THAD Therapeutic Horticulture Activity Database

Activity: Planting Goal: Cognitive Populations: All

TH Activity Plan – Planting Pea Shoots

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ACTIVITY DESCRIPTION: Participants will plant pea seeds in trays for later harvest as pea shoots.

THERAPEUTIC GOALS:

Cognitive/Intellectual: Follow sequential steps maintaining cognitive function; practice patience & delayed gratification

Physical: Maintain fine motor skills

Psychological/Emotional: Enjoy sensory stimulation especially touch; explore spiritual connections to plants

Sensory: Connect & relax with/using natural materials

Social: Socialize in a group setting

Materials

Pea seeds

Plastic trays with drainage holes

Dish pans filled with potting soil

Scoops for filling trays with soil

Small watering can with 'rose' attachment, water

Bright colored reusable plastic tablecloths

Grow lights

Pictures of pea shoots ready for harvest

Gloves, wipes

STEP-BY-STEP PROCESS:

- 1. **Pre-Session Preparation:** Have trolley ready with all supplies and materials.
- 2. Facilitator begins session by having participants gathered at tables in small groups.
- 3. Discuss planned activity, showing pictures of pea shoots ready for harvest.
- 4. Participants use scoops to fill trays ¾ full with potting soil, smoothing surface with hands.
- 5. Place pea seeds on top of potting soil (approx. ½" apart). The ½" seed spacing is a suggestion for maximum harvest. Participants can choose the spacing they prefer.
- 6. Using fingers, gently press seeds into the soil.
- 7. Gently water the entire tray until soil is evenly moist.
- 8. Place trays under a grow light or bright light source.
- 9. Water as needed. Check regularly to determine optimal harvest date for pea shoots, typically 20 days from planting when they are 3-4" tall.
- 10. Facilitate discussion on the vegetables participants have grown in previous years, nutritional value of pea shoots, other greens that participants may prefer, and the health benefits of eating healthy.

APPLICATIONS FOR POPULATIONS: Growing pea shoots (*Pisum sativum*) as a TH activity is appropriate for many populations including: vulnerable populations, seniors, youth, children, people with allergies and people in

corrections facilities. It is an effective activity especially for winter months when outdoor gardening can feel like a long time away. Passage of time can be a therapeutic goal important for children, seniors and people living with dementia. Anticipation of the seeds sprouting and growing can support realistic sense of time, and provide practice for delaying gratification tending to the pea shoots waiting for harvest. Relatedly, mood can be

enhanced by creating new beginnings/plants. Additional goals across health domains can include maintaining fine motor skills (physical), socialization, and reminiscing about previous gardening experiences (psychological).

SAFETY CONSIDERATIONS: Facilitators are responsible for knowing poisonous and toxic plants and plant parts. If pea shoots will be eaten, consultation with staff or parents should be done prior, to identify any allergies, swallowing issues or contraindications with medication. See comments below.

NOTES OR OTHER CONSIDERATIONS: Pea shoots are the young tips of garden peas. Considered a delicacy in salads, sandwiches and in stir-fries, they can also be steamed or sauteed. Pea shoots are typically 2-6" long with 2-4 pairs of leaves and immature tendrils. Participants can expand their horticultural knowledge learning and identifying these plant parts. The nutritional value of pea shoots includes vitamin A, B and C, and are rich sources for flavonoid phytochemicals. The dietary fiber and phytates in pea shoots may interfere with the bioavailability of iron, magnesium and calcium; people taking anti-coagulants are encouraged to avoid them due to their high concentration of vitamin K (medical disclaimer from Nutrition-and-you.com).

Pea shoots are fragile, very perishable greens. Use them within 1-2 days of harvest (Nutrition-and-you.com, 2024).

REFERENCES/ RESOURCES:

Miles, C.A., O'Dea, J., Daniels, C.H., & King, J. (2128). Pea shoots. PNW Publications. https://s3.wp.wsu.edu/uploads/sites/2709/2021/05/PNW567.pdf
Nutrition-and-you.com. (2024). Pea shoots nutrition facts. https://www.nutrition-and-you.com/pea-shoots.html

Edits were made for THAD purposes in 2024.

TH Activity Plan form developed by Lesley Fleming, Susan Morgan and Kathy Brechner (2012), revised in 2024.