

**HEAVY METALS DETERMINATION IN BRINJALS  
AND TOMATOES**

**NORMALIZA ISMAIL**

**BACHELOR OF SCIENCE (Hons.)  
CHEMISTRY  
FACULTY OF APPLIED SCIENCES  
UNIVERSITI TEKNOLOGI MARA**

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## TABLE OF CONTENTS

	<b>Page</b>
<b>ACKNOWLEDGEMENT</b>	iii
<b>TABLE OF CONTENTS</b>	iv
<b>LIST OF FIGURES</b>	viii
<b>LIST OF ABBREVIATION</b>	ix
<b>ABSTRACT</b>	x
<b>ABSTRAK</b>	xi
<b>CHAPTER 1 INTRODUCTION</b>	
1.1 Background	1
1.2 Problem statement	5
1.3 Significance of study	6
1.4 Objectives of study	7
<b>CHAPTER 2 LITERATURE REVIEW</b>	
2.1 Tomatoes	8
2.2 Brinjal	10
2.3 Introduction of heavy metals	11

2.3.1	Arsenic	12
2.3.2	Lead	13
2.3.3	Cadmium	14
2.3.4	Copper	15
2.3.5	Zinc	16
2.3.6	Manganese	17
<b>CHAPTER 3 METHODOLOGY</b>		
3.1	Material for heavy meta	19
3.1.1	Raw materials	19
3.1.2	Chemical	19
3.1.3	Apparatus	20
3.2	Methods for heavy metals	21
3.3	Quality assurance	24
<b>CHAPTER 4 RESULTS AND DISCUSSION</b>		
4.1	Heavy metals in brinjals	27
4.2	Heavy metals in tomatoes	30
<b>CHAPTER 5 CONCLUSION AND RECOMMENDATION</b>		
5.1	Conclusion	38
5.2	Recommendation	39
<b>CITED REFERENCES</b>		40
<b>APPENDICES</b>		42
<b>CURRICULUM VITAE</b>		45

## **ABSTRACT**

### **HEAVY METALS IN BRINJALS AND TOMATOES**

In this study, 2 types of tomatoes and brinjals that were cherry tomato, beefsteak tomato, long brinjal and oval brinjal were chosen as samples. This study was carried out with the aim to assess the levels of arsenic (As), cadmium (Cd), copper (Cu), manganese (Mn), lead (Pb) and zinc (Zn) concentration in brinjals and tomatoes sold in supermarket. Inductively Coupled Plasma (ICP) was used to determine the levels of these metals. Samples were prepared by using dry ashing method. In this study, only heavy metals of Cu, Mn, and Zn were found in tomatoes and brinjals. Zn had the highest while Cu was the lowest mean concentration for both types of brinjals and tomatoes. The concentration of copper is higher in oval brinjal than in long brinjal. The concentration of manganese and zinc were higher in long brinjal compared to oval brinjal. The concentration of copper, manganese and zinc were higher in cherry tomato than in beefsteak tomato. The concentrations of Cd, Cu and Pb in both types of tomatoes and brinjals were lower than those detected in Pakistan. The Zn level was higher than that found in Pakistan tomatoes and brinjals. Although, the concentration of Zn was higher than that reported studies in Pakistan for both tomatoes and brinjals, it was below than Provisional Tolerable Daily Intakes (PTDI) value. So, the, consumption of these vegetables does not pose a health risk to human.