

## **Short Term Indian Club Swinging Improves Shoulder Flexibility**

Therese Jordan, Seth Foreman, Rebecca Kudrna

DeSales University, Center Valley, PA

Indian clubs, also known as club bells, originated in India and Iran, and were a popular training tool for athletic performance and rehabilitation up through the 19<sup>th</sup> and early 20<sup>th</sup> centuries. While they had been a popular tool, there has been no modern scientific research validating their use or effectiveness.

**PURPOSE:** The purpose of this study is to evaluate the effects of short term Indian club training on acute shoulder flexibility. **METHODS:** Twenty-three active, healthy, college volunteers were divided into an experimental (4 Men, 8 Female) and control (5 Men, 6 Female) groups ranging between 18 and 24 years. Both groups were tested for flexibility at the beginning and the end of the study. The experimental group participated in two thirty-five minute clubbell swinging sessions, whereas the control group did not participate in any training. Shoulder flexibility was measured using the functional double reach test. Right and left shoulder flexibility was combined and compared pre to post using a repeated measures ANOVA test. **RESULTS:** There was a significant main effect for time ( $F= 19.08, p<0.001$ ). There was also a significant interaction (time \* group) whereby the club-swinging group saw a 35.1% increase in flexibility and the control group saw a 5.6% decrease, which was not a significant change.

**CONCLUSION:** Indian club swinging is an effective method for increasing acute shoulder flexibility. Significant changes were observed in just two clubbell training sessions. Club bell swinging could provide a cost efficient method for increasing shoulder flexibility. This study appears to validate the historical accounts of clubbell swinging effectiveness, however the long-term implications of clubbell training have not yet been determined. Also, future research is necessary to determine if clubbell swinging could be used as an equivocal alternative to traditional static stretching routines.