

Peppers, Dry Chili

Revised 2018

Storage Conditions

Temperature	32-50°F (0-10°C)
Relative Humidity	60-70%
Storage Period	6 months

After harvest at full maturity, chili peppers are dried and placed in covered piles to distribute the moisture content equally. Some water may be added after drying in order to make the peppers less brittle. They are then packed tightly into sacks holding 200 lbs (91 kg) or more.

Dry chili peppers are best stored in a relative humidity (RH) of 60-70% at a temperature in the range of 32-50°F (0-10°C). This low RH helps keep chili peppers at the optimum moisture content of 10-15%. When the moisture content of chili peppers drops to 6-9%, they become dry, brittle, and may shatter and lose color more rapidly. Exact temperature maintenance, within the range noted above, is less important than careful humidity control. The low moisture content of chili peppers usually discourages mold if humidity conditions are right. If humidity control is difficult, then dropping the temperature to 32°F (0°C) will reduce mold growth on the peppers or the sacks. With higher moisture content, the pods may be too pliable for grinding. The chief storage problem is insect infestation; if the temperature is maintained below 40°F (4.4°C), insect activity ceases. For insect dis-infestation, fumigation may be necessary.

The use of polyethylene film liners within boxes or sacks allows better storage and reduces the dust problem. They maintain a constant moisture content in the chili peppers during storage and until the time of grinding, thus permitting successful storage or shipment under a wider range of relative humidity. Packed in this manner, dry chili peppers can be stored 6-9 months at 32-50°F (0-10°C).

Manufacturers of chili pepper products hold part of their supply of the raw material in cold storage at 32-50°F (0-10°C), but they prefer to grind the peppers as soon as possible and store them in the manufactured form in airtight containers.

When receiving dry chili peppers for storage, ascertain by careful inspection that 1) the peppers are properly cured; 2) they are not unduly moist (ask the owner to state the average moisture content of the lot or have a moisture analysis made by a commercial laboratory if in doubt); and 3) the peppers are not already molded or wet or heating in the center of the sacks. Heating is rare except if the peppers are poorly handled or not sufficiently dried. Inspect the peppers in storage at intervals. The red color of chili peppers and their condition is better retained by refrigerated storage, although there is still some storage of peppers in unrefrigerated warehouses. For extended storage of a year or more, store dry chili peppers in the freezer.

Freshly harvested chili or other hot peppers should be stored under the same temperature and RH conditions as those for sweet peppers, around 45°F (7.5°C) and greater than 90% relative humidity.

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