HACCP PLAN FOR CHILE SAUCE

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Abstract

This HACCP plan delineates critical control points for chili sauce production, aiming to ensure its safety. Recent outbreaks and recalls attributed to pathogens like Salmonella and Listeria underscore the pressing need for stringent food safety measures. By meticulously identifying and mitigating hazards throughout the production process, from sourcing ingredients to packaging, this plan seeks to prevent contamination and uphold consumer well-being. Given the potential risks associated with chili sauce production, adherence to robust HACCP protocols is imperative for producers to uphold product quality and mitigate the risk of foodborne illnesses and associated recalls.

Introduction

Chile peppers, also known as Capsicum annum, are hot peppers belonging to the Solanaceae family. They originated in the Americas, particularly in regions now known as Mexico, Central America, and South America. Rich in vitamins and minerals, they contain capsaicin, which gives them their heat and may offer health benefits. Fresh chile peppers last 2 to 3 weeks in the fridge, while dried ones can last several months to a year in a cool, dry place.

Fig 1.1 Red Chili Peppers

Determination of CCPs

Critical Control Points	Potential Hazards	Preventive Measures
Ph Testing	Clostridium Botulinum	Maintain Ph below 4.6.
Cooling	Salmonella, E.coli, Listeria	Minimize the time that product spends in the temperature danger zone. Continuous monitoring and recording temperatures. Utilize rapid cooling methods
Metal Detection	Foreign Objects and Undesirable Substances	Utilize x-ray system to detect the foreign objects and eliminate those products. Any contamination of packaging materials with foreign objects should be avoided.

HACCP plan

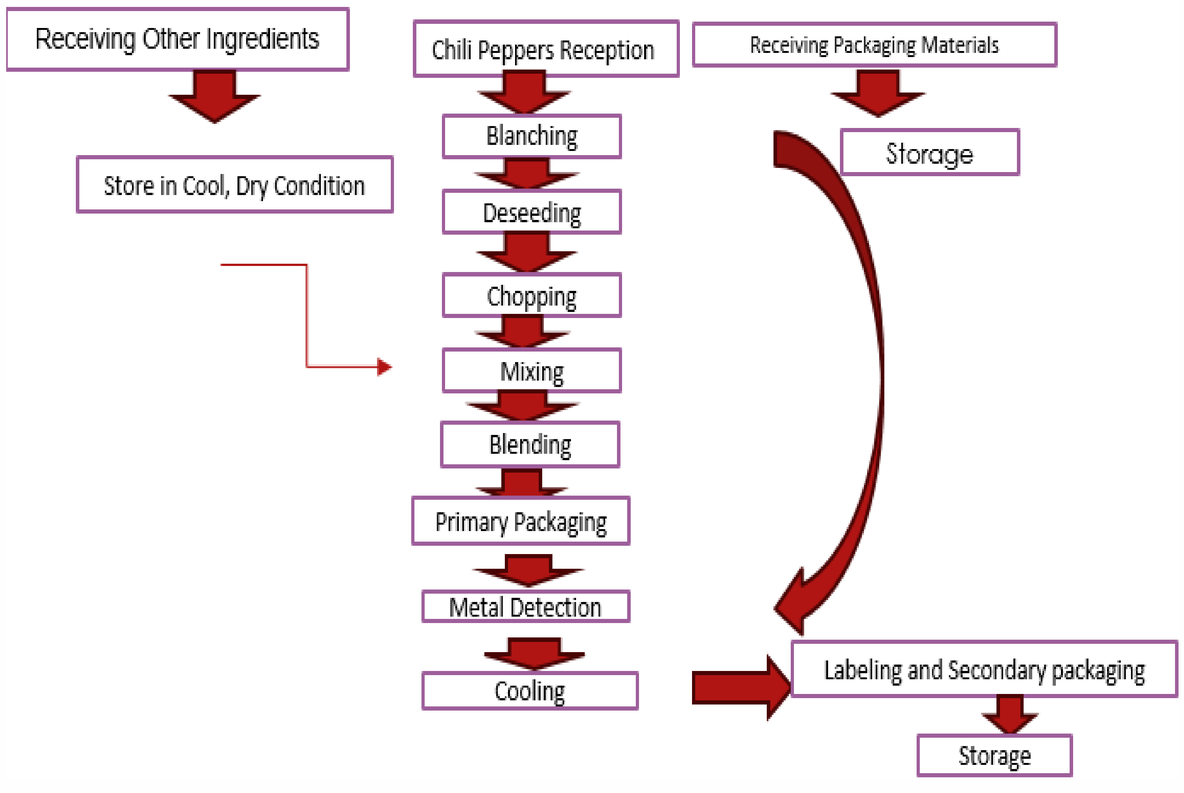
Monitoring	Critical Limits	Corrective actions	Verification
CCP 1 - pH Testing pH of	4.6 or below	If Ph is more than 4.6, retest Ph after making adjustments. Till it is below 4.6, it should be discarded	Calibrate the pH meter per manufacturer's instructions. Log pH measurements with details like date, time, location, batch number, and tester
CCP 2 – Cooling Temperature of the Product and time.	Below 70 F within 2 hours. Below 41 within additional 4 hours	Adjusting the cooling process Identifying the root cause of the deviation, such as equipment malfunction Revising the cooling plan or procedures	Review temperature logs to ensure that cooling cycles are meeting critical limits.
CCP 3 – Metal Detection	Less than 3 mm in diameter and 2 mm in length.	Recalibration of x ray system.	Reviewing system logs and error reports. Conduct additional checks and tests on the X-ray system

Recalls/Outbreaks

Company	Recall Time	Recall Cause	Affects	Resource
Vesta fiery gourmet foods Inc	January 08, 2024	Due to Undeclared wheat in labelling	No illnesses have been reported.	FDA.GOV
Delusional sauce Co.	July 18, 2023	Suspected Clostridium botulinum contaminatio n.	No illnesses have been reported	Newswire.c a

Fig 1.2 Manufacturing of Chile sauce in industries

Process flow diagram of chile sauce



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ACKNOWLEDGEMENTS

This study was supported by advisor Dr.Taejo Kim