

UNIVERSITI TEKNOLOGI MARA

**LUNG CAPACITY OF
SMOKER AND NON-SMOKER
AMONG UNIVERSITY ATHLETES**

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Research project submitted in partial fulfillment of the
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AUTHOR'S DECLARATION

I declare that the work in this research project was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as a referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

Purpose. The purpose of this study is to compare lung function of smokers and non-smokers among university athletes. **Methods.** The study included 40 male participants, aged 19 to 28 years, full-time students and have represented at for least Sukan Antara Fakulti (SAF) 2017. All participants underwent pulmonary function test. Measurements included forced vital capacity (FVC), Force Expiratory Volume in one second (FEV₁), and best of FEV₁/FVC. **Result.** The values of FEV₁ showed that there were a statistically no significant differences between smoker and non-smoker on FEV₁ at p level > 0.05 ($p = 0.265$) while FVC result showed a statistically no significant differences between smoker and non-smoker university athletes on FVC were shown at p level > 0.05 ($p = 0.066$). Non-smoker group has better result compared to the smoker group for best FEV₁/FVC where result showed no significant different in result of best FEV₁ and FVC among athletes at p level < 0.05 ($p = 0.524$). **Conclusion.** The study shows that the non-smokers of university athletes have better lung capacity compared to smokers of university athletes.

Keywords: Lung capacity, FEV₁, FVC

TABLE OF CONTENT

	PAGE
LETTER OF TRANSMITTAL	i
AUTHOR'S DECLARATION	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER ONE: INTRODUCTION	1
1.1 Background of The Study	1
1.2 Statement of The Problem	2
1.3 Research Questions	3
1.4 Research Objectives	3
1.5 Research Hypothesis	4
1.6 Significance of The Study	5
1.7 Delimitations	5
1.8 Limitations	6
1.9 Definition of Terms	7
1.9.1 Lung Capacity	7
1.9.2 Forced Vital Capacity (FVC)	7
1.9.3 Forced Expiratory Volume (FEV)	7

CHAPTER TWO: LITERATURE REVIEW	8
2.1 Introduction	8
2.2 Literature Review	8
2.3 Lung Capacity of Smoker and Non-smoker	10
2.4 Results of Lung Function from Previous Studies	12
2.5 Lung Capacity of Athletes Based on Sports	14
CHAPTER THREE: METHODOLOGY	16
3.1 Introduction	16
3.2 Research Design	16
3.3 Sampling	16
3.4 Instrumentation	17
3.5 Data Collection Procedures	18
3.5.1 Degree of Restrictive or Obstruction Lung Disease	20
3.5.2 Study Protocol	21
3.6 Data Analysis	22
CHAPTER FOUR: RESULTS	23
4.1 Normal Distribution	23
4.2 Demographic Data	25
4.3 Comparison between Smoker and Non-smoker on FEV ₁	26
4.4 Comparison between Smoker and Non-smoker on FVC	27
4.5 Comparison between Smoker and Non-smoker on Best FEV ₁ and FVC	28
CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATION	29
5.1 Introduction	29
5.2 Discussion	29
5.2.1 FEV ₁ between Smoker and Non-smoker among University Athletes	30