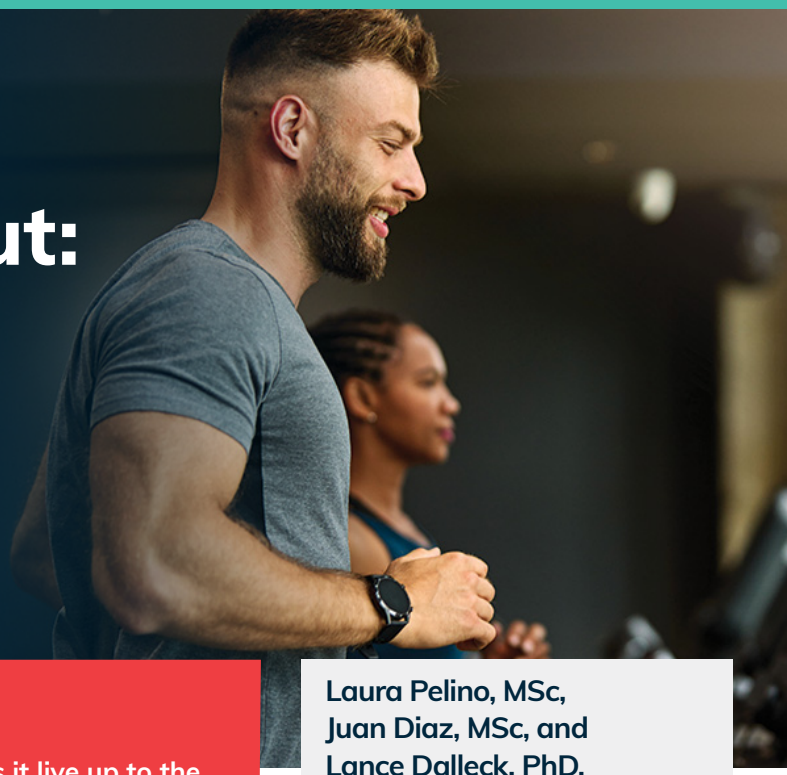

ACE-SUPPORTED RESEARCH:

The 12-3-30 Workout: Putting a Viral Workout to the Test

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What You Need to Know:

The 12-3-30 workout has taken social media by storm, but does it live up to the hype? This ACE-supported research study put this viral treadmill routine to the test, evaluating its effectiveness safety, and overall enjoyment. Discover what the science says and whether this workout is a good fit for your clients.

The 12-3-30 workout is a great example of how keeping things simple can be motivating for people who may be overwhelmed by the number of workout options available at the gym, in magazines and especially on social media, where seemingly everyone has a workout that will free those hips, cut that belly fat and help you develop perfectly sculpted glutes. Social media can be a fun and engaging way to learn new exercises and workout routines, but how can you tell hype from reality?

Knowing what's real and what isn't, and which social media "experts" have actual expertise, can be difficult, so ACE decided to investigate the 12-3-30 workout to find out if it stands up to scientific scrutiny.

ACE enlisted the help of Lance Dalleck, PhD, and his team of researchers in the High Altitude Exercise Physiology Program at Western Colorado University to evaluate the physiological responses to the 12-3-30 workout. Dr. Dalleck explains that he has a few questions that he wants answered when looking at a workout: What are the typical physiological responses? Is it safe and effective? And, do people enjoy doing it?

If the answer to that third question is "no," explains Dr. Dalleck, then safety and effectiveness won't mean much in the long run.

Before getting into the research, let's explain the 12-3-30 workout. It involves walking at a 12% incline at 3 miles per hour for 30 minutes. That's it. Nothing fancy. Which begs the question, how did this workout catch fire on social media like it has over the past several years?

The 12-3-30 workout first gained attention across social media platforms when influencer Lauren Giraldo shared a video of the fitness routine on YouTube in 2019. Since then, variations of the 12-3-30 workout have amassed billions of views on TikTok. People seem to love the simplicity of the workout and the fact that it requires only a treadmill to complete.

But, does it work? Does it elicit enough of a physiological response to improve a person's health and fitness? And, importantly, do people enjoy doing it?

Let's find out.

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The Study

The researchers recruited 17 healthy men and women who were, on average, 28 years old. All the participants were fit enough to complete a moderate bout of physical activity but not physically active, which is defined as participating in at least 30 minutes of activity five days a week for at least the past three months. In addition, none of the participants were at high risk for heart disease, pregnant or planning on being pregnant, or had musculoskeletal or orthopedic conditions that limited their ability to exercise.

The study began with researchers gathering anthropometric data and participants completing a maximal oxygen uptake (VO_2max) test (Table 1).

Then, after a practice session during which they familiarized themselves with the treadmill and the protocol of the 12-3-30 workout, the participants completed the workout a few days later while hooked up to a metabolic cart for data collection. In addition, a feeling scale and an exercise enjoyment questionnaire were completed following the workout.

Table 1. Descriptive Characteristics of the Participants

	Women (N=10)	Men (N=10)	Combined (N=10)
Age (years)	25.4 ± 5.7	32.1 ± 12.7	28.2 ± 9.5
Height (cm)	167.6 ± 7.6	179.4 ± 7.1	172.5 ± 9.3
Weight (kg)	63.1 ± 9.2	72.4 ± 8.3	67.0 ± 9.8
Resting Heart Rate (bpm)	69.3 ± 3.7	72.3 ± 7.4	70.5 ± 5.5
Maximal Heart Rate (bpm)	188.2 ± 7.4	178.4 ± 17.5	184.2 ± 13.0
Maximal Oxygen Uptake (mL/kg/min)	44.9 ± 4.4	45.5 ± 6.7	45.1 ± 5.3
Resting Oxygen Uptake (mL/kg/min)	5.5 ± 1.5	4.7 ± 0.7	5.2 ± 1.3

Note: Values are mean ± standard deviation (SD).

Table 2. Acute Cardiovascular and Metabolic Responses

Parameter	Women (N=10)	Men (N=7)	Combined (N=17)
HR (beats/min)	130.4 ± 14.7	115.3 ± 19.3	124.2 ± 17.9
Range	108–151	83–140	83–151
%HRR	51.2 ± 11.5	42.0 ± 17.9	47.4 ± 14.7
Range	39.2–67.8	16.1–70.6	16.1–70.6
%VO_2R	45.9 ± 8.0	41.1 ± 10.7	44.0 ± 9.2
Range	39.6–63.6	21.8–53.9	21.8–63.6
METs	5.9 ± 1.4	5.1 ± 1.3	5.5 ± 1.4
Range	3.7–8.1	2.7–6.8	2.7–8.1
kcal/minute	7.2 ± 1.6	7.5 ± 1.9	7.4 ± 1.7
Range	5.4–10.7	5.1–10.4	5.1–10.7
kcal/workout	217.0 ± 47.2	226.4 ± 56.4	220.8 ± 49.7
Range	161–321	154–312	154–321

Note: Values are mean ± standard deviation (SD). HR = Heart rate; %HRR = Percentage of heart-rate reserve; %VO_2R = Percentage of oxygen uptake reserve; kcal = Kilocalories; METs = Metabolic equivalents

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The Results

Workout Intensity

The cardiovascular and metabolic responses to the 12-3-30 workout are presented in Table 2. The participants averaged a heart rate of 124.2 ± 17.9 beats per minute, which represented 47.4 ± 14.7% of their heart-rate reserve and 44.0 ± 9.2% of their oxygen uptake reserve.

Exercise intensity is arguably the most critical component of exercise programming. Failure to meet minimal threshold values may result in lack of a training effect, while too high of an intensity could lead to overtraining and negatively impact adherence to an exercise program. Results from this study indicate the 12-3-30 workout can be classified as "moderate." Figure 1 illustrates the intensity of the 12-3-30 workout in terms of heart-rate reserve.

Figure 1

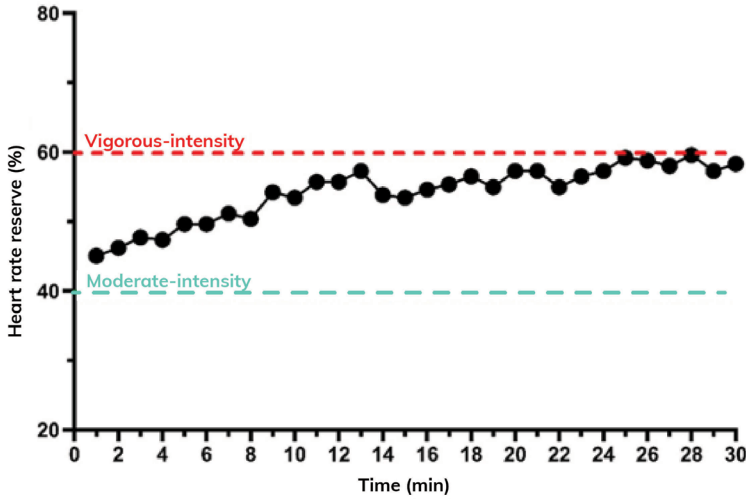

Figure 1. Heart-rate reserve response throughout the 12-3-30 workout for a representative participant. The green dashed line (-----) denotes the threshold for moderate-intensity exercise and the red dashed line (------) denotes the threshold for vigorous-intensity exercise.

Energy Expenditure

The participants burned an average of 220.8 ± 49.7 calories during the half-hour workout (see Table 2). Research has demonstrated that there is a dose-response relationship between exercise and multiple health outcomes, including cardiorespiratory fitness, risk of coronary artery disease, risk of all-cause mortality, obesity, dyslipidemia, type 2 diabetes and colon cancer. For the prevention of chronic diseases, a target energy expenditure of 150 to 400 kilocalories per day (kcal/day) has been recommended. Performing the 12-3-30 workout met this goal.

Exercise Enjoyment

Remember, Dr. Dalleck also wanted to find out if the participants enjoyed the workout, as having fun often equates to long-term adherence to an exercise program. On the other hand, if a person dislikes a workout or finds it to be a grind, motivation is likely to wane. The feeling scale measures a person's feelings about an activity on a scale of -5 to +5, with 0 being neutral. The scores from this study ranged from +2 to +4, meaning that the participants felt "good" following completion of the 12-3-30 workout (Figure 2).

The researchers also used an assessment called the exercise enjoyment questionnaire, the results of which are presented in Table 3.

Figure 2. Feeling scale results

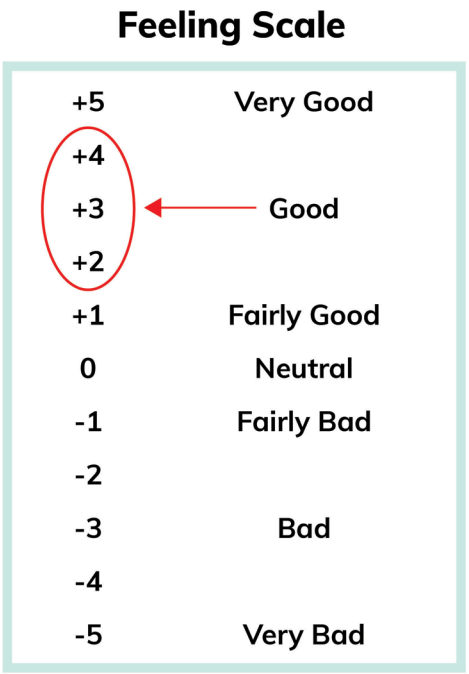

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Table 3. Exercise Enjoyment Responses to the 12-3-30 Workout

	Items	Disagree a Lot	Disagree	I am not sure	Agree	Agree a Lot
1	I enjoy it			50%	37.5%	12.5%
2	I feel bored		37.5%	25%	37.5%	
3	I dislike it	25%	75%			
4	I find it pleasurable		12.5%	37.5%	37.5%	12.5%
5	It is no fun at all	37.5%	50%	12.5%		
6	It gives me energy		25%	37.5%	37.5%	
7	It makes me depressed	87.5%	12.5%			
8	It is very pleasant			37.5%	50%	12.5%
9	My body feels good				75%	25%
10	I get something out of it			12.5%	62.5%	25%
11	It is very exciting	12.5%	37.5%	25%	12.5%	12.5%
12	It frustrates me	25%	62.5%		12.5%	
13	It is not at all interesting	12.5%	50%	25%	12.5%	
14	It gives me a strong feeling of success		12.5%	50%	37.5%	
15	It feels good			12.5%	62.5%	25%
16	I feel as though I would rather be doing something else	12.5%	12.5%	25%	50%	

The Bottom Line

To summarize the findings of this study, the 12-3-30 workout elicits cardiovascular and metabolic responses that fulfill exercise intensity guidelines for improving and maintaining cardiorespiratory fitness, achieving weight loss/maintenance, and deriving positive and substantial health benefits. As the researchers explain, "Collectively, these findings support the 12-3-30 workout as an ideal form of cardiorespiratory exercise for young to middle-aged adults."

This age range—remember, the participants in this study were an average of 28 years old—is important, as some clients who are a bit older and/or have a lower level of fitness may have to work up to the duration, speed and/or incline used in this study. As you can see in Figure 1, the intensity trended up to that vigorous-intensity threshold late in the workout, and that's for this young, fit population of participants. If someone is less fit, the workout may be too vigorous for them to perform safely.

However, the upside of this is that many less-fit clients may already be walking as part of their physical-activity routines, and the 12-3-30 workout shows that you don't have to work out for a long time or perform some complex form of exercise to reap meaningful benefits. So, the evidence base that this study provides can be used to inspire clients to progress toward eventually having the fitness level to regularly perform this workout.

That's where your role as a health and exercise professional comes into play. Yes, a client may have seen the 12-3-30 workout on their social media feed, but they will need your guidance and expertise to develop the behavior-change skills to be consistent and your exercise programming skills to safely progress their workouts.

As Dr. Dalleck points out, the popularity that this type of workout can gain across social media platforms can be a great thing if it gets people moving who otherwise might not be doing so. But, the health and fitness industry, and you as an individual professional, have an essential role to play in educating people on what's real and what's not, what works and what doesn't, and then developing programs that help them achieve their goals.

The final word is that in terms of the question of hype vs. reality, the effectiveness and safety of the 12-3-30 workout are a reality, which is great news for the countless folks who learned about this workout on social media and incorporated it into their exercise routines. "If done repeatedly," Dr. Dalleck explains, "this workout will improve and maintain cardiorespiratory fitness, which we know is so important to overall health and longevity and the prevention of many chronic diseases. And, the energy expenditure is pretty meaningful."

In other words, it's a simple workout that really works.

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