Spade the soil to 8 to 12 inches deep (Fig. 1). This is about the depth reached by most shovels or spading forks. Turn each shovel of soil completely over to cover all plant materials with soil.

Work the soil into beds 4 to 6 inches high and at least 36 inches apart (Fig. 2). Ridges are especially important in heavy soils and poorly drained areas because cucumbers must have good drainage.

Site selection

Although cucumbers do best in loose sandy loam soil, they can be grown in any well-drained soil. Cucumbers must be grown in full sunlight. Because their roots reach 36 to 48 inches deep, do not plant them where tree roots will rob them of water and nutrients.

Soil preparation

Remove rocks, large sticks, and trash before preparing the soil. Leave fine pieces of plant material such as dead grass and small weeds because they will help enrich the soil when turned under.
Cover the seeds with about 1 inch of fine soil. Use the flat side of a hoe to firm the soil over the seeds, but do not pack it.

In small gardens, you can train cucumbers on a fence, trellis or cage if wire is available (Figs. 4 and 5). Plant three or four seeds in hills 4 to 6 inches high along the trellis or cage.

You can plant fast-maturing crops such as lettuce and radishes between the cucumber hills to save space. These will be harvested before the cucumber vines get too large.

**Fertilizing**

Cucumbers require plenty of fertilizer. Scatter 1 cup of a complete fertilizer such as 10-10-10 or 10-20-10 for each 10 feet of row; then work the fertilizer into the soil and leave the surface smooth.

When the vines are about 10 to 12 inches long, apply about ½ cup of fertilizer for each 10 feet of row or 1 tablespoon per plant.

**Watering**

Soak the plants well with water weekly if it does not rain.
If the female flowers do begin to drop off, touch the inside of each male and female flower with a soft brush or cotton swab. This will pollinate the flowers and help them develop into fruit.

Insects

Many insecticides are available at garden centers for homeowner use. Sevin is a synthetic insecticide; organic options include Bt-based insecticides and sulfur. Sulfur also has fungicidal properties and helps control many diseases.

Before using a pesticide, read the label and always follow cautions, warnings, and directions.

Diseases

Several diseases attack cucumbers. Most of these diseases show up as spots on the upper or lower sides of leaves or on fruit. Check the plants daily, and spray them with an approved fungicide if diseases appear. Neem oil, sulfur, and other fungicides are available for use. Always follow label directions.

Harvesting

Harvest cucumbers when they reach the desired size and are green in color. Do not wait until they turn yellow. Yellow cucumbers are over mature and will have a strong flavor.

Care during the season

Keep the cucumbers as weed free as possible. Do not plow or hoe the soil deeper than about 1 inch because you may cut the feeder roots and slow the plant’s growth. Cucumbers produce two kinds of flowers, male and female. Male flowers (Fig. 6) open first and always drop off. Female flowers (Fig. 7) form the cucumber and should not drop off.

<table>
<thead>
<tr>
<th>Name and description</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banded cucumber beetle, ¼ inch long; yellow-green with 3 yellow bands</td>
<td>Pyrethrins or rotenone</td>
</tr>
<tr>
<td>Spotted cucumber beetle, ¼ inch long; yellow-green with 12 black spots</td>
<td>Pyrethrin or rotenone</td>
</tr>
<tr>
<td>Squash bug, up to 1 inch long; gray-brown, reddish brown when small</td>
<td>Sevin or Thiodan</td>
</tr>
</tbody>
</table>

Figure 6. Male cucumber flowers open first and always drop off.

Figure 7. Female cucumber flowers form the cucumbers.