



# WISCONSIN SCHOOL NUTRITION IN A NUTSHELL

## The Lifecycle of Farm to School:



## Composting

### What is Composting?

Composting is the decomposition or breakdown of organic matter (i.e., leaves and food scraps) into a nutrient-rich medium that supports future plant growth. When incorporated into the soil, compost provides improved plant health and moisture retention.

### Benefits of Composting

- Converts food scraps and yard waste into natural fertilizer that can then be added to school gardens and lawns.
- Enriches soil, helps retain moisture, and suppresses plant diseases and pests.
- Provides opportunities for hands-on learning activities (i.e., waste audits, measuring compost variables, compost experiments, collaboration between food service and other departments).
- Diverts waste from the landfill and prevents the production of methane gas.

### Composting Systems

#### Pile/Bin (Backyard) Composting

Pile or bin composting is the most common type of composting and is ideal for beginners. It involves filling a bin or creating a pile with layers of green and brown material.

- *Green material* is nitrogen-rich and has more moisture resulting in a heavier product. Examples of green material include food scraps, grass clippings, coffee grounds, and tea bags.
- *Brown material* is carbon-rich, light, and fluffy. Examples of brown material include straw, pine shavings, and fallen leaves.
- Do not add bones, meat materials, or oils to backyard composting systems.



**Location:** Pile or bin compost can be placed in the sun or shade. However, if placed in the sun watch to make sure it does not dry out and if placed in the shade lookout to make sure it does not become too wet. Do not place compost directly against a wall or fence as it needs proper airflow. Make sure the pile is easy to access to by staff and students.

**Care and maintenance:** After placing food scraps in the compost bin or pile, add *three times* the volume of brown material. This will decrease smells, fruit flies, and deters animals. Turn the compost regularly to ensure adequate air flow. Once the food scraps are mostly decomposed, turn once more. Then the compost will go through a hot process where it reaches a temperature of

130-150°F for three days to kill off any weed seeds. Check the temperature during this phase with a compost thermometer and keep the compost piled up, rather than spread out.

Timeline: Pile or bin composting is relatively quick; it takes about four weeks to three months after the hot process for the final decomposition process. Active care of the pile will yield compost quicker than passive composting.

Check out this video overview of [Traditional Backyard Composting](#).

## Vermicomposting

Vermicomposting uses worms to break down organic matter. It will take approximately 3-6 months to separate worms from the useable compost.



Ideal conditions for worm composting include:

- A dark area
- Room temperature between 55-85°F
- Incorporation of fruit and vegetable scraps; bananas and leafy greens are favorites.
- Avoidance of fats, oils, dairy, and meat.

## Commercial Composting

Commercial composting is a process in which food scraps are picked-up and moved to an offsite composting facility for breakdown. Typically, commercial composters charge a fee for their services but the work for the school is significantly decreased. To find a commercial composter near you (in Wisconsin), visit [Litterless](#).

## Compost Digester

Compost digesters work without oxygen to dehydrate and break down a large variety of food scraps, including meat, bones, and some dairy products. The addition of heat from the digester speeds up microbial activity to produce compost faster, some as quickly as 24 hours!

## How to Use Compost



Nutrient-rich compost is dark and crumbly and can be incorporated into any type of existing soil with tillage equipment. Add extra compost to clay or sandy soil. Place compost 4-6 inches deep on top of the garden bed prior to seed starting outdoors or top dress a thinner layer around plants a week or two after transplanting plants grown indoors. Fresh compost can be added to the garden bed every 3 months.

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