Activity: Harvesting Goal: Physical Populations: All

TH Activity Plan – Harvesting Herbs Grown for Roots, Rhizomes & Bulbs

Text by Lesley Fleming, Diane Relf, PhD, HTM & Mary Predney
Photo by D. Relf

ACTIVITY DESCRIPTION: Participants will harvest herbs with roots, rhizomes or bulbs (garlic, ginger & horseradish).

THERAPEUTIC GOALS:
Cognitive/Intellectual: Improve executive function
Physical: Expand physical skills working in plant setting; improve wheelchair skills moving through the garden
Psychological/Emotional: Use strategy of increasing physical exercise to improve nutrition & sleep patterns
Sensory: Develop automatic & appropriate responses to sensations
Social: Work independently reducing number of cues during session

Materials

Herb with roots, rhizomes, bulbs ready for harvesting
Long handled trowels, shovels
Light-weight containers to collect harvest
Air-tight storage containers
Knife(s)

STEP-BY-STEP PROCESS:

1. **Pre-Session Preparations:** Determine when herbs are ready to be harvested & how much is required for activity. These perennial herbs need to be at least one year old to be mature enough to harvest. Prepare a harvesting kit for each participant consisting of a trowel or scoop and container.
2. Facilitator presents the session's activity discussing the particular plant characteristics (see below). Demonstrate the harvest method, using a trowel to dig up a bulb or rhizome. Review safety & food handling points.
3. Participants harvest herb roots, rhizomes & bulbs as directed.
4. Lead a group discussion on how the harvesting went, tips for future harvesting, nutritional attributes of each herb & how these relate to the harvesting of other plants.
5. Store herbs properly until they will be used. Herbs need to be stored in a dark colored, air-tight container that will keep moisture out.

APPLICATIONS FOR POPULATIONS: Some of these herbs can be grown in raised beds so that people with physical challenges can harvest from seated or wheelchair positions. The physical demands of harvesting the herbs can involve bending, squatting, lateral reach and balance, with therapeutic goals focused on expanding and maintaining these skills. For people using wheelchairs, physical goals can focus on arm and hand strength to move the wheelchair over dirt or grass garden surfaces, as well as range of motion, hand and arm strength. Related, psychological goals can involve strategies where physical exercise contributes to health by improving sleep patterns and melatonin production if harvesting is done outside in sunlight. Nutrition goals choosing healthy herbs can complement the physical goals.

Working independently harvesting the roots of herbs and using executive function determining when and how to best harvest plants expands the therapeutic potential of this activity. For individuals who have sensory and sensory processing challenges, the therapeutic focus might include developing and practicing automatic and appropriate responses to sensations experienced during harvesting and touching roots, rhizomes and bulbs.

Measuring outcomes can involve before and after functional abilities of reaching, standing, length of time actively working at harvesting and documenting sleep patterns impacted by increased physical exercise expected to have longer duration.

SAFETY CONSIDERATIONS: Knives may not be appropriate for some populations and ages. Allergies or sensitivities to these herbs may be present: permission should be in place prior to activity.

NOTES OR OTHER CONSIDERATIONS: There are very few herbs harvested for their roots, except for some native (U.S.) medicinal herbs. Three that should be considered for growing are horseradish, garlic (not a true root but rather an underground stem called a bulb) and ginger (a tropical plant that can be used as a houseplant). Dig up bulbs such as garlic in mid-to late-summer after the tops have died back on their own. For other root herbs such as ginger, wait until fall or early spring when they are not producing top growth. Horseradish can be dug any time from late fall (after a hard frost) until growth starts in the spring.

Garlic – Harvest bulbs after the top leaves bend and turn brown. Fall planted bulbs should be ready in mid-summer, and spring planted bulbs should be ready in fall. Loosen soil so bulbs can be removed with tops attached. Garlic should be cured and dried before storing. Do not wash, but brush soil off, leaving stalk and roots on bulb. Store garlic in bundles of 8 stalks together or lay garlic flat on raised screen in single layer. Cure/dry for 3-4 weeks, keeping out of sunlight.

Ginger – Pull up the rhizome 8 to 12 months after planting. Cut off leaf stalks and remove fibrous roots. Cut as much ginger root as needed and replant the rest. Ginger root should be kept in a cool, dry place, usually at 40 to 45 degrees F. After harvesting, ginger may be refrigerated in plastic wrap for up to one week. For longer storage, peel ginger root and cover it with sherry wine before refrigeration. Freezing for up to three months is also an option.

Horseradish - Dig roots. Leave some small, pencil-sized roots for next year's harvest or plant them in another row. Some horseradish roots will be left during digging/harvesting; it will be impossible to eradicate. Tip - grow in a large container if you do not want to have an established planting in the ground. It can be used fresh or frozen; best if peeled and grated before freezing (it will lose some potency, freeze in small amounts for thawing).

Growing garlic, horseradish or ginger can precede the harvesting, and it too can offer therapeutic activities across populations. Nutritional benefits of each of these, including garlic, often referred to as a superfood, can enhance session.

REFERENCES/ RESOURCES:

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TH Activity Plan form developed by Lesley Fleming, Susan Morgan, and Kathy Brechner (2012), revised in 2023.