: A systematic review. *PLoS One, 16*(8).
Landon, LB., Begerowski, SR., Roma, PG. et al. (2025). Sustaining the Merry Space farmer with pick-and-eat crop production. *NPJ Microgravity, 11*(1).
Lentoor, AG., Motsamai, TB., Nxiweni, T. et al. (2023). Protocol for a systematic review of the effects of gardening physical activity on neuroplasticity and cognitive function. *AIMS Neurosci., 10*(2).
Lindsey, L., & Mahlala, M. (2025). The impact of gardening on the wellbeing of people with mental health condition: A systematic review. *European Journal of Public Health*, *35*(Supplement_4).
Lunde Fjaestad, S., Mackelprang, JL., Sugiyama, T., & Kongsley, J. (2023). Mental health outcomes associated with gardening: A scoping review. In Marsh & Williams (Eds.), *Cultivated therapeutic landscapes*. Routledge.

McQuillan, S. (2021). 11 ways plants enhance your mental and emotional health. *Psychologytoday.com*
McGuire, L. (2022). Community gardening and wellbeing: The understandings of organizers and their implications for gardening for health. *Health & Place.*
Minkoff-Zern, L. A., Walia, B., Gangamma, R., & Zoodsma, A. (2024). Food sovereignty and displacement: Gardening for food, mental health, and community connection. *The Journal of Peasant Studies*, *51*(2).
Mok, K.T., Tung, S.E.H., Kaur, S. et al. (2024). Children's perspectives on vegetable consumption and gardening: Outcomes from a qualitative study in Kuala Lumpur, Malaysia. *Children & Society*, *38*(5).
Monsur M, Hefner T, Van Allen J. et al. (2024). Effects of childcare hands-on gardening on preschoolers' (3-5 Years) physical activity in semi-arid climate zone. *Int J Environ Res Public Health.*, *21*(5).
Moore, H., Boisvert, K., Bryan, M. et al., (2023). Inspired to garden: A qualitative study of participants' experiences in an academic medical center garden. *Cureus, 15*(7).
Murtagh, N., & Frost, R. (2023). Motivations for urban front gardening: A quantitative analysis. *Landscape and Urban Planning*, *238.*
National Gardening Association Editors. (2021). Food is medicine. *The National Gardening Association Learning Library*.
Nishiwaki, M., Takada, S., Otsuka, S. et al. (2025). Effects of agricultural or gardening physical activity on cardiovascular disease and dementia-related markers via arterial stiffness, cognitive function, and cerebral white matter status: Results from cross-sectional and interventional studies. *Frontiers in Public Health*, *13.*
Norwood, F.B. (2022). The garden as art, hobby, and the good life. *HortTechnology 32*(3).
Odebeatu, C.C., Darssan, D., Roscoe, C. et al. (2024). Greenspace and risk of obesity-related cancer in the UK Biobank cohort: An analysis of private residential gardens and other greenspace types. *Science of The Total Environment*, *943.*

Odeh, R., Diehl, E.R.M., Nixon, S.J. et al. (2022). A pilot randomized controlled trial of group-based indoor gardening and art activities demonstrates therapeutic benefits to healthy women. *PLoS ONE, 17*(7).
Odumosu, F. (2024). "It's essential we learn how to grow for ourselves": The legacies of Black gardening in racialized food systems. Master's thesis, *University of South Florida*.
Olanbiwoninu, A., Awotundun, T., Olayiwola, J., & Somorin, Y. (2024). Antimicrobial-resistant pathogens in fruits and vegetables from retail and home gardens. *Sustainable Microbiology*, *1*(1).
Pantiru, I., Ronaldson, A., Sima, N. et al. (2024). The impact of gardening on well-being, mental health, and quality of life: An umbrella review and meta-analysis. *Systematic Review, 14(1)..*
Park, S.A., Kim, S.O., Son, S.Y. et al. (2021). A preliminary study on physiological changes of humans during soil-mixing activity according to the presence of soil microorganism: Metabolomics approach. *ISHS Acta Horticulturae 1330: XV International People Plant Symposium and II International Symposium on Horticultural Therapies: The Role of Horticulture in Human Well-being and Social Development.*
Park, S., Lee, A.Y., & Park, H. (2019). Benefits of gardening activities for cognitive function according to measurements of brain nerve growth factor levels. *International Journal of Environmental Res. Public Health, 16*(5).
Park, S.A., Son, S.Y., Lee, A.Y. et al. (2020). Metabolite profiling revealed that a gardening activity program improves cognitive ability correlated with BDNF levels and serotonin metabolism in the elderly. *International Journal of Environmental Research and Public Health, 17*(2).
Perez Lugones, D. (2022). Exploring home gardener needs with citizen science. *Cultivate, 2*(3).

Porter, C.M., Wechsler, A.M., Naschold, F. et al. (2019). Assessing health impacts of home food gardens with Wind River Indian Reservation families: Protocol for a randomized controlled trial. *BMJ Open, 9*(4).
Roh T, Verzwyvelt LA, Aggarwal A. (2025). Indoor hydroponic vegetable gardening to improve mental health and quality of life in cancer patients: A pilot study. *Front Public Health., 13.*
Saaka, M., Awini, S., Kizito, F., & Nang, E. (2024). Relationship between home garden ownership and the consumption of fruits and vegetables. *Public Health Nutrition*, *27*(1).
Saito, M., Kinoshita, M., Sumimoto, T. et al. (2024). Association between gardening activity and frailty in patients with heart failure. *Intern Med., 16.*
Schattenberg, P. (2022). The positive effects of gardening on mental health. *AgriLife Today.*
Scott, T.L., Masser, B.M., & Pachana, N.A. (2020). Positive aging benefits of home and community gardening activities: Older adults report enhanced self-esteem, productive endeavors, social engagement and exercise. *SAGE Open Medicine*, *8.*
Shoemaker, C.A., Relf, P.D., Park, S., & Dorn, S. (2021). Hortophilia hypothesis. *ISHS Acta Horticulturae 1330: XV International People Plant Symposium and II International Symposium on Horticultural Therapies: The Role of Horticulture in Human Well-being and Social Development.*
Silva, T.P., & Araujo, A.M.S. (2020). Perception of improvement in people with disabilities who cultivate plants. *ISHS Acta Horticulturae 1279: XXX International Horticultural Congress IHC2018: VII Conference on Landscape and Urban Horticulture, IV Conference on Turfgrass Management and Science for Sports Fields and II Symposium on Mechanization, Precision Horticulture, and Robotics.*
Soga, M., Kurisu, K., Tsuchiya, K. et al. (2022). Contribution of agriculture to health promotion. *J Nutr Sci Vitaminol (Tokyo)., 68*(Supplement).

Sofo, A., & Sofo, A. (2020). Converting home spaces into food gardens at the time of Covid-19 quarantine: All the benefits of plants in this difficult and unprecedented period. *Human Ecology*, *48*(2).
Sommerfield, A., McFarland, A., Waliczek, T.M., & Zajicek, J. (2021). Use of gardening programs as an intervention to children's visual-motor integration. *HortTechnology, 31*(5).
Spano, G., D'Este, M., Giannico, V. et al. (2020). Are community gardening and horticultural interventions beneficial for psychosocial well-being? A meta-analysis. *International Journal of Environmental Research and Public Health*, *17*(10).
Tharrey, M., & Darmon, N. (2021). Urban collective garden participation and health: A systematic literature review of potential benefits for free-living adults. *Nutr Rev., 80(1).*
Timler, K., & Sandy, D.W. (2020). Gardening in ashes: The possibilities and limitations of gardening to support indigenous health and well-being in the context of wildfires and colonialism. *International Journal of Environmental Research and Public Health*, *17*(9).
Tracey, D., Gray, T., Manohar, N. et al. (2023). Identifying key benefits and characteristics of community gardening for vulnerable populations: A systematic review. *Health & Social Care in the Community*, *2023*(1).
Uğur, HG., & Kabakci, M. (2025). The perspectives of elderly residents in nursing home on gardening activities: A qualitative study. *Psychogeriatrics, 25*(2).
Vassányi, I., Szakonyi, B., Loi, D. et al. (2024). Impact of information technology supported serious leisure gardening on the wellbeing of older adults: The Turntable project. *Geriatric Nursing*, *55*.
Veldheer, S., Tuan, W.-J., Al-Shaar, L. et al. (2023). Gardening is associated with better cardiovascular health status among older adults in the US: Analysis of the 2019 Behavioral Risk Factor Surveillance System (BRFSS) Survey. *Journal of the Academy of Nutrition and Dietetics*, *123*(5).

Veldheer, S., Whitehead-Zimmers, M., Bordner, C. et al. (2023). Participant Preferences for the development of a digitally delivered gardening intervention to improve diet, physical activity, and cardiovascular health: Cross-sectional study. *JMIR Form Res., 7.*
Wang, F., & Boros, S. (2025). Effect of gardening activities on domains of health: A systematic review and meta-analysis. *BMC Public Health*, *25*(1).
Wang, K., Li, Y., Na, M. et al. (2024). Association between gardening and multiple sleep complaints: A nationwide study of 62,098 adults. *Journal of Affective Disorders*, *355.*
Wang, K., Li, Y., Chen, X. et al. (2024). Gardening and subjective cognitive decline: A cross-sectional study and mediation analyses of 136,748 adults aged 45+ years. *Nutrition Journal*, *23*(1).
While, A.E. (2020). Life is for living: The contribution of the arts and gardens. *British Journal of Community Nursing*, *25*(3).
Wijekoon, W.M.S.T., Weerakoon, R., & Vitharana, S. (2021). A review of gardening as a recreation impact on people's psychological wellbeing. *IOSR Journal of Sports and Physical Education, (11).*
Wu, CF., Trac, LVT., Chen, SH. et al. (2023). Enhancing human resilience beyond COVID-19-related stress: Public responses to multi-benefits of home gardening. *Sci Rep., 13*(1).
Wu, Y.C., & Chang, C.Y. (2021). The impact of landscape plant fragrance on emotion and brain responses. *ISHS Acta Horticulturae 1313: International Symposium on Horticultural Therapies: Past, Present and Future.*
Xu, J., Lin, T., Wang, Y. et al. (2024). Home food gardening in modern cities: Advances, issues, and future perspectives. *Frontiers in Sustainable Food Systems*, *8.*
Yeo, N.L., Elliott, L.R., Bethel, A. et al. (2020). Indoor nature interventions for health and wellbeing of older adults in residential settings: A systematic review. *The Gerontologist, 60*(3).
Zhang, Y., Huang, X., & Kwan, M-P. (2021). Urban gardening and mental health: Evaluating accessibility and equity in gardening programs. *Social Science & Medicine, 276.*

Examples of gardening's health benefits

Brooklyn Botanic Garden's adult education and community greening programs like Greenest Block, Street Tree Stewards, starting a vegetable garden offer ways for people to garden, enjoy environmental stewardship and be outside connecting with nature.
https://www.bbg.org/learn/adult_programs

Extension Master Gardener programs combine horticulture training with community service, delivered through land grant state universities, and active across the US and Canada, with participation by 86,000 gardener/volunteers who benefit from gardening knowledge, physical activity and social interactions.
https://mastergardener.extension.org/

Gardening for Health at University of Vermont Medical Center incorporates gardening, nutrition, culinary and mindfulness instruction at the hospital's rooftop garden, discussed in a YouTube video.

Inspiration from Loveland youth gardeners [YouTube] video/webinar demonstrates the power of plants on changing lives, improving health & strengthening communities.
https://www.youtube.com/watch?v=7yEQ3kDy_uk

It's official: Gardening is good for your health video from the University of Colorado Boulder identifies community gardens, nutrition, mental health, social benefits, and access to green space contributing to health.

National Garden Clubs and affiliated local clubs promote gardening, social connections, service projects and more by involving thousands of men & women interested in gardening & providing service to their communities with a horticulture connection. Benefits include sense of belonging, meaningful purpose and intellectual/educational development.
https://gardenclub.org/

Videos, webinars & websites on gardening's health benefits
Cornell garden-based learning website offers key findings of gardening-health connections, nutrition awareness, learning achievements, social connections and life skills.
https://gardening.cals.cornell.edu/lessons/program-tools/benefits-and-research/key-findings/

Fragrant plants [YouTube] video/webinar identifies plants that provide fragrance in the garden for home gardeners and therapeutic gardens at healthcare and residential facilities.
https://www.youtube.com/watch?v=6DLDqdipb9s

Gardening provides health benefits at any age [video] from Baylor College of Medicine.
https://www.youtube.com/watch?v=t3osRE2ccrM

Hall, C. (2025). Nature nurtures - How gardening and outdoor play support kids mental and emotional wellbeing. [Youtube]. *American Horticultural Therapy Association.*

National Center on Safe Supportive Leaning Environments website identifies benefits of school gardening promoting student mental health.

Preventing Injury in the Garden with Tools, Techniques and Stretches video by Extension Agent Gabriela Murza shares ideas demonstrating good techniques.
https://youtu.be/Kk4BTnWjoXY

Smithsonian has 2 webinar series "*Let's Talk Gardens*" and "Let's Talk African American Gardens!" with wide-ranging topics in 2025. Its online library had past recordings @
https://gardens.si.edu/learn/lets-talk-gardens-video-library/
https://gardens.si.edu/learn/lets-talk-gardens/

Texas A&M Agrilife Extension website: Resources available regarding the benefits of plants, nature, and other green spaces for human health.
https://ellisonchair.tamu.edu/benefitsofplants/

The surprising health benefits of gardening – a physician comments on exercise, improvements to physical & mental health, exposure to sunlight (vitamin d), diet & body mass index [YouTube] video.

Trellis Scotland has online plant activities appropriate for many populations including indoor flowering bulbs, printing using natural materials.
https://www.trellisscotland.org.uk/content/videos

Why gardening is good for our health [YouTube] video by Dr. Sarah Myhill, naturopath shares ideas about mental and physical health, nutrition impacting all aspects of health and the link to gardening.

Hortophilia and great plants to nurture webinar from Dr. Diane Relf and Siang Yu Tham with information on health benefits, plants to grow and the importance of nurturing plants for humans and plant health.
https://www.youtube.com/watch?v=U2xk4k7xO_c

Interconnections of the soil-food-human microbiome talk from Conference on Connections Between Soil Health and Human Health (2018) by Dr. Carl Wepking.
https://www.youtube.com/watch?v=vpm-DKTIZu0

Utah State University Extension offers demonstration videos on safe gardening techniques to stay healthy and prevent injury, part of their HEART initiative (Health Extension: Advocacy, Research, and Teaching).
3 Safe Gardening Techniques: https://www.youtube.com/watch?v=3zJW29LMsiA&t=0s
Safe Lifting Techniques for Gardeners: https://www.youtube.com/watch?v=5maY_tfYddo&t=0s
Shoveling Safely when Gardening: https://www.youtube.com/watch?v=QlJ5ZtzmRqI&t=0s

Your brain on plants: Why gardens are good for you in a [YouTube] video from *Los Angeles Times* focuses on mental health, stress relief; experts provide comment and reference empirical evidence.

Related organizations
Plant specific gardening societies: American Hemerocallis Society, American Iris Society, American Daylily Society

Written & compiled by Lesley Fleming Nov 2021; revised in Oct 2022 by Lesley Fleming, Siang Tham; revised in 2024 by Lesley Fleming; revised in Nov 2025 by Lesley Fleming, Joanna Brown.