

SOP: Temperature Control for Food Safety and Storage

This SOP details **temperature control for food safety and storage**, including proper monitoring techniques, temperature requirements for various food types, use of calibrated thermometers, guidelines for refrigeration and freezing, protocols for thawing and cooking, and corrective actions for temperature deviations. The objective is to maintain food quality, prevent bacterial growth, and ensure compliance with food safety standards to protect consumer health.

1. Purpose

To outline procedures for monitoring and maintaining appropriate temperatures during the storage, thawing, preparation, cooking, and holding of food items to prevent foodborne illnesses and ensure food quality.

2. Scope

This SOP applies to all food handling, storage, preparation, and service staff in food service establishments and facilities.

3. Responsibilities

- All staff must adhere to temperature control procedures.
- Supervisors are responsible for ensuring compliance and documentation.
- Management will provide necessary equipment and training.

4. Temperature Requirements

Food Type/Process	Required Temperature
Refrigerated storage	≤ 4°C (≤ 40°F)
Frozen storage	≤ -18°C (≤ 0°F)
Hot holding	≥ 60°C (≥ 140°F)
Cold holding	≤ 4°C (≤ 40°F)
Cooking poultry	≥ 74°C (≥ 165°F) (internal temperature)
Cooking ground meats	≥ 71°C (≥ 160°F) (internal temperature)
Cooking seafood	≥ 63°C (≥ 145°F) (internal temperature)
Reheating	≥ 74°C (≥ 165°F) within 2 hours

5. Monitoring Procedures

- Check and record refrigerator, freezer, and holding unit temperatures at least twice daily using calibrated thermometers.
- Verify internal temperatures of food with a clean, calibrated probe thermometer at critical control points (receiving, storage, cooking, holding, reheating).
- Complete temperature logs and report any deviations immediately to supervisors.

6. Calibration of Thermometers

- Calibrate all probe thermometers weekly and after any instance of dropping or suspected damage.
- Follow manufacturer instructions for calibration, using the ice point (0°C/32°F) and boiling point (100°C/212°F) methods as needed.

7. Refrigeration and Freezing Guidelines

- Store raw and ready-to-eat foods separately to prevent cross-contamination.
- Do not overload refrigeration and freezer units to allow proper air circulation.
- Label, date, and rotate stored items (FIFO: First In, First Out).

8. Thawing Procedures

- Thaw foods in refrigerators at $\leq 4^{\circ}\text{C}$ ($\leq 40^{\circ}\text{F}$), in cold running water, or as part of the cooking process.
- Do not thaw foods at room temperature.
- Minimize the time food spends in the temperature danger zone (4°C to 60°C / 40°F to 140°F).

9. Cooking and Hot Holding Protocols

- Cook foods to minimum required internal temperatures as per the table above.
- Hold hot foods at $\geq 60^{\circ}\text{C}$ ($\geq 140^{\circ}\text{F}$) and cold foods at $\leq 4^{\circ}\text{C}$ ($\leq 40^{\circ}\text{F}$).
- Monitor holding temperatures and record at designated intervals.

10. Corrective Actions

- If temperatures fall outside required ranges, immediately adjust units or relocate food to compliant storage (e.g., move to another refrigerator).
- Discard potentially hazardous foods exposed to unsafe temperatures for four hours or more.
- Document all incidents and corrective actions taken on temperature logs.

11. Documentation and Records

- All monitoring and corrective actions must be recorded in temperature logs.
- Logs must be reviewed regularly by supervisors and kept on file for regulatory review as per legal requirements.

12. Training

- Staff must be trained in food safety temperature control upon hiring and receive refresher training annually or as needed.
- Training records must be maintained by management.

13. References

- Local health regulations and food safety codes
- FDA Food Code
- Food Standards Agency (as applicable)

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