## **CATEGORY: POPULATIONS/PROGRAMS**

# **Cancer Populations and Plant-based Programs**

People being treated or recovering from cancer have specific health challenges including need for privacy, sense of place, greater need for shade due to medication, and possible compromised immunity. Involvement by family and friends in the cancer journey is an important aspect as well. Plant-based programs and gardens offer all involved in a cancer journey some respite from sterile hospital environments, distraction from pain, and settings that can be restorative and beautiful. A range of programs and places for people dealing with cancer demonstrate the variety of health strategies, the breadth of cancers, and the impact plants can have on physical, emotional, and spiritual health of patients, care partners, and staff. Gardening lifestyle intervention studies in particular have emerged in greater numbers for cancer populations since 2021 (Bail et al, 2022; Blair et al, 2021; Cases et al, 2022).

Studies have expanded the horticulture-health connections relating to cancer populations, cancer prevention and treatment. Studies on plant-based diets are supporting this lifestyle choice, particularly as it relates to cancer (Guerra et al, 2018; Wu et al, 2020; Santana-Gálvez et al, 2020; Buentzel et al, 2022; Shen et al, 2023). Research on specific plants and their benefits for cancer prevention and treatment cover nutrition, aromatherapy and nutra pharmaceuticals: mistletoe, black berries, chickpeas, bananas, cruciferous vegetables and orange peel (Gupta et al., 2022; Rostock, 2020; Heydarirad et al., 2019; Mondale et al., 2021; Tajaldini et al., 2020).

For related resources refer to category: Food, Nutrition and Food Action – Nutrition; category: Horticultural Therapy & Health Services – all sections; and category: Horticulture for Health Overview – Gardening Health Benefits.

#### **Key Organizations**

American Horticultural Therapy Association (AHTA)
American Cancer Society

# Books, journals & epublications on cancer populations

Cooper Marcus, C. & Sachs, N. (2013). Chapter 8 Gardens for cancer patients. Therapeutic landscapes: An evidence-based approach to designing healing gardens and restorative outdoor spaces. Wiley. Fleming, L. (2016). Therapeutic horticulture a practitioner's perspective. Smashwords. Haller, R., Kennedy, K. & Capra, C. (2019). The profession and practice of horticultural therapy. CRC Press.

Journal of Adolescent and Young Adult Oncology

## Research & articles on cancer populations and plant-based programs

Recently published selected research & articles:

Alexander, G.K., Bashore, L., & Brooks, V. (2022). Improving food literacy and access among young adult cancer survivors: A cross-sectional descriptive study. *Cancer Nurs.*, 45(2), 161-166. Bail, J.R., Blair, C.K., Smith, K.P. et al. (2022). Harvest for Health, a randomized controlled trial testing a home-based, vegetable gardening intervention among older cancer survivors across Alabama: An analysis of accrual and modifications made in intervention delivery and assessment during COVID-19. *J Acad Nutr Diet.*, 122(9), 1629-1643.

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#### Examples of cancer populations and plant-based programs

Amita Health Cancer Institute and Outpatient Center in Hinsdale III. uses a leaf sculpture suspended in its main foyer as a connection to nature, where the aluminum lacelike patterned leaves have subtle movement.

https://www.hfmmagazine.com/articles/2890-getting-a-lift-from-nature

Camp Dream Street Kaplen Jewish Community Center's summer camp is specifically for children with cancer and other blood disorders. Therapeutic horticulture and other programs address needs of this population.

https://www.dreamstreetms.org/

Cancer Treatment Centers of America video examines plant-based and organic meals for cancer patients with dietician and cookbook author Ellie Krieger, sharing nutrition insights like eating the rainbow.

https://www.youtube.com/watch?v=oBAbMIff7Pg

Cape Breton Regional Cancer Centre in Sydney, Nova Scotia has a healing garden adjacent to the treatment room along with plant-based programs for people with cancer.

 $h\underline{ttps://www.saltwire.com/cape-breton/news/slideshow-cape-breton-cancer-centre-offers-m} or e-than-medical-treatments-200882/$ 

Carle Foundation Hospital rooftop garden, opened in 2022 is for use by all patients and families including those being treated for cancer.

https://carle.org/newsroom/community/2022/06/new-rooftop-garden-opens-this-week-at-carle-founda

Dana-Farber Cancer Institute's Thea and James Stoneman Healing Garden and the Morse Conservatory in Boston, MA offer patients, visitors and staff green space for healing including green space with strict infection control standards for use by those who are immune compromised. https://www.hfmmagazine.com/articles/1404-bringing-nature-indoors

Friends of Kids with Cancer organization offers therapeutic horticulture at Mercy Clinic in Saint Louis Missouri as part of its programming services for this young population.

https://www.friendsofkids.com/horticulturetherapy.html

Healing garden in Hawaii welcomes cancer patients to restore emotional health and engage with cancer survivors in a plant-dense outdoor sanctuary. KITV.com report on ABC https://www.youtube.com/watch?v=C-UB34-HnUU

Hope in Bloom non-profit installs gardens for patients in their own homes recognizing cancer patient's preference for healing at home and challenges related to mobility and stamina. <a href="https://www.hopeinbloom.org/">https://www.hopeinbloom.org/</a>

Seidman Cancer Center's therapeutic space at University Hospital includes a labyrinth, circular garden, zen sculptures and restorative areas.

https://www.sculpturecenter.org/oosi/items/show/1384

The Garden of Hope and Courage, a 2.5-acre outdoor space on NCH Healthcare System's Baker Hospital in Naples, FL is near the Raymond L. Lutgert Cancer Pavilion.

https://gardenofhopeandcourage.org/

Missouri Botanical Garden (MOBOT) began a therapeutic horticulture program for pediatric oncology patients in 2024, growing plants, seeds of hope, perseverance and social connections.

https://www.laduenews.com/health-and-wellness/mobot-provides-therapeutic-horticulture-to-kids-with-cancer/article 53a3bef8-dof9-11ee-82ba-2b6d5b359859.html

The Mustard Tree Macmillan Cancer Support Center at Derriford Hospital in Plymouth UK delivers Blooming Well community-based therapeutic horticulture program for patients with a cancer diagnosis.

https://www.plymouthhospitals.nhs.uk/latest-news/therapeutic-horticultural-programme-to-aid-cancer-patients-recovery-5850

The Gathering Place Norma's Garden, Cleveland, Ohio is a facility with multiple gardens designed to support the cancer journey, offering activities, yoga, and support groups in this green setting. https://www.tclf.org/landscapes/normas-garden-gathering-place

The Gathering Place in Kitchener, Ontario Canada, a facility servicing people touched by cancer uses a garden designed with 2 themes – play and meditation, for restoration and recovery.

https://landscapeontario.com/healing-gardens-the-power-of-nature

The Healing Gardens at Cone Health Center, Greensboro NC. has a variety of programs in its woodland setting.

https://www.conehealth.com/services/cancer-care/support-wellness/healing-gardens/

University of Alabama Birmingham's *Harvest for Health* program and research paired cancer survivors with master gardeners to grow food in their home gardens, with improvements in physical exercise, nutrition, self-confidence and sense of control.

https://www.youtube.com/watch?v=kpzKxjNOLsw

Virginia Thurston Healing Garden, Harvard Mass. is an 8-acre woodland setting with cancer facility. https://healinggardensupport.org/

Wilmot Botanical Gardens, College of Medicine Healing Gardens and Teaching Laboratory at the University of Florida delivers group therapeutic horticulture programs for people with cancer. https://www.htinstitute.org/blog/therapeutic-horticulture-for-people-affected-by-cancer/https://wilmotgardens.med.ufl.edu/programming-2/therapeutic-horticulture-program/

## Videos, webinars and websites on cancer populations and plant-based programs

Horticultural healing article by T. Novak in *Cancer Wellness* site outlines how nature, horticulture and related programming can support a cancer journey.

https://cancerwellness.com/horticulture-therapy/

John Sykes Curtis Harvey Center lists healing gardens including Blackstone River Healing Garden for cancer patients, Dana Farber/Brigham and Women's Cancer Center in Weymouth, Howard Ulfelder Healing Garden at Yawkey Center, Mass General, Mary Eagan Garden at Children's Hospital Waltham MA. and others throughout the U.S.

http://jschcenter.org/healing\_gardens.html

Parkview Cancer Institute's Healing Garden indoor space with floor to ceiling windows and live plants brings the outside in for patients, families and visitors in support of healing.

https://www.parkview.com/blog/inside-the-parkview-cancer-institute-healing-garden

Siteman Cancer Center has partnered with Missouri Botanical Garden to bring Journey to Well Being walking tours in a virtual format, using their Japanese Garden for cancer treatment-related programming.

https://siteman.wustl.edu/visiting/patient-and-family-services/virtual-support-services/

THAD (Therapeutic Horticulture Activity Database) offers TH activities across populations including those with medical conditions like cancer (activities like <a href="herbal-heating-bags">herbal heating bags</a>, <a href="growing garlic">growing garlic</a>, <a href="herbal-heating-bags">l'm</a>
<a href="mailto:Tired">Tired</a>: Plants & People</a>, care of houseplants).

https://hort.ifas.ufl.edu/therapeutic-horticulture-activities-database/medical-conditions/

Therapeutic Gardens for Cancer Populations, part of presentation "Half-Day Intensive Grow Your Professional Skills: Gardening, Gardens and Therapeutic Horticulture" at the Canadian Therapeutic Recreation Association's Annual Conference by Lesley Fleming, HTR and Jennifer Kirby, CTRS shares a downloadable pdf on therapeutic gardens, enabling gardens and restorative gardens. https://canadian-tr.org/wp-content/uploads/2018/05/103.pdf

Therapeutic Gardening with Barbara Boone Episode 46 podcast discusses gardening benefits through Dr. Jennifer Young Pierce's endometrial cancer journey.

https://cancering.com/therapeutic-gardening-with-barbara-boone

# **Related organizations**

**Breast Cancer Foundation** 

National Cancer Institute at the National Institutes of Health (U.S.)

Specific cancer types & related organizations (Ovarian Cancer Organizations, Bladder Cancer Advocacy Network etc.)

Acknowledgement of content derived from Fleming and Figueiredo article Healing Gardens for Cancer Populations. https://www.hopeinbloom.org/press/HealingGardens.pdf

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