

# HACCP PLAN FOR READY-TO-EAT CHICKEN FRIED RICE

PRESENTOR : HARSHA VARDHAN REDDY PASHIKA

ADVISOR: TAEJO KIM

Department of Kinesiology, Health, Food and Nutritional Sciences, University of Wisconsin-Stout, Menomonie, WI, 54751, USA



## ABSTRACT

Ready-to-eat chicken fried rice is a popular dish, but ensuring its safety and quality is crucial. This project aimed to develop a Hazard Analysis and Critical Control Points (HACCP) plan for ready-to-eat chicken fried rice production. Key steps included identifying potential hazards, establishing critical control points, and implementing monitoring procedures. Critical limits for each control point were set to ensure food safety. The plan also included corrective actions, verification procedures, and record-keeping. Implementation of this HACCP plan will help minimize food safety risks and ensure consistent quality in ready-to-eat chicken fried rice production.

## INTRODUCTION

Ready-to-eat chicken fried rice is a convenient and flavorful meal, often consumed as a standalone dish or paired with other Asian cuisine. It typically consists of cooked rice, diced chicken, vegetables, eggs, and seasonings such as soy sauce and spices. The dish is prepared by stir-frying the ingredients together until fully cooked. Ready-to-eat chicken fried rice is a popular choice in restaurants, takeout establishments, and home kitchens due to its delicious taste and convenience.

## CRITICAL CONTROL POINTS

**Receiving, Inspecting, and Storing Raw Materials:** Ensure raw ingredients like chicken, rice, vegetables, and eggs are of high quality and free from contaminants.

**Cooking Process:** Ensure chicken and rice are cooked to appropriate internal temperatures to eliminate pathogens.

**Cooling and Storage:** Cool cooked chicken fried rice rapidly to prevent bacterial growth and store at proper refrigeration temperatures.

**Packaging and Labeling:** Ensure proper packaging and labeling to convey storage instructions and expiration dates to consumers. These critical control points are essential for maintaining food safety and quality in ready-to-eat chicken fried rice production, reducing the risk of foodborne illnesses and ensuring customer satisfaction

## OUT-BREAKS and RECALLS

- The recall issued by Garland Ventures for ready-to-eat chicken fried rice products is significant due to the potential contamination with *Listeria monocytogenes*, a bacterium that can cause listeriosis, especially in vulnerable populations such as older adults, individuals with weakened immune systems, pregnant women, and newborns.
- The recalled product specifically includes 12-oz trays of "CHICKEN FRIED RICE DICED CHICKEN MEAT WITH VEGETABLES AND RICE IN A SAVORY SOY SAUCE" bearing lot code WK10CFR and best if used by date of 11/10/2024.
- Listeriosis symptoms can be severe, including fever, muscle aches, headache, stiff neck, confusion, loss of balance, and gastrointestinal issues.
- Garland Ventures recalled approximately 13,842 pounds of the RTE chicken fried rice products, which were distributed to retail locations nationwide.
- Consumers who have purchased these products are advised not to consume them and to either dispose of them or return them to the place of purchase. This recall underscores the importance of food safety measures and the potential risks associated with *Listeria* contamination in RTE foods.

SIGNIFICANT HAZARDS	CONTROL MEASURES
Salmonella, Listeria, and foreign objects like dirt are significant hazards	Inspect raw materials like chicken, rice, vegetables, and eggs upon arrival, ensuring they are free from contaminants.
Insufficient heat treatment may lead to the survival of pathogens such as <i>Clostridium botulinum</i> .	Monitor cooking temperatures and times to ensure proper heat treatment and pathogen elimination.
Growth of pathogenic bacteria such as <i>Listeria monocytogenes</i> , <i>Salmonella</i> spp., or <i>Escherichia coli</i> is a concern.	Store raw materials at appropriate temperatures to prevent bacterial growth.
Inadequate sealing during packaging can result in contamination and potential foodborne illness.	Use proper sealing techniques and equipment during packaging to avoid contamination.
Contamination from leaching of metals from packaging materials.	Utilize food-grade packaging materials that are resistant to chemical leaching.
Foreign objects like metal fragments or glass in the final product.	Employ metal detectors to identify and remove any foreign objects present in the final product.



## MONITORING SYSTEMS

### Receiving, Inspecting, and Storing Materials:

Regularly monitor and record the temperature of incoming raw materials to ensure they're within the safe range. Maintain detailed records of material inspections and supplier information.

Train staff to visually inspect all materials for signs of damage or contamination. Establish a protocol for rejecting or quarantining questionable items.

### Blanching and Cooking:

Monitor cooking temperatures and durations to ensure thorough cooking and pathogen elimination. Calibrate cooking equipment regularly for accuracy.

Periodically sample cooked ingredients for microbial testing to verify the effectiveness of the cooking process in eliminating pathogens.

### Pasteurization:

Monitor and control the pasteurization temperature to destroy harmful bacteria while preserving food quality. Maintain detailed records of pasteurization parameters.

### Filling and Sealing:

Inspect packaging materials for integrity before filling to prevent contamination. Monitor the sealing process to ensure all packages are securely sealed.

## HACCP PLAN AND DOCUMENTATION

Maintain detailed documentation of the HACCP plan, including hazard analysis, CCPs, critical limits, monitoring procedures, corrective actions, verification procedures, and record-keeping protocols

- Employee Training Records:** Keep records of employee training related to food safety and quality control measures.
- Cleaning and Sanitation Records:** Maintain records of cleaning and sanitation activities for equipment and facilities, ensuring hygienic conditions.
- Pest Control Records:** Keep records of pest control activities and inspections to prevent contamination risks.

## REFERENCES

- <https://www.fsis.usda.gov/wps/portal/food-safety-education/get-answers/food-safety-fact-sheets/production-and-inspection-haccp/haccp>
- <https://www.thepharmajournal.com/archives/2021/vol10issue5/PartC/10-4-164-974.pdf>

Stage	CCP	Corrective Actions	Verification Procedures
Receiving and Inspection	Temperature Monitoring	If raw materials are out of safe temperature range, reject and notify supplier.	Regularly review temperature logs and verify against safe temperature guidelines.
Blanching and Cooking	Cooking Temperature	If cooking temperature is below recommended level, re-cook ingredients at proper temperature.	Use calibrated thermometers to monitor cooking temperatures and conduct regular checks.
Pasteurization	Pasteurization Temperature	If pasteurization temperature is not achieved, re-pasteurize product or discard affected batch.	Conduct daily checks of pasteurization equipment and verify temperature accuracy.
Filling and Sealing	Package Integrity	If packaging integrity is compromised, reseal or discard affected packages.	Implement visual inspection of package seals and conduct seal strength tests regularly.
	Batch Traceability	If batch traceability is compromised, halt production, and investigate the source of the issue.	Regularly review batch records and conduct mock recalls to test traceability procedures