



Physical Activity & Nutrition Outside School Hours

NUTRITION ACTIVITY #2

COMPOSTING

What is compost?

Compost is the soil-like material that is created when plant and vegetable matter breaks down. Compost can be used as potting mix, soil enhancer or simply as mulch.

Why compost?

Did you know that 50% of what goes to landfill is organic and comes from our kitchens and gardens? This material is a valuable resource, which through composting, can easily be converted to nutrient-rich humus and used to improve soil quality.

Disposal of organic material causes problems at landfill sites and is a waste of valuable organic resources.

Location:

Help the children choose an appropriate place in the garden outside for the compost. If possible, choose a sunny, well drained position, away from the general area of play.

Choose your compost method:

Compost method	Cost	Ingredients	Time to compost
Heap	No cost	Garden Waste only	3-4 months
Enclosure (using pallets, wire or a bay made from planks)	Little to no cost	Garden waste and food scraps	3-4 months
Bin	\$30-\$100	Garden waster and food scraps	3 months
Barrel or tumbler	Up to \$200	Garden waste and food scraps	14-21 days



Compost ingredients:

A good compost mix is made up of the following ingredients: **nitrogen, carbon, air, water**

Nitrogen products <ul style="list-style-type: none">✓ fruit and vegetable scraps✓ fresh lawn clippings✓ tea leaves/bags and coffee grounds✓ manure from herbivores (ie – cow, horse, sheep, bird and chicken)✓ egg shells	AVOID these ingredients <ul style="list-style-type: none">X manure from carnivores (ie – cat and dog)X meat scrapsX vegetable fats and oilsX flowers that have bulbsX weeds that you don't wish to sprout again in your gardenX dairy productsX diseased plants, or weeds and plants that have been sprayed with pesticidesX treated timber
Carbon products <ul style="list-style-type: none">✓ dried leaves and grass clippings✓ end of season vegetable plants✓ small twigs and sticks (no thicker than your thumb)✓ paper towels and cardboard✓ straw✓ scrunched newspaper✓ contents of your vacuum cleaner bags	



What You Do:

1. Build your heap in 5-10cm layers, alternating between carbon and nitrogen layered materials.
2. Sprinkle soil or finished compost between every few layers to add additional micro-organisms to kick start the decomposition process.
3. Add air to the mixture by regularly turning the pile. The more frequently you turn the pile, the faster it will break down.
4. Add water as necessary to speed up the decomposition process. Your pile should be damp to touch, but not soggy. Check the moisture levels every time you turn it, and add water when necessary (usually once a month).
5. When the bin is full, begin your next heap and allow the first heap 2-3 months to mature. Continue to turn the first heap on a weekly basis when adding ingredients to your second heap.
6. Your compost is ready when the finished product resembles a rich dark soil-like material.

Solving composting problems:

Problem	Cause	Solution
Smelly compost	Heap is too wet	Add carbon products to dry it out Cover heap during rainy weather
	Not enough air	Turn the pile more regularly to improve drainage and aeration Add coarse material (e.g.- twigs) to create air pockets Sprinkle with garden lime and turn
Slow to break down	Not enough 'active' ingredients	Add more activating ingredients (i.e. – comfrey leaves, food waste, manure, soil or compost)
	Not enough air	Turn heap more regularly
	Compost too dry	Add more water until compost heap is damp all the way through
Maggots or cockroaches (Both maggots and cockroaches are beneficial to the breakdown process, so if you can tolerate them, they will actually help your pile to break down faster)	Ingredients such as seafood or fats added to pile	Avoid adding meats or fats to pile Cover maggots with garden lime Cover each layer of food waste with carbon products (see page 2) Turn the pile more regularly to prevent food waste rotting before it breaks down
Mice and Rats	Excess bread or grains in the compost mix	Put fine wire mesh under the bin/heap. Turn heap more regularly Cover each layer of food waste with carbon products (see page 2)
	Compost too dry	• Add more water until heap is damp all the way through

[http://www.brisbane.qld.gov.au/2010%20Library/2009%20PDF%20and%20Docs/4.Environment%20and%20Waste/4.5%20Gardening/Gardening Compost and worm farms.pdf](http://www.brisbane.qld.gov.au/2010%20Library/2009%20PDF%20and%20Docs/4.Environment%20and%20Waste/4.5%20Gardening/Gardening%20Compost%20and%20worm%20farms.pdf) accessed 16 January 2012