

## Normative Values of Trunk Flexors and Extensors Muscles Endurance of Healthy College Students

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**Communication Date:** Feb. 20, 2015

**Acceptance Date:** June 8, 2015

**DOI:** 10.18376/2015/V11I2/67707

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**Key Words:** Normative database, Trunk muscle endurance, Low back pain

*To cite this article:* Jain, Hetal; Pandey, Rachna; & Rathod, Sonal

Normative Values of Trunk Flexors and Extensors Muscles Endurance of Healthy College Students [online]. *Journal of Exercise Science and Physiotherapy*, Vol. 11, No. 2, Dec 2015: 90-97.

### Abstract

**Objective:** Objective of this study was to establish normative reference values of trunk flexors and extensors muscle endurance of healthy college students. **Method:** A cross sectional study was carried out with 500 subjects aged between 18 to 25 years. Evaluation of muscle strength and endurance was done with the use of Canadian Standardized Test of Fitness which includes four static and two dynamic muscles performance. **Result:** In this study we establish normative data for male and female both. The mean value for different tests are 60 sec (for male) and 25 sec (for female) for IUA, 21 sec (for male) and 9 sec (for female) for ILA, 36 rep (for male) and 14 rep (for female) for DUA, 29 sec (for male) and 17 sec (for female) for IUBE, 50 sec (for male) and 34 sec (for female) for ILBE, 16 rep (for male) and 9 rep (for female) for DUBE. **Conclusion:** The gender reference norms for static and dynamic endurance of trunk flexors and extensors group of muscles established in this study which could be used as outcome measure for improvement.

### Introduction

Strength, muscular endurance, and flexibility are important components of healthy back function (Hannibal et al, 2006). Trunk flexors and extensors are the postural muscles for trunk stability and they are designed to fulfill their role of

continuous activity throughout the day, but pain and inactivity alter muscles so that they fatigue in normal situations (Moffroid, 1997). A number of muscles cross the spine and contribute to lumbar mobility and stability. The muscular system is a complicated system composed of the deep