

The Acute Effects of “SwingOil™” Supplement on Flexibility and Clubhead Velocity During the Golf Swing.

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Nutrition and Fitness

Purpose

The “SwingOil™” supplement is one of the first nutritional supplements designed for and marketed specifically to golfers, and the manufacturers claim that it can improve flexibility, strength and focus both acutely and long-term. The aim of this study was to assess the acute effects of the “SwingOil™” supplement on measures of flexibility and clubhead velocity during the golf swing.

Methods

Using a crossover, double-blind experimental design, eleven golfers (handicap 5-18) performed five drives (after a standardised warm-up) in randomised supplementation (“SwingOil™”) and control (flavoured placebo) conditions. Participants and the club were marked on 19 key locations and the drives were recorded using a nine-camera Qualysis Pro-Reflex 500 motion analysis system. Visual3D software used pelvic and abdomen/thorax segments and the clubhead marker to calculate maximum ‘X-Factor’ (XFmax), ‘X-Factor’ at Top of Backswing (XFtbs), ‘X-Factor Stretch’ (XFstretch), maximum clubhead velocity (CHVmax) and clubhead velocity at impact (CHVimp). Statistical analysis was carried out with a 2 Way ANOVA (supplement x trial) with two within factors with α -level set at 0.05. Pearson Product Moment correlations were also carried between flexibility measures (XFmax, XFtbs, XFstretch) and clubhead velocities (CHVmax, CHVimp).

Results

	Placebo	SwingOil™
XFmax (°)	-32.27 ± 7.20	-31.41 ± 8.47
XFtbs (°)	-29.47 ± 7.43	-29.38 ± 8.68
XFstretch (°)	1.97 ± 2.17	2.03 ± 2.31
CHVmax (m.s ⁻¹)	42.01 ± 2.64	41.49 ± 2.88
CHVimp (m.s ⁻¹)	41.50 ± 2.82	41.03 ± 2.91

Table 1. Mean values (11 golfers, 5 trials) for dependent variables

There were no significant differences found between the two conditions for the XFmax (p=0.47), XFtbs (p=0.52), XFstretch (p=0.59), CHVmax (p=0.44) or CHVimp (p=0.47). There were also no trial or interaction significant differences. Effect sizes for the supplement were medium for XFmax, CHVmax and CHVimp but small for the other two variables. There were significant relationships only between XFstretch and CHVmax (r=0.48; p=0.025) and between XFstretch and CHVimp (r=

0.50; p=0.018).

Discussion

There were no significant differences in any factor in the analysis (supplement, trial, supplement x trial) showing that there is no acute effect of the supplement on flexibility or performance. In fact, the XFmax, XFtbs, CHVmax and CHVimp were very slightly higher (0.3-2.6%) in the placebo condition with only the XFstretch being 3.0% higher with SwingOil™. There were also no trial significant differences, showing that there was no effect of fatigue or warming up over the 5 trials used in each condition. Golfers were asked which drink they believed they had consumed after each condition, and 62% guessed correctly which suggests that ‘blinding’ had been successful.

Practical Application/Clinical Relevance

Therefore, it is concluded that the “SwingOil™” supplement does not improve golfer’s flexibility during the golf swing when ingested shortly before performance. Further research is required to draw conclusions on the efficacy of the “SwingOil™” supplement in relation to its claimed long-term benefits.

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