

**THE EFFECT OF DURATION DYNAMIC STRETCHING ON  
WINGATE PERFORMANCE**

**By**

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**DECLARATION OF ORIGINAL WORK BACHELOR OF SPORT SCIENCE  
AND RECREATION UNIVERSITI TEKNOLOGI MALAYSIA**


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This work is 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 University Teknologi MARA (UiTM) and it is Faculty of Sport Science and Recreation from any blame because of my work.

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## ABSTRACT

The application of dynamic warm-up before doing an anaerobic activity (football and rugby etc.) has been recommended since many beneficial on sport field based on that type of stretching. Although benefits of a proper warm-up have long been well known but the specifics warm-up duration is lacking on its information.. The purpose of this study was to determine the Wingate performance following 5 minute and 10 minute warm-up programs. 14 active recreational rugby player included with 10 males and 4 females were involved. Each participant completed two warm-up programs which are short duration dynamic stretching (SDDS) and long duration dynamic stretching (LDDS on separate days with 24/48 hours between sessions. Peak power capacities were immediately being assessed on Wingate test using Monark bicycle ergometer. Peak power showed improvement after application of the SDDS protocol compared to LDDS protocol. The result showed a significant differences ( $p < 0.05$ ) between SDDS and LDDS group with significant ( $p=0.03$ ). Mean score  $\pm$  standard deviation of peak power for SDDS and LDDS were  $(891.51 \pm 179.20)$  and  $(829.98 \pm 144.08)$ . In conclusion, SDDS consist of 5 minute warm-up is suitable apply for power performance since it shown an improvement. Regardless, reduction in power after LDDS protocol showed a dynamic warm up should be apply in a suitable intensity or volume. **Keywords:** Short duration dynamic stretching, long duration dynamic stretching, Wingate performance, power performance, Rugby athletes.

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