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KAMPUS ARAU

**THE EFFECTS OF MYOFASCIAL RELEASE USING FOAM ROLLING VERSUS
RESISTANCE BAND ROUTINE AS WARM UP PROTOCOL ON LOWER BODY
POWER AND FLEXIBILITY AMONG MALAYSIAN RUGBY PLAYERS**

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Research Project submitted in partial fulfilment of the requirement for the degree of
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AUTHOR'S DECLARATION

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

I, hereby, acknowledgement that 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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The Effects of Myofascial Release Using Foam Rolling versus Resistance Band Routine as Warm-up Protocol on Lower Body Power and Flexibility among Malaysian Rugby Players

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Abstract

Warm-up prior to physical activities has the potential to improve performance and work as injury prevention. Myofascial release using foam rolling is warm-up approach that widely applied on site of sport settings. However, there is limited evidence on its effectiveness on lower body power and flexibility. The aim of this study was to investigate the effects of myofascial release using foam rolling versus resistance band routine as warm-up protocol on lower body power and flexibility among Malaysian rugby players. Fifteen elite Malaysian male rugby players were recruited. This study is a repeated-measures study design consists of control and two types of warm-up exposures. Participants exposed to three trials; control trial with no additional warm-up (C), myofascial release using foam rolling (MFR), and resistance band routine (RB). During each trial, participants performed two sets of ten repetitions of dynamic stretching and followed by prescribed warm-up exposure before proceed to countermovement jump (CMJ) test and Y-balance test (YBT). Participants performed all warm-up exposure with two sets of ten repetitions in three non-consecutive days of trials within three weeks. The data was analysed by using one-way ANOVA with repeated-measures. As results, CMJ peak power had improved significantly ($p=0.001$) after

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 Background of Study	1
1.2 Problem Statement	2
1.3 Research Objective	3
1.4 Research Hypothesis	3
1.5 Significance of Study	4
1.6 Definition of Terms	4

2.0 LITERATURE REVIEW

2.1 Reliability myofascial release using foam rolling	7
2.2 Reliability resistance band routine	7
2.3 Resistance band routine positive outcome	8
2.4 Reliability result of Y-balance test	8
2.5 Myofascial release using foam rolling positive result	9
2.6 Resistance band routine in relation to activity preparation	10

2.7 Myofascial release using foam rolling in relation to activity preparation	11
2.8 Relationship myofascial release using foam rolling and flexibility	11
3.0 RESEARCH METHODOLOGY	
3.1 Research Conceptual Framework	13
3.2 Research Design	14
3.3 Participants	15
3.4 Participants criteria	16
3.5 Instrumentation	17
3.6 Study procedures	19
3.7 Data Analysis	31
4.0 RESULTS	
4.1 Introduction	32
4.2 Participants characteristics	32
4.3 Demographic data of participants	33
4.4 Lower body peak power results	34
4.5 Flexibility results	35