

EFFECTS OF SILYMARIN AND VITAMINS SUPPLEMENTATION ON THE HEPATIC ABNORMALITIES OF ALBINO RATS (Rattus norvegicus)

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ABSTRACT

This study focused on the effects of silymarin and vitamins supplementation on the hepatic abnormalities of albino rats (Rattus norvegicus). Thirty eight-week old, male albino rats weighing 250-300 g were used as the test animals subjected to acetaminophen drug to induce liver abnormalities. A complete randomized design was employed with 5 treatment groups namely the control (CON), silymarin (S), silymarin with Vitamin C (SC), silymarin with Vitamin E (SE) and silymarin with Vitamin C and E (SCE). Blood was collected from different experimental group of rats for the level of alanine aminotransferase (ALT), aspartate aminotransferase (AST) and total bilirubin count (TBC) pre-induction, post- induction, one week and two weeks post-treatment. Histopathologic analysis of the liver was done post treatment. Results showed that all treatment groups made an improvement on their histologic condition post- treatment. Among the groups, rats treated in SE showed the consistent decreased in AST and ALT levels compared to S, SC and SE. No synergistic effect was observed with the combination of two vitamins. Histologically, silymarin alone and with supplementation improved the liver condition. Further studies be done on the development of the therapeutic strategies through other antioxidant supplementation with a flavonoid silymarin against hepatic abnormalities.



TABLE OF CONTENTS

	PAGE
TITLE PAGE	1
ABSTRACT	2
APPROVAL SHEET	3
ACKNOWLEDGMENT	4
TABLE OF CONTENTS	7
LIST OF TABLES	10
LIST OF FIGURES	10
CHAPTERS	
I. INTRODUCTION	
Background of the Study	11
Objectives of the Study	17
Scope and Limitations	17
Significance of the Study	18
II. METHODOLOGY	
Research Design	19
Test Animals	19
Acclimatization and maintenance of laboratory rats	19
Blood Collection	20
Administration of Drug Inducers	21



lest for liver damage	22
Preparation of silymarin dosage	22
Administration of the Treatments	
Silymarin Treatment	23
Supplementation of Vitamins C and E	23
Control animals	23
Hematologic Examination	23
Histopathologic Examination	24
Handling of experiment animals for termination	25
Data Gathering and Statistical Analysis	25
III. RESULTS AND DISCUSSIONS	
Results	
Aspartate Amino Transferase	27
Alanine Amino Transferase	29
Total Bilirubin Count	31
Histopathologic Conditions of the Liver tissues	33
Discussion	37
IV. CONCLUSIONS AND RECOMMENDATIONS	
Conclusions	40
Recommendations	41
CITED REFERENCES	42



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APPENDICES

A.	Standard Procedure	48
В.	Raw Data	60
C.	Statistical Analysis	62
D.	Photo Documentation	73
E.	Certification of Clinical Laboratory Results	81
F	Curriculum Vitae	82





LIST OF TABLES

TITLE		PAGE
1.	Average decrease (increase) of Aspartate Amino	
	Transferase (AST) value 1st week and 2nd week	
	after treatment	30
2.	Average decrease (increase) of Alanine Amino	
	Transferase (ALT) value 1st week and 2nd week	
	after treatment	32
3.	Average decrease (increase) of Total Bilirubin Count	
	(TBC) value 1st week and 2nd week after treatment	34
4.	Histologic Condition of Rat Liver	35
	LIST OF FIGURES	
TITLE	*Since 1977 • 02	PAGE
1.	Average Aspartate Amino Transferase (AST) on rats prior	
	to and after acetaminophen induction and post treatment	28
2.	Average Alanine Amino Transferase (ALT) on rats prior	
	to and after acetaminophen induction and post treatment	31
3.	Average Total Bilirubin Count (TBC) on rats prior to and	
	after acetaminophen induction and post treatment	33
4.	Histopathologic Conditions of Hepatic Tissues	37