

## The Test Battery: Evaluate Muscular Strength and Endurance of the Abdominals and Hip-Flexor Muscles

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The purpose of this was to evaluate the performance level of the muscular strength and endurance of abdominal and hip-flexor muscles of youth people in Sri Lanka. Though fitness test batteries are available for a particular group of people relevant to their anthropometric measurements and geographic variation, those are not reflecting accurate performance evaluation for youth. The thirty-second sit-up test introduces youth people (n=405, male and n=306, female) in Sri Lanka. Assumed that Geographic variation and socio-cultural factors in Sri Lanka do not affect the performance of the Sit-Up test. The percentile method was used to distinguish the performance levels. The average number of sit-ups of males and females are 17 (SD=5.98) and 13 (SD=4.99), respectively. University students (68), who have already tested their physical fitness levels (satisfactory level or above) through the Eurofit test, were selected to observe their performance levels under the new protocol. Hence, nearly 90% of students were at the average level or above. The reason for the difference between performance levels of the same subject is the Eurofit test battery (sit-up test) designed based on European people. Therefore, the '30s sit-up test battery' under the new protocol provides reliable performance levels of youth people in Sri Lanka.

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