

The Science of the No Excuses Workout (NEWO) System Summary Report

Please note that the average NEWO System member is a 46 year old who is trying to lose 42 pounds and that each member's personalized fitness and weight loss plan is set-up based on their health status and starting fitness level. As you will read below, the American College of Sports Medicine (the governing body of fitness in the US) is now recommending Intervals as part of people's initial conditioning phase (for beginners).

The NEWO System = Interval Workouts = Higher Average Intensity = More Benefit = Greater Results

Interval Workouts = The NEWO System exercise program is based on highly-effective Interval Workouts. Intervals are simply the alternating back and forth between short bursts of energy (work intervals) with periodic rests (recovery intervals) and they can be done walking in place in an office or living room or using any type of activity that gets your heart rate up.

Higher Average Intensity = Recovery periods are important because they allow individuals to accomplish a higher intensity of work overall.

More Benefit = This higher intensity is essential to maximizing fitness and weight loss during exercise because research shows that the already important benefits of an active lifestyle increase with higher intensity physical activity when compared to moderate and lower intensity activity.

Greater Results = The benefits of the NEWO System include weight management, a stronger heart and lungs, more endurance, and a decreased risk for major health problems including heart disease, diabetes and hypertension.

The Research supporting the Power of Interval Workouts:

- ACSM Guidelines: Interval Recommendation
- Interval Workouts: Lose 3 Times the Fat
- Interval Workouts: Burn up to 30% More Calories
- Interval Workouts: Results in Three 30-Minute Workouts per Week
- Interval Workouts: Strengthen Heart and Lungs
- Interval Workouts: Build Endurance
- Interval Workouts: Increase "After-Burn"

* **NEWO System Note:** The amount of weight that people can expect to lose, the number of calories burned during exercise and the level of exercise recommended with the No Excuses Workout System are all dependent on a person's initial health status and fitness level. Individuals with low initial levels of fitness and a high percentage of body fat can expect to experience a greater improvement over time than leaner individuals with higher initial levels of fitness.

The Research supporting the Power of Interval Workouts (more details):

#1: ACSM Guidelines: Interval Recommendation

For the first time, the American College of Sports Medicine (ACSM), the most widely recognized authority on fitness guidelines, specifies "intervals" as an acceptable method of working toward improving cardiovascular fitness (for both beginners and moderate level individuals) in their textbook, *ACSM's Guidelines for Exercise and Prescription*

(ACSM Guidelines), 7th Edition (2006 – released May, 2005).

#2: Interval Workouts: Lose 3 Times the Fat

One important benefit of positive lifestyle changes from a program like the NEWO System (which promotes increased levels of physical activity and healthy eating habits) is a reduction in body fat. This is important because of the well-established effect of reduced body weight and fat on risk for a host of health problems including heart disease, diabetes, and hypertension. Studies show that high-intensity physical activity leads to greater loss of subcutaneous fat than moderate- or lower-intensity activity. This is important for *NEWO System* users because the *NEWO System* is based on higher-intensity work intervals alternating with short periods of recovery. The following are excerpts from a range of studies on this subject (please refer to the full Science of the No Excuses Workout System document for full study references):

"...the high-intensity (HI) group lost 71% more body fat (4.91% vs. 1.4%) than the medium-intensity (MI) group...";

"...those who reported vigorous physical activity on a regular basis had lower percent fat and skin-fold thickness than those not performing vigorous activities...";

"...there was a significant decrease in percent fat for HI group compared to LI group (average of 5% fat compared to 1% fat)...";

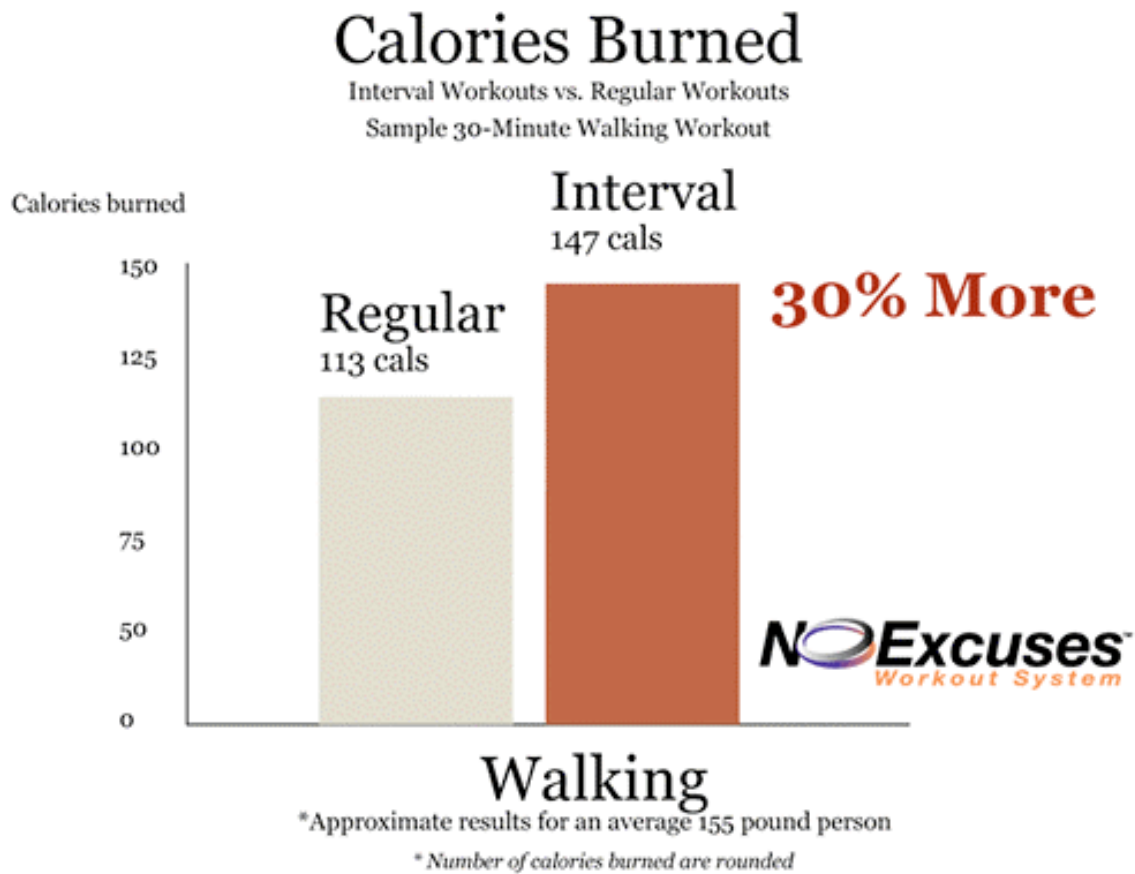
“...the high-intensity interval training group lost over three times as much subcutaneous fat as the endurance training group...”;

“...those who self-reported vigorous physical activity on a regular basis had lower percent fat and waist-to-hip ratios than those not performing vigorous activities...”

#3: Interval Workouts: Burn up to 30% More Calories

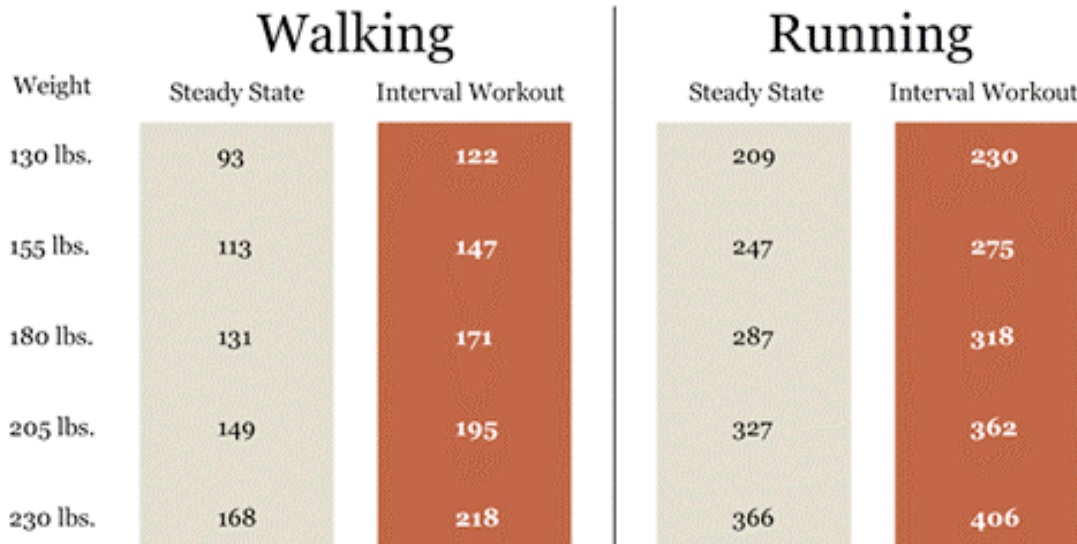
Studies show that higher-intensity physical activity, like workouts that incorporate intervals, leads to a greater calorie deficit than moderate or lower intensity activity.

- The calorie comparison values used for the chart and table below are taken from Ainsworth, B. et. al. (1993). Compendium of physical activities. Classification of energy costs of human physical activities. *Medicine & Science in Sports & Exercise*. 25: 71-80.*



Comparison Results

Weight vs. Actual Calories Burned - 30 minutes



* Number of calories burned are rounded.

NOExcuses™
Workout System

#4: Interval Workouts: Results in Three 30-Minute Workouts per Week

Participating in the *NEWO System* program will not only enhance fitness, but it will also significantly improve overall health in as little as three 30-minute workouts per week. ACSM Guidelines define the frequency, duration, and intensity of exercise necessary to meet fitness goals. The typical *NEWO System* user's exercise routine falls within these guidelines.

For example, a typical *NEWO System* workout week might include a program of three 30-minute training sessions of varying intensities (Intervals) ranging from 60 to 90% of maximal heart rate (participant programs vary). According to the ACSM, participating in this level of exercise program will lead to a variety of improvements in cardiovascular fitness such as decreased resting heart rate and blood pressure, increased stroke volume and increased aerobic capacity (VO₂max).

#5 & #6: Interval Workouts: Strengthen Heart and Lungs and Build Endurance

Studies show that an active lifestyle is not only beneficial, but that benefits increase with higher intensity physical activity. Through the *NEWO System's* Interval Workouts, participants are able to increase intensity and overall volume

of work because the hard work is alternated with periods of recovery (lower intensity). This translates into a host of overall health and fitness benefits including a stronger heart and lungs and improved endurance.

#7: Interval Workouts: Increase “After-Burn”

Research shows that high-intensity exercise elevates “after-burn” – or post-workout metabolism – at a higher rate than low and moderate intensity exercise. This additional calorie burning, although minor in comparison to the calories burned during an actual workout, could be a contributing factor to weight loss over a period of time.

This report is a summary of the information presented in the original 16-page “The Science of the No Excuses Workout System” report which cites specific and qualified research pertaining to the No Excuses Workout System and the above claims. A copy of that report is available upon request.

Validation of Results: Dr. Joseph Quatrochi

The results stated in the Science of the No Excuses Workout System report are verified by Dr. Joseph Quatrochi. Joseph Quatrochi, Ph.D. is Professor of Human Performance and Sport (HPS) at Metropolitan State College of Denver, where he coordinates the Adult Fitness and Exercise Science curriculum. He holds a B.S. in Physical Education, an M.S. in Exercise Physiology and a Ph.D. in Health Promotion. Dr. Quatrochi’s primary research interest lies in the area of physical activity for the promotion of health and the prevention of disease. A paid advisor for Breakthrough Health & Wellness Solutions, Dr. Quatrochi is available to discuss this report, to offer his insights on the No Excuses Workout System and to review the benefits of Interval Training techniques.

To schedule an appointment with Dr. Quatrochi, please contact us.

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