UNIVERSITI TEKNOLOGI MARA

COMPARISON BETWEEN
CROSSFIT TRAINING AND TABATA TRAINING
EFFECT ON LUNG CAPACITY

NUR SYAIRAH BINTI KARIM

BACHELOR OF SPORT SCIENCE

2017
DECLARATION OF ORIGINAL WORK

BACHELOR OF SPORT SCIENCE AND RECREATION

UNIVERSITI TEKNOLOGI MARA

I, Nur Syairah Binti Karim (I/C 941031-06-5398)

Hereby, declare that:

This work has not previously been accepted in substance for any degree, locally or overseas and is not being concurrently for this degree or any other degrees.

This research project was the best result of my independent work and investigation, except, where otherwise states. I absolve Universiti Teknologi MARA (UiTM) and it is Faculty of Sport Science and Recreation from any blame because of my work.

All verbatim extract is being distinguished by quotation marks and sources of my information have been specially acknowledgement.

Signature : 
(Nur Syairah Binti Karim)

UiTM ID : 2014555633

Date : 31 JAN 2017
ABSTRACT

The purpose of this study is to compare the effect of lung capacity between CrossFit training and Tabata training. The lung capacity parameters that are measured are Force Vital Capacity (FVC), Force Expiratory Flow (FEF), Peak Expiratory Flow (PEF) and Force Expiratory Volume 25% - 75% (FEV 25% - 75%). 20 subject from UMP Footballer were divided by two group which is 10 subject for Crossfit training and 10 subjects for Tabata training. All subjects were testing using spirometer before and after 6-week training intervention. The result and data collected were analysed by using Statistical Package for Social Science (SPSS) version 19.0. The lung capacity testing result was analysed using Paired T test. The result shows there is no significance difference of FVC, FEF, PEF and FEV 25% - 75% between CrossFit training and Tabata training. The p-value for FVC, FEF, PEF and FEV 25% - 75% is greater than 0.05.

Keyword: Lung Capacity, Tabata Training, Crossfit Training, Spirometer
# TABLE OF CONTENT

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>i</td>
</tr>
<tr>
<td>TABLE OF CONTENT</td>
<td>ii</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLE</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURE</td>
<td>vii</td>
</tr>
<tr>
<td>LETTER OF TRANSMITTAL</td>
<td>viii</td>
</tr>
<tr>
<td>AFFIRMATION</td>
<td>ix</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>x</td>
</tr>
</tbody>
</table>

## CHAPTER

1 INTRODUCTION

1.1 Background of study 1
1.2 Statement of the problem 3
1.3 Research objective 5
1.4 Significance of the Study 5
1.5 Hypothesis 6
1.6 Operational terms 6
1.7 Limitation 8
1.8 Delimitation

2 LITERATURE REVIEW
2.1 Introduction 9
2.2 Crossfit Training 9
2.3 Tabata Training 11
2.4 Lung capacity and exercise 13
2.5 Factor influence lung function 14

3 METHODOLOGY
3.1 Introduction 16
3.2 Research Design 16
3.3 Statistical Analysis 17
3.4 Population and Sampling 17
3.5 Data Collection Procedure 18
3.6 Instrumentation
   3.6.1 Physical Activity Readiness – 20
       Questionnaire (PAR-Q)
   3.6.2 Pony FX Spirometer 20
3.7 Testing Procedure 21