

## Carrots



### **Nutritional Value:**

Beta-carotene is the biggest nutritional benefit in carrots. We convert it to vitamin A when eaten. Carrots are also a good source of potassium, and calcium-pectate, which helps lower blood cholesterol.

### **Challenges / Advantages:**

The toughest challenge is to get carrots through the germination and young seedling stages. They can be very sensitive to lack of water during the first couple

weeks after direct sowing.

### **Sowing:**

Although carrots can be carefully transplanted, they are most often directly sown into spring soil. I have found pelleted carrot seeds to be very time saving since they are big enough to be sown at appropriate centers and avoid the need to thin all together, thus saving many hours of tedium later on. Not all varieties are offered in pelleted form, however. If using non-pelleted seed, remember that the more densely you space those tiny seeds, will just lead to more work later on in necessary thinning, so take the extra time to space them at 3" centers right from the start. Drag a stick to make the rows aligned with where your drip irrigation will be placed. Sow the seeds right around your last frost date, 1/4" deep in rows in very fine beds that have all stones removed. Gently cover the seeded area with 1/4 inch of fine soil/compost mixture to keep the seeds in place.

### **Soil prep:**

Sandy loam that is light, deep (18-24") and well-drained is best for carrots. Optimal pH is 6.5-7.0. Clay soils are more difficult but can be prepped for carrot production with the introduction of lots of organic material (compost) to help break up the harder clay. The incorporation of mature leaf mold into the top 10" of soil also helps accomplish this in carrot beds. If carrots have to work too hard to push down through any compacted soil, they will become stunted or forked. This can also occur due to inconsistent water in the soil, or too many rocks in the way. Careful attention to working the soil of a carrot bed into a loose, fine bed that has minimal compaction is one of the major factors toward success of carrot production. Take your time. Add lots of organic matter. Work it all with the garden fork into a fine tilth.

### **Growing Conditions:**

Full sun is best for continual fast carrot growth, although they tolerate partial shade.

**Watering:**

It's critical to keep the soil moist as the carrots germinate and sprout above the soil during the first few weeks. This is where most new gardeners falter. One method is to moisten the bed first (carefully as to not wash the seeds around) and then cover entire planted area with a layer of burlap. Soak the burlap and keep it wet for the first two weeks. This will help minimize evaporation, and help keep the bed moist between daily watering so the carrots can germinate. Right before the seedlings break the soil, remove the burlap. Once established, carrots need medium, but consistent watering. Drip fed irrigation works well. As the carrots grow in size mid-season, a deeper watering every few days will lead to larger yields. If you see a high number of fine hairs growing off the carrot itself, this can be a sign of lack of water.

**Harvest:**

Once carrots become a few inches long, they can be harvested or thinned in the 'baby carrot' stage, although they won't have much flavor at that stage. Full maturity is reached between 70 and 160 days depending on variety.

**Notes:**

It is important to weed the carrot bed early so they are not overrun with competition. Equally important is to thin them to proper spacing since they won't mature if grown too close together. You can do both the weeding and thinning at the same time at first when the carrots are about 2" tall. If growing in hot climates, between rows to keep the soil cooler so the carrots stay sweet, and their shoulders won't turn green in sun exposure. They do best in cooler growing conditions and flavor improves significantly in colder days of early winter. Carrots vary wildly in shape and size depending on variety. Check seed catalogs for details on ones that are appropriate for your climate zone.

**Storage:**

Carrots can be stored in the refrigerator for several weeks in a plastic bag. They will last six months in a cold root cellar, at 34 degrees, especially if layered in containers of sand. High humidity around 90% is best. And for those that want the easy way, just mulch them heavily in late fall (12" or more) in the bed outside and harvest as needed all winter. For both these methods of long-term storage, the tops of the carrots should be cut just an inch above the carrot before storage to retain moisture. Mid-winter carrots, if kept from freezing in the ground, with deep straw, or leaf mulch will be some of the sweetest you've ever tasted. The carrots convert starch into sugar during the cold months under the snow.

**Good Varieties:** Scarlet Nantes, Mokum, Nelson, Sugarsnax 54, Purple Haze, Danvers Half-Long, (1871), Oxheart, *short and fat*, 1884

