

## Ankle Flexibility and Kick Time in Swimmers

### **Abstract:**

**Purpose:** To determine if eight weeks of ankle exercises would improve ankle mobility in young swimmers to affect twenty-five yard kicking times.

Swimmers with more ankle mobility will have faster kick times than swimmers who have limited ankle mobility. **Methods:** This study used stratified random sampling.

Thirty competitive swimmers were randomly divided into experimental and control groups. Fifteen children were placed in the experimental group, and the other

fifteen in the control group, while participating in regular swim practices. An eight-week structured exercise program was implemented. There was a total of thirty-two

exercise sessions targeting ankle mobility, and range of motion. Ankle mobility was measured by plantar flexion (pointing toes toward the ground) with a goniometer.

Kicking speed was measured by the time to complete a twenty-five yard maximum

flutter kick. **Results:** No significant difference was found for ankle mobility and

kicking time ( $P = 0.06$ ). Average post kicking times between the experimental and

control group was twenty four to twenty nine seconds. There was a strong negative

correlation ( $r = -0.72$ ) between ankle mobility and kick times. **Conclusions:** These

results indicate that ankle mobility could affect a swimmers kicking time. Results

could help improve a swimmers kick time by implementing daily ankle stretches

into workouts.