

Activity: Planting Goal: Psychological/Emotional Populations: All

TH Activity Plan – Basil Seed Germination

Text by Marisol Clark, HTR, Libba Shortridge, HTR & Jeanne Schultz, HTR

Photo by J. Schultz



ACTIVITY DESCRIPTION: Clients will learn about seed germination & how to plant basil seeds using cell trays or seed blocks.

THERAPEUTIC GOALS:

Cognitive/Intellectual: Follow instructions; improve communication skills

Physical: Strengthen fine motor & hand skills manipulating soil & small tools

Psychological/Emotional: Encourage awe & wonder

Sensory: Engage multiple senses - touch, taste sight, smell

Social: Connect & communicate with others; share information, memories & tools in prosocial manner

STEP-BY-STEP PROCESS:

- | Materials |
|-------------------------------|
| Mature basil plant |
| Wipes |
| Cell trays or seed blocks |
| Rooting soil |
| Spray bottle with water |
| Paper towels |
| Watering can; full |
| Silver marker |
| Trays for soil |
| Small shovels |
| Basil seeds, variety |
| Magnifying glasses (optional) |
| Small bowls |
1. **Pre-Session Preparation:** Gather & set out all materials.
 2. Facilitator begins session by showing participants a mature basil plant & reminding the group how the plant is used in cooking.
 3. Ask participants to write their name & *Basil* on the trays or containers. Fill containers with root soil to the top rim. Shake container to settle soil if needed.
 4. Distribute small bowls of basil seeds & magnifying glasses & ask clients to describe them.
 5. Direct clients to hold 5-10 seeds in their hands & look at them closely with magnifying glasses if available. Ask them to share what they see.
 6. Spray a small amount of water directly on the seeds in their hands & ask them to close their hand over the seeds. Allow time for discussion.
 7. Group leaders can ask general questions about gardening, favorite recipes featuring basil or anything else they'd like to share about the herb. Remind clients to keep their hands closed.
 8. After about 1-3 minutes, ask the group to open their hands & look for changes in the seeds. Use magnifying glasses if available.
 9. Ask the group how the seeds have changed. Point out that seeds have to become vulnerable – to soften their seed coats - in order to start the process of growth. According to Brene' Brown "it takes strength to be vulnerable."
 10. Many times the seeds will become more "sticky" [due to mucilage production](#). This can be demonstrated by flipping the hands with the seeds upside down.
 11. Explain germination has begun. Discuss the plant/seed cycle if appropriate.
 12. Suggest participants take a pinch of soil & mix it with the sticky seeds. Place the combination of moistened seeds & soil into the top of the soil containers or blocks.
 13. Water the seeds by covering the tray with paper towels or water the soil blocks in trays. Place in a well-lit location.
 14. Encourage participants to water seeds & check progress weekly.

APPLICATIONS FOR POPULATIONS: Discussions will vary depending on the makeup of groups. Remind groups the mature plant began from the small seed. Children can be asked how they have grown over the last year. Seniors can reflect on what small events have made large impacts on their lives. Those in treatment for mental illness or substance use disorder can discuss which small parts of their recovery journeys can grow into something that can support a healthier lifestyle.

The theme of vulnerability and strength can be incorporated into the TH session. [Brene Brown's work on vulnerability](#) provides many short quotes that can inspire and resonate with participants. Considering the size of the basil seeds and what they can eventually grow into and produce can also be a hopeful reminder to clients about their own ability to change and “grow”.

SAFETY CONSIDERATIONS: Facilitators are responsible for knowing poisonous and toxic plants and plant parts. Some populations may be tempted to put seeds into mouth; supervision needs to be vigilant. Wash basil leaves thoroughly before allowing participants to taste them. If participants will taste or eat plants, allergies, swallowing issues or contraindications with medication need to be identified prior to session.

NOTES OR OTHER CONSIDERATIONS: Encourage groups to use magnifying glasses to compare seeds before and after the activity. Encourage group members to share their results with others. There is often variation in the amount of changes participants see in the seeds. This occurrence may lead to problem solving discussions. Remind participants seeds are programmed to grow all the same and that nature is consistent and resilient.

The science of mucilage production in basil seeds that aid in germination requires water to hydrate the seed. A thick layer of mucilage around the testa, held together by columnar structures that unfold from the pericarp hold the mucilage to the seed. The mucilage increases the seed's germination success (Welbaum et al., 2017).

REFERENCES/ RESOURCES:

Brown, B. (2011). [The power of vulnerability | Brene Brown | TED](#). [Youtube].
Welbaum, GE., Barney, J., & Dongfang, Z. (2017). [The production and function of mucilage by sweet basil \(*Ocimum basilicum* L.\) seed](#). Virginia Tech Works Archives.
Whitworth, E. (2023). [33 Brene Brown vulnerability quotes \(+context\)](#). Shortform.com.

Edits were made for THAD purposes in 2025.

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