

Inventory management and waste reduction

This workflow automatically monitors food inventory levels in real-time and triggers waste reduction actions when expiration dates approach or overstocking occurs. It optimizes ingredient usage, reduces spoilage costs, and ensures compliance with food safety standards.

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WORKFLOW TRIGGER



Inventory levels drop below minimum threshold or ingredient expiration date approaches within 48 hours

Visual Flow

Each node represents an automated step. Connections show how data and decisions move through the workflow.





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Step-by-Step Breakdown

Detailed explanation of each automated stage in the workflow.

1

⚡ TRIGGER

Monitor Inventory Threshold Alert

Real-time inventory monitoring system detects low stock levels or approaching expiration dates for raw materials and ingredients. Alert is generated with current stock levels, expiration dates, and usage forecasts.

SAP Food & Beverage

JustFood ERP

2

 ACTION

Analyze Current Production Schedule

System retrieves current and planned production runs to determine immediate ingredient requirements and potential usage for expiring materials. Calculates optimal batch sizes to minimize waste.

Wonderware MES

SAP Food & Beverage

3

 DECISION

Evaluate Waste Risk Level

AI algorithm assesses whether expiring ingredients can be consumed through adjusted production schedules or if alternative waste reduction measures are needed. Decision based on shelf life, production capacity, and demand forecasts.

JustFood ERP

FoodLogIQ

4

 ACTION

Execute Production Schedule Adjustment

Automatically reschedules production batches to prioritize use of expiring ingredients while maintaining quality standards. Updates work orders and material requirements planning.

Wonderware MES

SAP Food & Beverage

5

Update Traceability Records

Documents all inventory movements, batch adjustments, and waste reduction actions for food safety compliance. Creates audit trail linking raw materials to finished products.

FoodLogiQ

ComplianceQuest

6

⚙️ ACTION

Generate Procurement Recommendations

Calculates optimal reorder quantities and timing based on updated inventory levels, waste reduction actions, and demand forecasts. Creates purchase requisitions for approval.

Epicor Prophet 21

SAP Food & Beverage

7

📄 OUTPUT

Deliver Waste Reduction Report

Generates comprehensive report showing inventory optimization actions taken, waste prevented, cost savings achieved, and compliance documentation. Distributes to operations and management teams.

JustFood ERP

ComplianceQuest



Outputs

- Updated production schedule with waste-optimized batches
- Automated purchase requisitions for inventory replenishment
- Comprehensive waste reduction and compliance audit report



Key Metrics

- Food waste reduction percentage
- Inventory holding cost savings
- Production schedule adherence rate



Tools & Integrations

- SAP Food & Beverage
- JustFood ERP
- Wonderware MES
- FoodLogiQ
- ComplianceQuest
- Epicor Prophet 21

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