Reprinted from:

HACCP

Hazard Analysis Critical Control Point

IMPLEMENTATION

March 4 & 5, 1998

Omni Rosen Hotel Orlando, Florida

A Short Course Co-sponsored by

Food Science and Human Nutrition Dept. University of Florida



Florida Section, Institute of Food Technologists



Developing and Implementing a HACCP

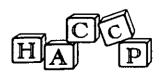
Plan: RECORD-KEEPING

Corrective Actions

Fred W. Leak

Record-keeping Procedures

W. Steven Otwell



RECORD-KEEPING

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RECORD-KEEPING

6th or 7th Principle?

 $NACMCF = 7^{th}$



Kinds of Records

- Supporting Documents
- HACCP Plan
- **■** CCP Monitoring
- Corrective Actions
- Verification Activities
- Sanitation SOP's & Monitoring





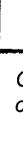
Support Documents

Any information used to develop the HACCP program

- HACCP Team & Assignments
- Flow Diagrams
- Training, external & internal
- Product Spec's & Intended Use
- Hazard Analysis
- Sanitation SOP's



etc ...



HACCP PLAN(S)

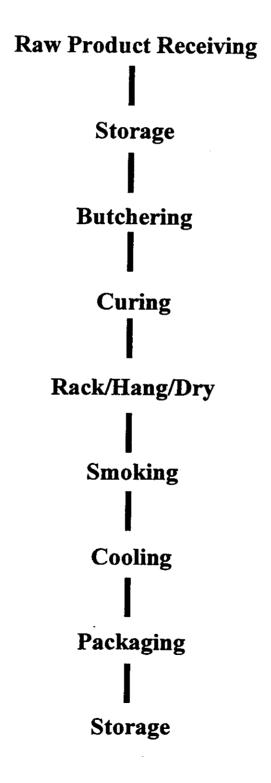
Condensed form outlining the basic components in the HACCP program

- CCP's & Significant Hazards
- Critical Limits & Preventative Measures
- Monitoring (What, How, When & Who)
- **■** Corrective Actions
- Verifications
- Records

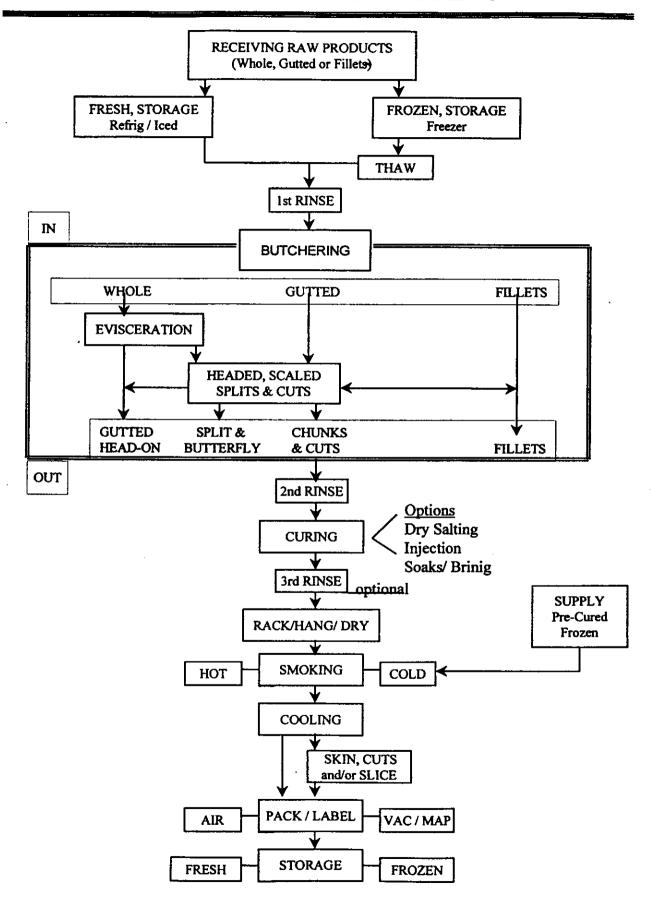


SMOKED FISH PROCESSING

(flow diagram)



SMOKED FISH PROCESSING



HACCP PLAN FORM

Firm: 'A' Blue Crab Co. Address Anywhere, USA

Products: Pasteurized Blue Crabmeat, refrigerated Intended Use: General Public

9. M. Incharge I. M. Incharge 3/5/98

Significant Hazard	Critical Limits		Monitoring	oring		Corrective Actions	Verifications	Records
		What	Ном	When	Who			
Bacterial pathogen recontamination through can seam	Container seams meet current manufacturer's specifications	Can Seams	Can seam teardown evaluation Visual seam evaluation	1. Monitor one can at start-up and when an adjustment is made to the seal machine 2. One can every half hour	Quality Control Supervisor	Readjust can seaming machine Hold and evaluate product since previous check	Daily record review	Can seam evaluation form
Pathogen Survival	For 401x301 can, min. Water bath @188°F for 120 minutes to achieve F-value = 31, ref. 185°F, z=16	Water bath temperature and time for pasteurization	Recording thermometer	Each barch	Pasteurization Supervisor	Recook, reject product or hold for evaluation	*Daily record reviews *Process validation filed *Calibration of temperature recorder to MIG thermometer daily and annual calibration of MIG thermo.	Thermal process record
Bacterial pathogen growth in packed product	50°F maximum	Temperature of cooler	Recording thermometer and visual check	Continuous with visual checks every 4 hours during operation	Quality Control Supervisor	*Hold and evaluate based on time and temperature exposure *Adjust cooler	*Daily record review *Calibration of temperature recorder with MIG thermo. weekly	*Recorder charts *Cooler temperature records

HACCP PLAN FORM

Firm: 'A' Blue Crab C.

Address

Product: Pasteurized Blue Crabmeat, refrigerated Intended Use: General Public

Page:

9. M. Incharge I. M. Incharge 3/5/98

Critical Con	trol Points	Packing/Sealing	Pasteurization	Refrigerated Storage
Significant H	lazard	Bacterial pathogen recontamination through can seams	Pathogen survival	Bacterial pathogen growth in packed product
Critical Limi	its	Container seams meet manufacturer's specifications	For 401x 301 can, min. water bath @ 188°F, time 120 minutes to achieve an F-value=31, ref.185°F,z=16	50°F maximum
Monitoring	Wḥat	Can seams	Water bath temperature and time of pasteurization	Temperature of cooler
	How	Can seam teardown evaluation Visual seam examination	Recording thermometer	Recording thermometer and visual checks
	When	1. Monitor one can at start-up and when an adjustment is made to sealing machine 2. One can every half hour	Each batch	Continuous with visual checks every four hours during operation
	Who	Quality Control Supervisor	Pasteurization Supervisor	Quality Control Supervisor
Corrective Actions		Readjust can seam machine Hold and evaluate product since previous checks	Recook, reject or hold for evaluation	Hold and evaluate based on time and temperature exposure Adjust coler
Verifications		Daily record review	*Daily record review *Process validation filed *Calibration of temperature recorded to MIG thermometer daily and annual calib. MIG thermo.	*Daily record review *Calibration of temperature recorder with MIG thermometer weekly
Records		Can seam evaluation form	Thermal process record	*Recorder charts *Cooler temp. Records



CCP Monitoring

What, How, When and Who used to monitor each critical control point

- Evidence Control
- Demonstrate Compliance
- Reflect Trends for Adjustments



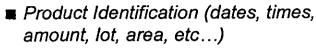
Consider use of existing records or forms as templates for CCP monitoring



Monitoring Record

- Form Title
- Firm Name & Location
- Times & Dates
- Product Identification
- 'Actual' Observation or Measurement
- Critical Limit
- Operators Signature or Initials
- Reviewers Signature or Initials and date of review





- Description of the Deviation
- Corrective Action Taken
- Responsible Individual
- Results of any Evaluation if necessary

Assure link with monitoring record



Evidence routine sanitation practices

Record forms customized to suit the particular food operations



Consider "T.I.P." formats

ANY SUPERMARKET Inc WAREHOUSE SANITATION SOP's

Start Date:

Warehouse:

1.0	Check Time / Date		1	i i	+	-	-	
1.0		ł	1	ĺ	}			
	Work area in good order and not cluttered.	<u> </u>			1		1	
l	(Work area includes cooler, freezer, racks,							
2.0	receiving dock and forklifts) Work surfaces and areas clean and properly		 			 	<u> </u>	<u> </u>
2.0	sanitized.							
3.0	Food container and packaging maintained in sound order.							
4.0	All food properly labeled and stored.							
5.0.	Water supply approved and ice supply clean and protected							
6.0	Disposal area properly maintained to avoid pest problems.							
7.0	All cleaning chemicals stored and labeled separate from foods.				-			<u> </u>
8.0	Thermometers, scales calibrated and in proper working order.							
	PERSONNEL CHECKS	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1.0	Only authorized persons in the food processing area							
2.0	No person with illness, open or infected wounds allowed in contact with foods or food operations							
3.0	Handwash facilities properly supplied and used							
4.0	All food handling personnel trained in routine warehouse operations							
COO	LER TEMPERATURE CHECKS	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Coole	er Unit No.							
	Time/ Temperature check AM	÷						! !
					-			
	Time / Temperature check PM				ļ			
<u>.</u> .					Date Com	unleted		
Compl	eted by:				Date Con	ibicica		
Compl	eted by:				Date Con	ibicica		

ANY SUPERMARKET Inc WAREHOUSE SANITATION SOP's

Varehouse:	Start I)ate:	:				,		.,		-		,	
SANITATION CHECKS	Day	1	Day	y 2	Day	y 3	Day	, 4	Day	5	Day	6	Day	7
Check Time / Date														
1.0 Work area in good order and not cluttered.			<u> </u>											
(Work area includes cooler, freezer, racks,					1	1								
receiving dock and forklifts)			l	<u></u> .	1		<u>L.</u>							
2.0 Work surfaces and areas clean and properly sanitized.	!													
3.0 Food container and packaging maintained in sound order.														
4.0 All food properly labeled and stored.								·						
5.0. Water supply approved and ice supply clean and protected														
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problems.														
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working order.														
PERSONNEL CHECKS	Day	1	Day	, <u> </u>	Day	, 3	Day	, 4	Day	5	Day	6	Day	7
1.0 Only authorized persons in the food processing area														
2.0 No person with illness, open or infected				<u> </u>										
wounds allowed in contact with foods or food														
operations	\sqcup			ļ		<u> </u>	<u> </u>							
3.0 Handwash facilities properly supplied and used					ļ									
4.0 All food handling personnel trained in routine warehouse operations														
				:										
COOLER TEMPERATURE CHECKS	Day	1	Day	, <u>2</u>	Day	73	Day	r 4	Day	5	Day	6	Day	7
Cooler Unit No.													1	
Time/ Temperature check AM													1	
							-							
Time / Temperature check PM														
			<u>t</u>		<u></u>				1		<u> </u>		1	
ompleted by:		<u>-</u>					Date	Con	pleted	l				
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eviewed by:							Date	KCAI	CMCI					

