



Gardening Strategies for People with Heart and Lung Problems

S. Foster and J. Powell

Donald Burns, Master Gardener and former cardiac patient from Lake Oswego, says, "I believe that if a person *loves* gardening, most ex-cardiac patients, with proper mental and physical rehabilitation training, can get back to some form of gardening that will be medically and mentally beneficial to them."

Among the most widespread serious health problems in the United States are heart disease, lung cancer, and long-term breathing problems. These breathing problems include such conditions as chronic bronchitis, emphysema, and asthma. Saving energy and alleviating stress are major concerns for people with heart and lung problems, and they can be addressed well with adaptive gardening techniques.

Important strategies to remember are:

1. *Work up to activities slowly.* Warm up with lighter gardening tasks before doing any heavier jobs.
2. *Work at trunk level.* Avoid reaching high or bending low, as these require much more energy. If you must, bend at your knees instead of leaning over at the hips and back with your knees straight. The work surface should not be lower than your fingertips. Sitting and kneeling positions can help accomplish this. If you must use a ladder, it should be high enough for you to work without reaching above your head. In a standing position, use long-handled tools (weeders, spades, bulb planters, grass

shears) to reduce reaching and bending.

3. *Sitting requires less effort than standing.* Raising garden beds and arranging containers allows working in a sitting position to conserve energy.
4. *Avoid lifting or holding anything for too long.* Carry an object to where you need it, then put it down. Use a tray or bucket to carry several small objects. Use a wheelbarrow to minimize carrying and to consolidate trips. Spreading soil and digging involve lifting and carrying soil, and should be avoided when possible. Hoeing, raking, and cultivating require less energy, but should still be done gently and slowly for short periods of time. Raised beds are also helpful in this situation because the soil stays looser without having to be turned.
5. *Use electric equipment.* An electric mower is easier to start than a mower with a pull cord. Walk slowly and pace yourself while mowing. Use an electric power auger instead of a rototiller to turn and mix in soil amendments. This reduces the amount of strain from arm and shoulder movements, which are more taxing than leg movements.

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MAKING GARDENING EASIER

6. *Having proper lighting is important in conserving energy, as we use one-quarter of our energy to see. With increasing age, we use even more.*
7. *Use a pulley system for hanging plants so the plants can be raised and lowered more easily. Use larger pots for plants, as they require less frequent watering than those in small pots.*
8. *Keep garden beds near the house and tool-storage area.*
9. *Set time limits and pace yourself. Avoid working too long or too hard. Take frequent rests. Complete one small section of a project at a time. Even major projects such as tree removal can be accomplished if you rest often and work slowly.*
10. *People whose activities are quite restricted can still benefit from horticultural activities. Flower arranging and bird feeding can be enjoyed with very little energy output. Cuttings, seedlings, and potted plants stimulate interest and pleasant expectations for the future.*

As with all physical activities, consult your family physician to determine what is the safest level for you.

For More Information

- Bubel, N., "A Therapy Garden," *Country Journal*, 9/10, pp. 74-76, (1990).
- Burns, D., Letter to Jan Powell, Portland, Oregon, (1990).
- Watson, D. and Burlingame, A., *Therapy Through Horticulture*, (New York: MacMillan Company, 1960).

Willard, H. and Spackman, C., *Occupational Therapy*, 4th ed., (Philadelphia: J.B. Lippincott, 1971).

Other Publications

For more information on the Master Gardener Horticultural Therapy Program, write the Oregon State University Extension Service, Oregon Master Gardener Program, 211 S.E. 80th Avenue, Portland, Oregon 97215.

Other titles available in the "Making Gardening Easier" set are:

Foster, S., and Duvall, C., and Powell, J., *Adaptive Gardening Techniques for the Visually Impaired*. Oregon State University Extension Service publication EM 8498, (Corvallis, 1992).

Jewell, M., and Powell, J., *Gardening Hints for People with Arthritis*, Oregon State University Extension Service publication EM 8499 (Corvallis, 1992).

Throckmorton, E., and Powell, J., *Gardening Adaptations for People with Gripping and Lifting Problems*, Oregon State University Extension Service publication EM 8500 (Corvallis, 1992).

Foster, S., and Powell, J., *Gardening Ideas for Children with Special Needs*, Oregon State University Extension Service publication EM 8502 (Corvallis, 1992).

McNeilan, R.A., and Powell, J., *Therapeutic Benefits of Gardening*, Oregon State University Extension Service publication EM 8503 (Corvallis, 1992).

Throckmorton, E., and Powell, J., *Adapting Garden Tools to Overcome Physical Challenges*, Oregon State University Extension Service publication EM 8504 (Corvallis, 1992).

Rogers, P., and Powell, J., *Gardening with Limited Range of Motion*, Oregon State University Extension Service publication EM 8505 (Corvallis, 1992).

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