Canned Foods

Revised 2008

Storage Conditions

Temperature	32 to 60°F (0 to 16°C)
Relative Humidity	70% or below
Storage Period	Variable with the product

Canned foods are not normally held in refrigerated storage; however, refrigerated storage offers the following major advantages:

- 1. Improved product quality retention as compared with higher ambient temperature storage, resulting in a better quality product for the consumer.
- 2. Decreased rate of internal corrosion, which is of considerable importance in securing maximum container performance, especially with highly corrosive food products.
- 3. Greater retention of nutritional factors.

As with all refrigerated foods, the lower the temperature of storage, the longer the period of time before quality and nutritional losses become evident. Storage at freezer temperatures is possible, but detrimental effects may result with many canned foods.

It is important to control the relative humidity to 70% or below. It is equally important that the temperature of the cans should be kept at least 5°F (1.7°C) above the dew point. The dew point is the temperature at which cooled air becomes saturated (100% relative humidity) and moisture vapor condenses as moisture on a cool surface.

Higher humidity may cause weakening of the packing cases, rusting of the cans and water soaking damage to the labels. On removal from the refrigerated storage room considerable care should be taken to prevent moisture condensation, or sweating, to occur or the cases may weaken, cans may rust, and labels will be spoiled. The cases should be tempered to prevent this. See the description of tempering techniques elsewhere in this manual, under **Condensation Control**.

Some canned products such as red, tart, pitted cherries, berries, prunes, pickles and sauerkraut are highly corrosive. This corrosive action can cause loss of color of products, swelled cans and perforations of the container. Refrigerated temperatures retard this action and minimize product and container degradation. Refrigerated storage is of particular advantage with products of this type expected to be held for a considerable length of time.

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Loss of color can also be retarded in some low-acid canned vegetables by refrigerated storage.	

WFLO is indebted to Tom Fetters, Corporate Technologies, Crown Cork and Seal, Alsip, Illinois, and Dr. Daryl Lund, University of Wisconsin, for the review and revision of this topic.

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