THAD Therapeutic Horticulture Activity Database

Activity: Herbs Goal: Sensory Populations: All

TH Activity Plan - Smelling Culinary Herbs

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Materials

Plant materials: Strong aroma-ginger rhizomes, garlic cloves, onion bulbs

Fragrant aromapeppermint, spearmint

Sweet aroma-pineapple mint, sweet basil, pineapple sage, lemon basil

Wipes, safety scissors, knife, aluminum foil

ACTIVITY DESCRIPTION: Participants will smell culinary herbs as a sensory and therapeutic activity.

THERAPEUTIC GOALS:

Cognitive/Intellectual: Recognize herb fragrances; recognize this sensory stimulation activity as a mechanism for exploring pleasure

Physical: Determine how sensitive their sense of smell is - some will have limited sense of smell

Psychological/Emotional: Reminisce about culinary smells & family/cultural traditions as a tool for emotional happiness; consider how sense of smell can change mood

Sensory: Utilize & understand gustatory, olfactory (senses) as sensory stimulation

Social: Share ideas & experiences with group members re ability to smell odor strengths; tolerate others with different experiences - both cultural & sense of smell preferences

STEP-BY-STEP PROCESS:

- Pre-Session Preparation: Harvest herbs shortly before activity: dig up ginger rhizomes with hands; pull garlic clove when tops begin to bend & brown; dig up onion bulb when tops turn yellow & fall to ground; trim or cut leaves/sprigs of mint, sage, basil
- Facilitator begins session by arranging plant material in center of table in (unlabeled) groups of sweet, fragrant & strong aromas. Participants pick one from each group & arrange them in same order (sweet, fragrant & strong) in front of them.
- 3. Smell the culinary herbs in the following order (sniff but do not crush): sweet mild odor, fragrant odor, then strong hot odor. To cleanse senses, take breathes away from herbs.
- 4. Smell plant material again this time scrubbing the herb (leaf or other) with thumb & index finger, smelling the finger. Facilitator then cuts the ginger, garlic clove, onion bulb into thin slices for participants to smell these again.
- 5. Participants can talk about their preferences, aroma strengths & how these might be incorporated into culinary dishes.

APPLICATIONS FOR POPULATIONS: This activity is appropriate for all populations. Some people may have limited or compromised sense of smell (people with cancer, smokers, sick with colds, or during allergy season). Sensory stimulation using sense of smell for populations with memory loss, for children or others living in isolated conditions may respond and connect with nature and herb fragrances to varying degrees. Positive emotions generally result from this activity. Other benefits include stress reduction, cognitive exercise identifying scents, gaining a better understanding about sensory stimulation (so that they may do this on their

own), its ability to change mood and rekindling reminiscing. Research has identified disruption in cravings related to smell inhalation (Kilonzi et al., 2019). This may be relevant to people in substance abuse or addictions programs.

Growing herbs for use in this activity is recommended. Other related activities using sense of smell can include aromatherapy, making hydrosols, herb atomizer spray, sleep pillow filled with herbs or herb scents & making herbal butter. Some of these activities are in THAD database.

SAFETY CONSIDERATIONS: Allergies or negative response to herb fragrances may be present in some participants. If essential oils are incorporated into activity, they may pose safety challenges for some. Though the recommended herbs are culinary, be mindful of dementia or young (child) clients who may ingest plant materials unsupervised.

NOTES OR OTHER CONSIDERATIONS: The strong connections between memory and smell can be explored in this activity as a deeper understanding of human functioning. Researchers identify two cognitive-perceptual processes involved in smell and memory - the ability to remember a scent (Yang et al., 2021; Fleming, 2022) and autobiographical memories triggered by specific odors, the latter reflecting the Proust phenomenon referring to odor-evoked memories (LIVED - limbic, old, vivid, emotional and rare) (Larsson et al., 2014). Smells can trigger multiple physiological & emotional responses like: decreasing negative mood, disrupting cravings, reducing stress, secretion of cytokines, and modulation of systemic inflammation (Kilonzi et al., 2019). Difficulty smelling fragrances, herbs & others, *may* signal other health issues including neurological dysfunction in Parkinson's and Alzheimer's diseases. Practitioners may want to suggest diagnostic testing.

REFERENCES/ RESOURCES:

Fleming, L. (2022). The relevancy of memory-smell connections to people-plant programming. *Cultivate*, *2*(2). https://www.flhhn.com/cultivate-epub.html

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Larsson, M., Willander, J., Karlsson, K. & Arshamian, A. (2014). Olfactory LOVER: Behavioral and neural correlates of autobiographical odor memory. Frontiers in Psychology, 5, 312.

Yang, Al., Dikecligil, GN., Jiang, H., Das, SR., Stein, JM., Schuele, SU., Rosenow, JM., Davis, KA., Lucas, TH. & Gottfried, JA. (2021). The what and when of olfactory working memory in humans. *Curr Biol.*, 31(20), 4499-4511.e8.



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