

UNIVERSITI TEKNOLOGI MARA

**THE EFFECTS OF ZINGIBER OFFICINALE ON
MUSCLE PAIN, STRENGTH AND RANGE OF
MOTION DURING DELAYED ONSET MUSCLE
SORENESS**

By

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ABSTRACT

The occurrence of Delayed Onset Muscle Soreness (DOMS) after several hours to days of training may cause pain sensation thus affected daily routine. Hence, this study is conducted to examine effectiveness of Yusmira Ginger Capsule in muscle pain, strength and range of motion in promoting fast recovery during DOMS. Twenty four participants (N=24), height 169.46 ± 4.50 , weight 75.91 ± 7.75 , aged 20.46 ± 1.80 were participated and divided to three group of Ginger Intake Before Exercise (GIBE), Ginger Intake After Exercise (GIAE) and Control group. Data were taken in four different time measurements (24, 48, 72 and 96 hours). Result has indicated insignificant of all three parameters. Most of participant regardless of groups experienced peak DOMS on 48 hours after exercise. Muscles pain does not showed any significant of reduction of DOMS on GIBE (0.50 ± 0.54), GIAE (0.50 ± 0.54) and Control group (1.00 ± 0.76). Muscle strength reported GIBE (0.41 ± 0.04), GIAE (0.42 ± 0.03) and Control group (0.36 ± 0.04). Result for range of motion showed GIBE (175.00 ± 2.97), GIAE (177.12 ± 3.39) and Control group (173.87 ± 4.70). This has indicated giving ginger capsule does not help in making fast recovery of DOMS. Participant still experienced DOMS no later than 96 hours after exercise. It is concluded that ginger capsule did not show any significant change in muscle soreness but group GIAE showed a faster recovery of DOMS compared to others groups

Keywords – Ginger Intake Before Exercise (GIBE), Ginger Intake After Exercise (GIAE), Delayed Onset Muscle Soreness (DOMS), Muscle Pain (MP), Muscle Strength (MS), Range of Motion (ROM)