Grow Your Own Vegetables ~
It's Worth it!

Vegetables can be grown in containers on patios and rooftops, home yards, community garden lots, or large ranch areas — providing nutritious, fresh, delicious food. Benefits include:

- Growing varieties that you and your family like
- Growing enough to feed your neighborhood
- Exercise
- Knowing how and where your food is grown
- Reducing your carbon footprint by
  - eliminating the environmental costs of growing and shipping produce to your market
  - less vehicle travel to purchase produce
  - reducing or eliminating pesticide use

The Basics
Growing enough produce to feed your family or your neighborhood is possible, just follow these basics:

- Choose the best available site for your garden, preferably in a location that is easily accessible from your home. Select a site that receives 6 to 8 hours of full sun each day. It should be relatively level, well-drained, and near a water source. Avoid shaded locations.
- Plan your garden on paper before you begin so that you have vegetables all year round. See planting table, below.
- Before you plant, amend the soil with compost. Mulch and fertilize as needed.
- Plant only as large a garden as you can easily maintain. The size of your garden should be based on how much time you'll be able to give to it. Plan about 3-5 hours a week for a large garden.
- Plant vegetables that your family likes.
- Grow crops that produce the maximum amount of food in the space available. For example, growing corn or melons is probably not your best choice if you have a small space.
- Plant during the correct season for the crop you plan to grow (see Vegetable Classification, below).
- Plant disease-resistant varieties that are adapted to and recommended for your area. Ask your local UCCE master gardener.
- Fertilize according to directions. Too much is as bad as too little.
- Harvest vegetables several times a week and at the maturity you like best. Store them promptly and properly if they are not to be used immediately.

Culture
- Irrigate soil thoroughly before planting.
- Plant rows running north to south with tall plants bordering the garden on the north

Consider planning on a grid for small spaces, small plants.
Directly sow seeds into the soil, use transplants that you have started indoors, or buy the seedlings from a nursery.
Transplant after the danger of frost is past, when the plant has only 2 or 3 true leaves. If there is a danger of frost, provide plant covers.
Plant seeds at a depth of twice the diameter of the seed. Thin emerged plants according to directions on the seed packet.
Do not crowd transplants. Space them according to directions.
Drip irrigation encourages root growth, reduces weed invasion, and is the most efficient. Check the moisture in the root zone, not at the soil surface.
Instead of trying to kill all insects, learn which ones are beneficial — plant a variety of plants to encourage beneficial insects.
Use least toxic chemicals – water, insecticidal soap, Bacillus thuringiensis (Bt), or horticultural oils.
Mulch to conserve water and prevent weed germination.
Some vegetables benefit from frequent harvesting, e.g., okra, peppers, beans, peas.

Vegetable Classification
Most vegetables are classified as cool-season or warm-season crops.

Cool-Season Vegetables grow best and produce the best-quality crops when average temperatures are 55º to 75ºF (13º to 24ºC), and they usually tolerate slight frost when mature. The food value of cool-season vegetables is usually higher per pound and per square foot than that of warm-season vegetables, because the edible parts of the plant are the vegetative parts—such as roots, stems, leaves, or immature flower parts. Examples include:

- **root:** beet, carrot, parsnip, radish, turnip
- **stem:** asparagus, white potato
- **leaf:** cabbage, celery (fleshy petioles), lettuce, onion, spinach
- **immature flower parts:** broccoli, cauliflower, globe artichoke

Warm-Season Vegetables require long, hot days and warm soil to mature. They grow best and produce the best-quality crops when average temperatures are 65º to 95ºF (18º to 35ºC), and they are intolerant of prolonged freezing temperatures. Examples include:
**Recommended Planting Dates**

<table>
<thead>
<tr>
<th>Vegetable</th>
<th>North and North Coast</th>
<th>South Coast</th>
<th>Interior Valleys</th>
<th>Desert Valleys</th>
<th>Crop Type</th>
<th>Amount to Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans, snap1,2</td>
<td>Jul; May-Jun</td>
<td>Mar-Aug</td>
<td>Apr-May; Jul-Aug</td>
<td>Jan-Mar; Aug</td>
<td>W</td>
<td>15-25 ft row</td>
</tr>
<tr>
<td>Beets1,2</td>
<td>Feb-Aug</td>
<td>Jun-Sep</td>
<td>Sep-Jan</td>
<td>C</td>
<td></td>
<td>10-15 ft row</td>
</tr>
<tr>
<td>Broccoli1,3</td>
<td>Feb-Apr; Aug-Sep</td>
<td>Jun-Jul; Jan-Feb</td>
<td>Dec-Feb, Jul</td>
<td>Sep</td>
<td>C</td>
<td>6-100 ft row</td>
</tr>
<tr>
<td>Cantaloupes/Other melons</td>
<td>May</td>
<td>Apr-May</td>
<td>Apr-Jun</td>
<td>Jan-Apr; Jul</td>
<td>W</td>
<td>5-10 hills</td>
</tr>
<tr>
<td>Carrots1,2</td>
<td>Jan-May; Jul-Aug</td>
<td>Jan-Sep</td>
<td>Aug-Sep; Feb-Apr</td>
<td>Sep-Dec</td>
<td>C</td>
<td>10-25 ft row</td>
</tr>
<tr>
<td>Chard1</td>
<td>Feb-May</td>
<td>Feb-May</td>
<td>Feb; Aug</td>
<td>Sep-Oct</td>
<td>C</td>
<td>3-4 plants</td>
</tr>
<tr>
<td>Chives1</td>
<td>Apr</td>
<td>Feb-Apr</td>
<td>Feb-Mar</td>
<td>Sep-Feb</td>
<td>C</td>
<td>1 clump</td>
</tr>
<tr>
<td>Corn, sweet2</td>
<td>May</td>
<td>Mar-Jul</td>
<td>Mar-Jul</td>
<td>Feb-Mar</td>
<td>W</td>
<td>20-30 ft</td>
</tr>
<tr>
<td>Cucumbers</td>
<td>Apr-Jun</td>
<td>Apr-Jun</td>
<td>Apr-Jul</td>
<td>Feb-May</td>
<td>W</td>
<td>6 plants</td>
</tr>
<tr>
<td>Eggplant1,3</td>
<td>May</td>
<td>Apr-May</td>
<td>Apr-May</td>
<td>Feb-Apr</td>
<td>W</td>
<td>4-6 plants</td>
</tr>
<tr>
<td>Garlic1</td>
<td>Oct-Dec</td>
<td>Oct-Dec</td>
<td>Oct-Dec</td>
<td>Sep-Nov</td>
<td>C</td>
<td>10-20 ft row</td>
</tr>
<tr>
<td>Lettuce1,2</td>
<td>Feb-Aug</td>
<td>Aug-Apr</td>
<td>Aug; Nov-Mar</td>
<td>Sep-Dec</td>
<td>C</td>
<td>10-15 ft row or 5 ft row each month</td>
</tr>
<tr>
<td>Okra</td>
<td>May</td>
<td>Apr-May</td>
<td>May</td>
<td>Mar</td>
<td>W</td>
<td>10-20 ft row</td>
</tr>
<tr>
<td>Onions1,4 (bulb)</td>
<td>Jan-Mar</td>
<td>Oct-Nov</td>
<td>C</td>
<td>30-40 ft row</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onions1,2,3 (green)</td>
<td>Apr-Jul</td>
<td>Aug-Dec</td>
<td>Sep-Jan</td>
<td>C</td>
<td></td>
<td>---</td>
</tr>
<tr>
<td>Peas1,2</td>
<td>Jan-Apr; Sep-Oct</td>
<td>Aug; Dec-Mar</td>
<td>Sep-Jan</td>
<td>Sep-Oct; Jan-Feb</td>
<td>C</td>
<td>30-40 ft row</td>
</tr>
<tr>
<td>Peppers1,3</td>
<td>May</td>
<td>Apr-May</td>
<td>May</td>
<td>Mar</td>
<td>W</td>
<td>5-10 plants</td>
</tr>
<tr>
<td>Potatoes1,2, sweet</td>
<td>May</td>
<td>Apr-May</td>
<td>Apr-Jun</td>
<td>Feb-Jun</td>
<td>W</td>
<td>50-100 ft row</td>
</tr>
<tr>
<td>Potatoes, white</td>
<td>Early: Feb</td>
<td>Feb-May; Jun-Aug; Mar-Aug, Aug-Mar; Sep; Nov-Mar; Oct-Mar; C 4 ft row</td>
<td>May-Jun; Apr-Jun</td>
<td>C 10-20 ft row</td>
<td>W 6-10 (processing)</td>
<td></td>
</tr>
<tr>
<td>Pumpkins</td>
<td>May</td>
<td>May-Jun</td>
<td>Apr-Jun</td>
<td>Mar-Jul; W 1-3 plants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radish1,2</td>
<td>All year</td>
<td>All year</td>
<td>Sep-Apr</td>
<td>Oct-Mar</td>
<td>C</td>
<td>4 ft row</td>
</tr>
<tr>
<td>Spinach1</td>
<td>Aug-Feb</td>
<td>Aug-Mar</td>
<td>Sep-Jan</td>
<td>Nov-Sep</td>
<td>C</td>
<td>10-20 ft row</td>
</tr>
<tr>
<td>Squash, summer</td>
<td>May</td>
<td>Apr-Jun</td>
<td>Apr-Jul</td>
<td>Feb-Mar</td>
<td>W</td>
<td>2-4 plants</td>
</tr>
<tr>
<td>Squash, winter</td>
<td>May</td>
<td>Apr-Jun</td>
<td>Apr-Jun</td>
<td>Feb-Mar; Aug</td>
<td>W</td>
<td>2-4 plants</td>
</tr>
<tr>
<td>Tomatoes1,3</td>
<td>May</td>
<td>Apr-Jun</td>
<td>Apr-Jun</td>
<td>Dec-Mar</td>
<td>W</td>
<td>6-10 (if processing)</td>
</tr>
<tr>
<td>Turnips1</td>
<td>Jan; Aug</td>
<td>Jan; Aug-Oct</td>
<td>Feb, Aug</td>
<td>Oct-Feb</td>
<td>C</td>
<td>10-15 ft row</td>
</tr>
<tr>
<td>Watermelons</td>
<td>May-Jun</td>
<td>Apr-Jun</td>
<td>Apr-Jun</td>
<td>Jan-Mar; W 6 plants</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**General Planting Requirements**

- **Crop Type**: C = cool season; W = warm season

**Recommended Planting Dates**

- **North and North Coast**: Monterey County north; South Coast = San Luis Obispo County south; Interior Valleys = Sacramento, San Joaquin, and similar valleys; Desert Valleys = Imperial, Coachella valleys. Planting dates are only approximate, as the climate may vary even in small regions of the state. Contact your local master gardeners and experiment on your own to find more precise dates.

- **North Coast**:
  - Apr-Jun: Mar-Oct
  - May-Jun: Jul-Aug

- **South Coast**:
  - Jun-Sep: Aug-Oct
  - Aug-Sep: Sep-Dec

- **Interior Valleys**:
  - Mar-Jul: Aug-Oct
  - Aug-Sep: Sep-Dec

- **Desert Valleys**:
  - Feb-Mar: May-Aug

**Please contact your local master gardener for more information**

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### Important Notes:

- **Pesticides are poisonous.** Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in their original labeled containers in a locked cabinet or shed, away from foods or feeds, and out of the reach of children, unauthorized persons, pets, and livestock.

- **Confining pesticides to the property being treated.** Avoid drift on to neighboring properties or gardens containing fruits and/or vegetables ready to be picked.

- **Never burn pesticide containers.**

- **WARNING ON THE USE OF CHEMICALS**
  - Phytotoxicity: Certain chemicals may cause plant injury if used at the wrong stage of plant development or when temperatures are too high. Injury may also result from excessive amounts or the wrong formulation or from mixing incompatible materials. Inert ingredients, such as wetters, spreaders, emulsifiers, and solvents, can cause plant injury. Since formulations are often changed by manufacturers, it is possible that plant injury may occur, even though no injury was noted in previous seasons.

- **Never burn pesticide containers.**

*This publication was excerpted from: California Master Gardener Handbook, Home Vegetable Gardening, 2nd ed., Home and Garden Information Center, University of California, Davis. Content for this publication was excerpted from: California Master Gardener Handbook, Home Vegetable Gardening, 2nd ed., Home and Garden Information Center, University of California, Davis.*

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### Additional Resources:

- [California Master Gardener Handbook](#)
- [Home Vegetable Gardening](#)
- [Home and Garden Information Center](#)
- [University of California, Davis](#)

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**Please contact your local master gardener for more information**

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**Project management: Pamela M. Geisel; Donna C. Seaver. Design and illustrations: Will Suckow Illustration.**

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