# STUDIES ON THE APPLICATION OF HAZARD ANALYSIS CRITICAL CONTROL POINTS (HACCP) PROGRAMS IN POULTRY MEAT

 $\mathbf{BY}$ 

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B.Sc. (Food Science and Technology), Faculty of Agriculture, Ain Shams University, 1991

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#### APPROVAL SHEET

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#### ABSTRACT

Mohamed Moustafa Mohmed Abd El-Razik, Studies on the Application of Hazard Analysis Critical Control Points (HACCP) programs in poultry meat. Unpublished Master of Science, University of Ain Shams, Faculty of Agriculture, Department of Food Science, 1997.

The main goal of our investegation is the possibility of application of Hazard Analysis Critical Control Points (HACCP) system, during the production of frozen chicken meat. The study was carried out: 1) To identify the Critical Control Points (CCP) during different stages of processing. Therefore, different samples were taken during processing operation, from, meal feed, water used in processing plant and litters samples, for the detection of Salmonella and other tested microbes, 2) To investigate the usability of spent hens meat for manufacture of three different formulations of chicken patties, i. e, from whole carcasses, breast muscles and leg muscles, 3) To study the effect of different muscles on the quality and tenderness characteristics of the patties and 4) To evaluate the production stages for identification of the CCP in processing line.

Chemical, physical and microbial tests, as well as ISO standards methods for the inspection of both slaughter line and the pattics production line were investigated. The patties were stored at -18°C for 180 day, grilling and frying were used for cooking the patties. The platability of fresh and frozen patties during different storage periods were also assessed. According to the results, it could be noticed that, the CCPI in slaughter line were the evisceration and chilling steps, while during manufacture of chicken patties, it was mixing with spices and frozen storage steps. The chemical, physical, microbial tests and organoleptic evaluation indicated that, spent hens could be used for producing chicken patties with high quality characteristics even with 180 day of frozen storage.

Key words: HACCP, slaughter, critical control points, spent hens patties, chicken.

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4

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## CONTENTS

	Page
Approval sheet	G
Abstract	
Key words	
Acknowledgment	
List of tables	JV
List of figures	VШ
List of abbreviation	X
I. INTRODUCTION	1
2. REVIEW OF LITERATURE	4
2.1. Hazard Analysis Critical Control Points	4
2.2. Chicken patties	11.
3. MATERIALS AND METHODS	20
3.1. MATERIALS	20
3.2. METHODS	20
3.2.1.Preparation of chicken patties samples	20
3.2.2. Chemical analysis	22
3.2.2.1. Moisture content	22
3.2.2.2. Protein content	22
3.2.2.3. Fat content	22
3.2.2.4. Ash content	22
3.2.2.5. Total Volatile Nitrogen (T.V.N.)	22
3.2.2.6. Thiobarbituric Acid (T.B.A.)	22
3.2.2.7. Total Volatile Fatty Acid (T.V.F.A.)	
	22
3.2.3. Physical properties	22
3.2.3.1. pH value	22
3.2.3.2. Water Holding Capacity (W.H.C.) and plasticity	22
J. A. T. COURTIO INCOME	

	Page
3.2.4.1. Cooking loss	23
3.2.4.2. Diameter reduction	23
3.2.5. Microbiological methods	23
3.2.5.1. Media	23
3.2.5.2. Microbial analysis	25
3.2.6. Sensory evaluation	26
3.2.7. Statistical analysis	26
4. RESULTS AND DISCUSSTION	27
4.1. HACCP of poultry processing plant	27
4.2. HACCP of chicken patties manufacture	35
4.3.1. Chemical composition of chicken samples	45
4.3.2. Physical properties of chicken samples	47
4.3.3. Chemical changes of chicken patties	47
4.3.3.1. Moisture content	47
4.3.3.2. Protein content	48
4.3.3.3. Fat content	51
4,3.3.4. Ash content	56
4.3.4. Physical parameters of chicken patties	59
4,3,4,1, pH value	59
4.3.4.2. Water Holding Capacity (W.H.C.)	64
4.3.4.3. Plasticity	64
4.3.5. Chemical methods for assesing chicken patties	
quality	70
4.3.5.1. Fat deterioration	70
4.3.5.1.1. Thiobarbituric Acid (T.B.A.)	70
4.3.5.1.2. Total Volatile Fatty Acid (T.V.F.A.)	73
4.3.5.2. Total Volatile Nitrogen (T.V.N.)	73
4.3.6. Microbial analysis of chicken patties	79
4.3.6.1. Total plate count	79

4.3.6.2. Enterobacteriaceae count	Page 82
4.3.6.3. Detection of Salmonella in different chicken	04
patties during frozen storage at -18°C for 180	
day	83
4.3.7. Quality parameters of cooked patties	83
4.3.8. Organoleptic evaluation	
5. SUMMARY	91 104
6. REFERENCES	
ARARIC SHMMADY	106

#### IV

#### LIST OF TABLES

		Page
Table (1):	Ingredients of different chicken patties	21
	formulations	21
Table (2) :	Microbial evaluation during poultry	
	processing plant	31
Table (3):	Bacterial picture of the different water	
	samples during poultry processing plant	32
Table (4):	Bacterial examination of the water, Meal feed	
	and litter samples	34
Table (5):	Total viable counts at different stages in	
` ,	production line of chicken pattics	37
Table (6):	Enterobacteriaceae and Salmonella detection	
	during different steps in production line of	
	chicken patties	37
Table (7):	Total viable counts of materials and machines	
,	used throughout the production of chicken	
	patties	40
Table (8):	Enterobacteriaceae and Salmonella detection	
x o ( o ) .	in materials and machines used through the	
	production line of chicken patties	40
Table (9):	Chemical composition of whole chicken and	• • •
raoie (2).	their parts	46
Table (10):	Some physical properties of whole chicken	10
rable (10).	and their parts	46
Table (11):	Effect of frozen storage at -18 °C on moisture	40
rable (11).	content of chicken patties produced from	
	• •	49
T. 11 (12)	whole, breast and leg meat	47
Table (12):	Changes in protein content of chicken patties	
	made from different chicken parts during	
	frozen storage at -18 °C for 180 day	52