



TABLES OF CONTENT

APPROVAL PAGE	i
DECLARATION PAGE.....	ii
PREFACE	iii
TABLES OF CONTENT	v
LIST OF FIGURES	vii
LIST OF TABLES	viii
LIST OF ABBREVIATIONS	ix
ABSTRACT.....	x
CHAPTER I	1
A. Background	1
B. Problem Formulation	4
C. Research Objectives	4
1. General objectives	4
2. Specific objectives	4
D. Research Authenticity	4
E. Research Benefit	10
1. Theoretical Benefit.....	10
2. Practical Benefit.....	10
CHAPTER II.....	11
A. Literature Review.....	11
1. Learning and Memory.....	11
2. Acute Hypoxia	17
3. Functional Food	19
4. Fig Fruit.....	20
B. Theoretical Framework	26
C. Conceptual Framework	26
D. Hypothesis.....	27
CHAPTER III	28
A. Design	28
1. Research Design.....	28
2. Research Place	28
3. Research Period.....	28
B. Subject.....	28
1. Subject Number Estimation	28
2. Inclusion and Exclusion Criteria.....	29
C. Tools and Materials.....	30



D. In Research Method	30
1. Preparation of Pureed Fig Fruit.....	30
2. Animal Models.....	32
3. Acute Hypoxia Induction	35
4. Novel Object Recognition Test.....	35
5. Euthanasia	37
E. Variable and Data.....	37
F. Result Analysis	38
G. Schedule of the Study.....	38
H. Ethical Clearance	39
CHAPTER IV	40
A. Results.....	40
1. Pre-test and Post-test Discrimination Index of Novel Object Recognition Test.....	40
2. Delta Discrimination Index of Novel Object Recognition Test.....	41
B. Discussion	44
1. The Effect of Acute Hypoxia Induction to Learning and Memory.....	44
2. Neuroprotective Effect of Vitamin E and Prophylactic PFC.....	45
3. Non-Dose Dependent Effect of Prophylactic PFC.....	47
4. Study Limitation	49
CHAPTER V.....	52
A. Conclusion	52
B. Recommendation.....	52
REFERENCES.....	54
APPENDICES	62