



## Effects of TRX Suspension and Dynamic Stretching on Crawl Stroke Speed in Young Swimmers

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### Abstract

**Background:** Warm-up and stretching can play a major role in exercise and training. Warm-up with TRX enhance to muscle and nervous function while dynamic stretching can effects to body structural strength. Furthermore, flexibility, body balance, stability, range of motion is important to swimmers in regards with speed. The purpose of this study was to compare the effects of TRX suspension and dynamic stretching on Crawl stroke speed in young swimmers.

**Methods:** Participant was consisted of three young male and five female swimmers (aged 12-13 years, BMI  $19.51 \pm 3.59 \text{ kg/m}^2$ ), they have usually participating in swimming (5 days/week). Both groups received 2 warm-up programs at a week interval resting. The first program, all swimmers performed a conventional warm up with TRX for 30 minutes. The second program, they had participated in a 30-minutes conventional warm up with dynamic stretching. After 10 minutes of rest they were tested on 50-meters crawl stroke speed in second.

**Results:** Swimmers who received conventional warm up with TRX has greater Crawl stroke speed than a group of conventional warm up with dynamic stretching ( $36.49 \pm 2.44$  vs  $37.19 \pm 2.94$  seconds, respectively,  $p < 0.05$ )

**Conclusions:** Conventional warm up with TRX can enhance to better Crawl stroke speed compared to conventional warm up with dynamic stretching.

**Keywords:** Warm – up, TRX Suspension, Stretching, Speed, Swimming