

## Speed Dial Coach's 2 Week Fat Loss Kettlebell Study Results

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### Introduction & Brief Summary of Results:

For a period of approximately 2 weeks, from 12/11/06 to 12/22/06, 12 participants took part in a fat loss study, which examined the effects of a Kettlebell Training Protocol (KTP) on overall body composition changes. Most notably, body fat mass reduction was the main focus of the overall effect on body composition. Out of the 12 participants, 9 were able to fully complete the post-testing portion of the KTP study\*. The following data reflects the pre and post test results of the 9 who completed the KTP study, and the 4 who were part of the Control Group.

Male/Female Makeup:	8F, 1M	3F, 1M
	<u>KTP Group</u>	<u>Control Group</u>
Mean Age:	42.0 years old	53.5 years old
Mean Height:	65.1 inches	66.8 inches
Mean Pre-Test Bodyweight:	173.7 Pounds	175.5 Pounds
Mean Post-Test Bodyweight:	171.2 Pounds	174.5 Pounds
Overall Bodyweight Change:	-2.5 Pounds	-1 Pound
Mean Pre-Test Body Fat %:	34.6% Body Fat	32.7% Body Fat
Mean Post-Test Body Fat %:	33.9% Body Fat	32.4% Body Fat
Overall Body Fat % Reduction:	0.7% Body Fat	0.3% Body Fat
Mean Pre-Test Body Fat Weight:	60.8 Pounds	59.8 Pounds
Mean Post Test Body Fat Weight:	58.7 Pounds	58.6 Pounds
Mean Body Fat Weight Change	-2.1 Pounds	-1.1 Pounds
Mean Workouts/Week	3.1 Workouts/Week	3 Workouts/Week

## **Procedures & Protocols:**

All Pre-Testing was conducted between 12/4/06 and 12/9/06, before the official start date of the protocol's start date of 12/11/06. Post-Testing was conducted on 12/21 and 12/22, on the day that each participant was coming for their last visit. Since participant testing could have been diverted due to commitments of many for 12/25/06, it was decided to do the post-testing before this date occurred.

The Kettlebell Training Protocol (KTP) was comprised of 6 basic fundamental movement patterns of squatting & lunging with the lower body, pushing & pulling with the upper body, plus bending & twisting with the midsection region (hips, abdominals, lower back). 2 exercises were paired up into 7 minute circuits, with participants doing submaximal repetitions throughout the circuit. Submaximal repetitions, & selection of exercises for each movement pattern, were based on a pre-test screening to determine a 10 Repetition Maximum resistance for each selected exercise. Kettlebells and bodyweight exercises were used in circumstances that reflected a need for them, as determined by the training professional who conducted the study. Three, 7 minute circuits were completed in approximately 21 minutes of exercise for each KTP workout. Those who had workout frequencies of more than 3 per week, such as 4 to 5 times a week, they completed a "Kettlebell Cardio" protocol, using the high intensity Kettlebell Swing exercise as the main focus of the workout. A Kettlebell Swing exercise is swinging a Kettlebell between the legs in a squatting position, then extending & rising up quickly, forcing the Kettlebell to rise up to chest level, then letting the weight drop back down and swing between the legs once again. Repetitions of the Kettlebell Swing were done for approximately 15 to 20 seconds, at the top of each minute, for a 20 minute workout. It should be noted that 2 of the KTP Group participants had the Kettlebell Swing workout as part of their overall workout structure. 2 of 3 who could not post-test also did the Kettlebell Swing exercise in their protocol.

Control Group participants were asked to keep track of any strength & cardiovascular workouts, plus the durations of workouts throughout this period. Participants also needed to show up for post-testing on 12/21 or 12/22.

## **Results:**

The KTP participants showed 2.1 pounds of fat loss, versus 1.1 pounds of fat loss with the Control group. Overall Mean Bodyweight changes in the KTP Group showed a 2.5 pound average of overall weight lost, meaning that .4 pounds of Lean Mass (muscle tissue) was also lost. This Lean Mass loss could be reflected in water weight changes that occur with exercise regimens, especially in females, which made up the high majority of those studied in both groups.

A further review of Workout Frequency Per Week versus Overall Fat Loss showed varied results. Subject 1, a female, worked out 5 times per week, but showed a .5 pound loss in body fat, while Subject 5, a female, worked out 2.5 times per week, and lost 3.5 pounds of body fat. A higher correlation of body fat reduction was shown when the subjects were closer to the average workout frequency. Those that had 2.5 to 3 times per week Workout Frequency were closer to the Overall Fat Loss average of 2.1 pounds, in the KTP Group.

### **Conclusions:**

A conclusion of this study, based on available data, suggests that a Kettlebell Training Protocol of 3 times per week, will show a greater fat loss reduction in a 2 week period, versus traditional fitness training methods.

Circumstances to note in this study was that overall dietary intake was not controlled by the subjects involved, as to reflect the real-world circumstances that most people face when starting an exercise regimen. A reason for not controlling this aspect of the study was that the study was conducted 2 weeks prior to the Christmas holiday, which is traditionally full of outside commitments for holiday celebrations & gatherings.

The study also wanted to discover how self-chosen workout frequencies on the KTP, with a trainer present, affected adherence to the protocol. Many times, failures occur with self-administered protocols of exercise. By scheduling a self-chosen frequency with a fitness professional, the participant becomes more accountable for their attendance and adherence with the protocol. It should be noted that the Control Group had selected an average of 3 workouts a week and still showed a body fat reduction in the same time frame. This suggests that a minimum workout frequency of 3 times a week could support fat loss goals, or at least assist with body weight maintenance, during a traditionally active time of the year for holiday commitments & celebrations. Since many studies have shown that people can gain 5 to 7 pounds of weight within the traditional holiday season, working out 3 times a week can be a successful strategy for weight maintenance & slight body fat reduction during this time. Further reviews may be necessary to study the effects of a Kettlebell Training Protocol with dietary restrictions, to investigate it's effects on body fat losses.

*\*It should be noted that the 3 study participants who could not participate in post-testing could not attend due to transportation circumstances. 2 could not attend due to an automobile failure, and one had to leave abruptly for a family emergency on 12/22/06.*