

**THE EFFECT OF BALLISTIC AND DYNAMIC STRETCHING ON JUMP
PERFORMANCE AMONG HIGH SCHOOL LONG JUMP ATHLETE**

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ABSTRACT

Stretching is known as injury prevention and it can be use before the athlete start makes the physical activity. The lack of knowledge concerning to long jump athlete, especially among high school athlete has been previously emphasized elsewhere. Hence, the purpose of the study was to determine the effects of ballistic and dynamic stretching on jump performance among high school long jump athlete. Thirty male students that involve in long jump from Sekolah Menengah Kebangsaan Putera, Kelantan was volunteers to participate in this study. In this study, athletes were tested for vertical jump test and standing long jump test by using the Vertec and Standing Long Jump Test Mat. The participant need to complete three trials of vertical jump and also standing long jump test after each warm up and stretch in different day after 5 minute warm and stretching. Rest interval for each stretching is 72 hours to avoid the data interfere by fatigue. This study showed the finding have significant differences in jump score comparing to all three protocols which is involve of no stretch, dynamic stretch and ballistic stretch. The result show the dynamic stretching ($70.8 \pm 0.04\text{cm}$) have the highest mean compare to the no stretching($24.9 \pm 0.04\text{cm}$), and also ballistic stretching($26.9 \pm 0.02\text{cm}$). for vertical jump test and for the standing long jump test, the dynamic stretching ($2.91 \pm 0.07 \text{ cm}$) also has the highest means compare to the other two stretching, the lowest score was no stretch ($1.16 \pm 0.05 \text{ cm}$) and following by ballistic stretching ($1.32 \pm 0.03 \text{ cm}$). Therefore, the dynamic stretching is the most effective stretching that can be applied as part of warm up in long jump athlete performance.