

Department of Food Science

Food Safety

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Protecting the Safety of Milk

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Grade A milk is carefully produced, processed and packaged in order to protect the safety of the consumer. Pasteurized milk can readily spoil and could cause foodborne illness if not properly protected.

Refrigeration is the single most important factor in maintaining the safety of milk. By law, Grade A milk must be maintained at a temperature of 45°F or below. However, temperatures **well below 40°F** are necessary to protect the milk's quality. It is critical that these temperatures be maintained through warehousing, distribution, delivery and storage.

Protecting Milk

- Remember temperature is the most important factor.
- Don't accept milk whose temperature is above 45°F.
- If milk is allowed to warm above 45°F, discard it.
- Stage milk orders only in refrigerated storage.
- Milk should be transported in trailers constantly below 40°F.
- Milk must be taken directly from the truck to the storage cooler. Never allow milk to sit on a loading dock.
- Check and record temperature of milk at each stage of the distribution chain.
- Rotate milk stocks and observe code dates. Remember first in first out.

Infants, pregnant mothers, the elderly and those taking certain drug therapies are most threatened by spoiled milk. Bacteria which grow in warm milk may cause serious illness and even death. It is important that everyone who handles milk understands this danger.

Properly refrigerated, milk can withstand about 2 weeks storage. As the product is allowed to warm, the bacteria grow more rapidly. The cooler milk is kept above 32°F, the longer it lasts, and the safer it is. In addition, milkborne illness bacteria will not grow below 45°F.

For more information:

1. Contact your county Cooperative Extension Office.
2. Call your milk supplier.

Important Facts

Harmful bacteria can grow rapidly in milk above 45°F. For each 18°F increase in temperature, the spoilage rate of milk doubles.

For 45°F milk on loading dock in summer:

15 min - temp 49°F

30 min - temp 51°F

45 min - temp 55°F

For 45°F milk unloaded in parking lot

15 min - temp 52°F

30 min - temp 54°F

45 min - temp 60°F