Growing vegetables in school

A vegetable plot in the school garden is an excellent teaching resource. It will demonstrate the origins of food, the varieties available and lead to enjoyable and satisfying experiments in planting and tasting.

1. Why grow vegetables?

Food growing can teach children about the lifecycles of the vegetables and the creatures attracted to the garden and about soil and nutrition. A vegetable plot can raise children’s awareness of the seasonal nature of food and its immense variety.

A food growing project should be part of a school’s development plan and staff, pupils, parents and even local residents can be involved.

2. Starting a vegetable garden

An area for growing vegetables may be created in a garden of any size, from a large, sunny vegetable plot, to a few containers on a patio. Vegetables can be grown in a separate plot or integrated into flowerbeds. The ideal situation provides warmth, sunlight, shelter and fertile, well-drained soil with an adequate water supply. The site should be open, but not exposed nor overshadowed.

A vegetable garden will do best on soils of around pH 6.5. Simple pH measurement kits are available from garden centres to test the pH of your soil. Adjust the pH if necessary. Manure is a useful addition.

In order to avoid using chemicals near children, your vegetable garden should, ideally, be organic.

3. Improving the soil

Compost and manure are excellent soil improvers but any organic matter will help. Adding a modest amount of fertiliser will improve fertility. If you don’t want to use a synthetic fertiliser try seaweed meal which you can order from the HDRA organic gardening catalogue, or pelleted chicken manure.

Plants known as green manures, grown to prevent weeds when nothing else is growing, can later be dug in to improve soil. Examples of green manures are winter beans, buckwheat, mustard, and grazing rye. See RHS website for more details.

www.rhs.org.uk/advice/profiles0802/green_manure.asp

4. Vegetables to grow

It is best to choose vegetables that are easy to grow, reliable and quick to crop. Ideally they should be ones that children like to eat. Chosen crops should fit with school term times, either to be harvested by mid July or survive the holiday period until September.
Choose varieties of vegetables which have been given the RHS Award of Garden Merit (AGM). This means that they are suitable for garden cultivation. Start small and grow just two or three crops at first, perhaps potatoes and legumes (peas, beans etc) with tomatoes or lettuce.

Some AGM varieties are suggested below. For more information on choice of varieties contact the RHS Curricular Education department who will send you the RHS advisory leaflet on AGM Vegetables. Seed companies will send you catalogues, usually free of charge. For more information see RHS website www.rhs.org.uk/advice/problems_archive.asp#Fruit

Vegetables varieties


**Carrots (early):** Sow early carrots outside in rows in March, April or June and then thin them out. They can be harvested 11-12 weeks later between June and July or in September. Varieties: ‘Adelaide’, ‘Napoli’, ‘Natan’ and ‘Panther’.

**Early peas:** Sow early peas in double rows outside between March and mid-April or in June to July. These can be harvested 12 weeks later in June or in September to October. Varieties: ‘Bayard’, ‘Holiday’ and ‘Kelvedon Wonder’.

**Early potatoes:** For a summer supply of new potatoes, early potatoes are best as they are usually harvested before potato blight or drought become problems. Plant chitted seed in from mid to late March for first earlies, early to mid April for second earlies. Ready for harvest in 13 weeks. Varieties: ‘Accent’, ‘Concorde’, ‘Foremost’ and ‘Red Duke of York’.

**Lettuce and salad leaves (cut and come again):** Choose small lettuce varieties such as ‘Little Gem’ or ‘Kendo’ (both Cos lettuce types), as there is little wastage. They are ready for harvesting eight to 14 weeks from sowing. Cut-and-come-again salads such as the Salad Bowl types, give a succession of leaves, from six to eight weeks after sowing. Prepare site with lots of compost to create a fertile, moisture-retentive soil. Start sowing from mid March, thinning early.

**Onions and shallots:** Push sets into the soil outside in late February or March or between September and November. These can be gathered 20 to 40 weeks later in June or July. Shallots from sets are quick to mature, producing a further eight to 12 shallots per set. Varieties: Onions – ‘Centurion’ and ‘Sturon’; Shallots – ‘Atlantic’ and ‘Pikant’.

**Radishes:** Ready to eat three to four weeks after sowing, sow at fortnightly intervals from March onwards for a continuous crop (avoiding 3-4 weeks before the holiday period). Seeds should be sown thinly to avoid thinning. Varieties: ‘Cherry Bell’, ‘Scarlet Globe’, ‘French Breakfast 3’ and ‘Marabelle’.

**Pumpkins, squash:** Most form large trailing plants, which can be trained in circles, over strong supports or left to sprawl. The large seeds are easy to sow, either in pots in April and May or in-situ in June. Pumpkins and squash require a moist soil, but are otherwise easy to grow. Look at seed packets or the seed catalogues for sowing instructions, spacings and further details of cultivation.
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4. Different ways of growing vegetables

Growing on concrete
If your school is short of bare earth or if the soil might be contaminated, use containers. Ask parents or local businesses to collect materials for you. Clean them thoroughly before use and make sure they have drainage holes in the bottom.

Here are a few ideas:
- Chimney pots
- Car tyres and wheels
- Bricks for making raised beds
- Wooden pallets
- Old cement mixer bowls
- Old sinks and baths
- Washing machine drums
- Fruit and vegetable crates
- Large cooking oil tins
- Dustbins

Potato towers
Old car tyres can be used for potato towers:
- Collect 5 tyres, stack 2 together and fill with soil mixed with grass clippings, straw or compost.
- Plant 5 potatoes in the tyres. As the potatoes grow, add another tyre and fill with organic matter. Keep adding more tyres and organic matter to build the root system and increase the crop

Square foot gardening
You just need a 120cm x 120cm plot, divided into 16 smaller squares which can each be planted with different crops. (See RHS Schools’ Membership Newsletter, Issue 10 Spring 2003).

5. Pest control
Most pests in a school garden can be controlled, to some extent, by their natural predators, so sprays are seldom needed. A sensible way of protecting plants from soil dwelling pests is to cover the plants in horticultural fleece. Barriers made of small squares of carpet underlay placed around brassica stems will prevent cabbage root flies from laying eggs there. You can use organic sprays to control pests on foliage. See RHS website for more information on the plants affected, the symptoms, causes, prevention and control of certain pests, www.rhs.org.uk/advice/problems_archive.asp#Fruit

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6. Making liquid plant food
A liquid plant tonic can be made from comfrey, or nettles, but is not a substitute for fertiliser or organic matter. For more information, contact the RHS Curricular Education Department.

7. Further reading
- RHS website  [www.rhs.org.uk/advice/problems_archive.asp#Fruit](http://www.rhs.org.uk/advice/problems_archive.asp#Fruit)
- Pollock, M, *The RHS Fruit and Vegetable Gardening* (Dorling Kindersley, 1991)

8. Further information
For further information on how to grow vegetables in schools contact:
- Royal Horticultural Society (RHS) on 01483 224234 or visit [www.rhs.org.uk](http://www.rhs.org.uk)
- Henry Doubleday Research Association (HDRA) on 024 7630 3517 or visit [www.schoolsorganic.net](http://www.schoolsorganic.net)

Other Useful Organisations
Learning through Landscapes [www.ltl.org.uk](http://www.ltl.org.uk)
Federation of City Farms and Community Gardens [www.farmgarden.org.uk](http://www.farmgarden.org.uk)
The Soil Association [www.soilassociation.org](http://www.soilassociation.org)