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**Checking Products Against Specifications**

This document describes the procedures for verifying that manufactured food products under NIC Code 10101 conform to established specifications. This ensures product quality, consistency, and compliance with regulatory requirements.

1. Defining Product Specifications

Clear and comprehensive product specifications are essential. These specifications should cover:

* Physical Characteristics: Size, weight, shape, color, texture, viscosity.
* Chemical Composition: Ingredient list, levels of specific nutrients, additives, contaminants.
* Microbiological Limits: Acceptable levels of pathogens, spoilage microorganisms.
* Sensory Attributes: Taste, smell, appearance.
* Packaging Requirements: Type of packaging, labeling information.
* Shelf Life: Expected duration of product quality and safety under specified storage conditions.

2. Inspection Methods

* range of inspection methods are used, depending on the specific product and specification:
* Visual Inspection: Checking for physical defects, such as damage, discoloration, or foreign material.
* Dimensional Measurement: Using calibrated instruments to measure size, weight, and other physical parameters.
* Chemical Analysis: Employing laboratory techniques to determine the chemical composition of the product.
* Microbiological Testing: Conducting microbiological tests to identify and quantify microorganisms.
* Sensory Evaluation: Using trained sensory panels to evaluate taste, smell, and appearance.

3. Inspection Frequency and Sampling Plans

The frequency of inspections should align with the product's risk profile and the criticality of the specifications. This might involve:

* 100% Inspection: For high-risk products or critical characteristics.
* Sampling Inspection: Using statistical sampling plans (as described in the previous section) for lower-risk products.
* In-process Inspection: Checking product quality at various stages of the manufacturing process.
* Finished Product Inspection: Checking product quality before packaging and distribution.

4. Non-Conformance Management

When products do not meet specifications, a non-conformance report should be generated. This report should detail:

* Nature of the Non-Conformance: Specific aspects that do not meet specifications.
* Quantity Affected: The number of units affected by the non-conformance.
* Root Cause Analysis: Investigation to determine the underlying causes of the non-conformance.
* Corrective Actions: Implementation of corrective measures to prevent recurrence.
* Disposition of Non-Conforming Products: Decision on how to handle non-conforming products (e.g., rework, rejection, disposal).

5. Record Keeping

Meticulous record-keeping is essential for traceability and compliance. This includes:

* Inspection Reports: Detailed records of all inspections, including dates, methods, results, and any non-conformances.
* Calibration Records: Documentation of calibration and maintenance of inspection equipment.
* Corrective Action Records: Documentation of all corrective actions taken to address non-conformances.