

# Younger adults benefit from gardening's moderate- to high-intensity activities

May 5 2014

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People throughout the world enjoy gardening. The popular pastime can not only enhance home and community landscapes and provide low-cost food sources, the level of physical activity required also offers a multitude of health benefits. Studies have confirmed that engaging in gardening can lower cholesterol and blood pressure, and increase psychological well-being. The authors of a new study say that, although many studies have focused on the health benefits of gardening for older adults, research on different age groups is limited. A new study suggests that gardening can provide similar benefits for younger adults.

Researchers from Konkuk University and Hongik University in Seoul, South Korea, published a study in *HortTechnology* that evaluated the intensity of gardening activities for adults in their 20s. "The [exercise intensity](#) of physical activity may differ between age groups and fitness levels, and there was not enough data on the metabolic equivalents of gardening tasks in different [age groups](#) to develop a garden exercise program for maintaining or improving health conditions," explained the study's lead author Ki-Cheol Son.

Fifteen university students in their 20s participated in the study in South Korea. Each subject performed 10 common gardening tasks in a high tunnel and in a nearby grassy area with a vegetable garden and weeds. The subjects visited the garden plot twice and performed five gardening tasks during each visit; each task lasted for 5 minutes and was followed by a 5-minute rest. Subject wore a portable telemetric calorimeter and respired into the facemask during the gardening tasks and resting periods

so researchers could measure their oxygen uptake. The subjects also wore a heart rate monitor to record heart rate data during the gardening tasks and resting periods via radiotelemetry.

The research team evaluated the data and determined that all 10 gardening tasks were "moderate- to high-intensity" physical activities for the research subjects. Planting transplants, mixing growing medium, watering, harvesting, sowing, hoeing, mulching, raking, and weeding were all classified as "moderate intensity", while digging was found to be a "high-intensity" activity and was the most intense task in study.

"Determining the exercise intensity of gardening tasks should be useful information for developing garden exercise programs based on [physical activity](#) recommendations for [health benefits](#)," the researchers said, adding that the data will also be valuable for designing horticultural therapy program based on the physical capacity of a client and for clients with special needs.

**More information:** The complete study and abstract are available on the ASHS *HortTechnology* electronic journal web site: [horttech.ashspublications.org/ ... ent/24/1/58.abstract](http://horttech.ashspublications.org/...ent/24/1/58.abstract)

Provided by American Society for Horticultural Science

Citation: Younger adults benefit from gardening's moderate- to high-intensity activities (2014, May 5) retrieved 9 May 2024 from <https://medicalxpress.com/news/2014-05-younger-adults-benefit-gardening-moderate-.html>

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