Home Storage of Fruits and Vegetables in Root Cellars

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Use this chart as a quick reference. For more detailed information about constructing and using a root cellar, check the references listed or call your local county extension center.

Root Cellar storage requirements

Apples
- Cold and moist
- Do not store with vegetables
- 32 to 40 degrees Fahrenheit
- 80 to 90 percent relative humidity

Beans, dry
- Cool and dry
- Home and commercially prepared foods also need a cool, dry storage place
- 32 to 50 degrees Fahrenheit
- 60 to 70 percent relative humidity

Beets
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

Brussels sprouts
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

Cabbage
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity
Cabbage, Chinese
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

Carrots
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

Cauliflower
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

Celeriac
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

Celery
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

Endive (Escarole)
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

Garlic
- Cool and dry
- Home and commercially prepared foods also need a cool, dry storage place
- 32 to 35 degrees Fahrenheit ideal
- 60 to 70 percent relative humidity

Grapefruit
- Cold and moist
- Do not store with vegetables
- 32 to 40 degrees Fahrenheit
- 80 to 90 percent relative humidity

Grapes
Cold and moist
Do not store with vegetables
32 to 40 degrees Fahrenheit
80 to 90 percent relative humidity

Horseradish

- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity
- May be left in the ground undisturbed until needed. Digging can be done unless the soil is frozen hard. A thick layer of mulch may extend your harvest season.

Jerusalem artichoke

- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity
- May be left in the ground undisturbed until needed. Digging can be done unless the soil is frozen hard. A thick layer of mulch may extend your harvest season.

Kale

- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

Kohlrabi

- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

Leeks

- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

Onions

- Cool and dry
- Home and commercially prepared foods also need a cool, dry storage place
- 32 to 35 degrees Fahrenheit ideal
- 60 to 70 percent relative humidity

Oranges

- Cold and moist
- Do not store with vegetables
- 32 to 40 degrees Fahrenheit
• 80 to 90 percent relative humidity

**Parsnips**

• Cold and very moist
• 32 to 40 degrees Fahrenheit
• 90 to 95 percent relative humidity

**Pears**

• Cold and moist
• Do not store with vegetables
• 32 to 40 degrees Fahrenheit
• 80 to 90 percent relative humidity

**Peas**

• Cool and dry
• Home and commercially prepared foods also need a cool, dry storage place
• Airtight container
• 32 to 50 degrees Fahrenheit
• 60 to 70 percent relative humidity

**Peppers, hot dried**

• Cool and dry
• Home and commercially prepared foods also need a cool, dry storage place
• 32 to 50 degrees Fahrenheit
• 60 to 70 percent relative humidity

**Popcorn**

• Cool and dry
• Home and commercially prepared foods also need a cool, dry storage place
• Airtight container
• 32 to 50 degrees Fahrenheit
• 60 to 70 percent relative humidity

**Potatoes**

• Cold and moist
• Do not store with fruits
• 38 to 40 degrees Fahrenheit ideal
• 80 to 90 percent relative humidity

**Potatoes, sweet**

• Warm and moist
• To keep sweet potatoes from spoiling in warm and moist storage, do not let temperatures drop below 50 degrees Fahrenheit
• 80 to 90 percent relative humidity
**Pumpkins**
- Warm and dry
- 50 to 55 degrees Fahrenheit
- 60 to 75 percent relative humidity

**Radish, winter**
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

**Rutabaga**
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

**Salsify, oyster plant**
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity
- May be left in the ground undisturbed until needed. Digging can be done unless the soil is frozen hard. A thick layer of mulch may extend your harvest season.

**Squash, winter**
- Warm and dry
- 50 to 55 degrees Fahrenheit
- 60 to 75 percent relative humidity

**Tomatoes**
- Warm and moist
- To keep green tomatoes from spoiling in warm and moist storage, do not let temperatures drop below 50 degrees Fahrenheit
- 80 to 90 percent relative humidity

**Turnip**
- Cold and very moist
- 32 to 40 degrees Fahrenheit
- 90 to 95 percent relative humidity

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**Note**
Storing foods in a root cellar makes it possible to eat fresh fruits and vegetables from the home garden well into the winter months.

The length of time that fruits and vegetables keep well in root cellars depends on several factors:
- Early or late crops (late-maturing crops store better)
- Storage conditions (less-than-ideal conditions shorten storage life)
Fruit and vegetable condition at storage time (proper curing of damage-free produce results in longer storage life).

Vegetables and fruits should not be stored together even though temperatures and moisture requirements are similar. As fruits such as apples and pears ripen, they give off ethylene gas which decreases the storage life of vegetables. This is especially evident with potatoes which sprout early if stored near certain fruits. Also, the odor of strong smelling vegetables, like turnips and cabbage, can be absorbed by fruits and other vegetables. Store them away from other food and where the odor cannot waft into the house.

Do not allow fruits and vegetables to freeze.

References


Related MU Extension publications

- MP557, Storing Food in the Cupboard
  http://extension.missouri.edu/p/MP557
- MP558, Storing Food in the Refrigerator
  http://extension.missouri.edu/p/MP558

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