

Ever Heard of Rucking? You Might Want to Try It

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STORY AT-A-GLANCE

- › The term rucking comes from rucksack marches, or rucks, which are strenuous exercises commonly used during military bootcamp training
- › Put simply, rucking involves walking while wearing a weighted pack or vest
- › You burn more calories — about 30% to 45% more — walking with a weighted pack than you would without one
- › In one study of walking while carrying a load, the weighted walking led to significant improvements in psychophysical responses, including increases in squat jump maximal force, pushups, situps and estimated maximal oxygen uptake, after 10 weeks
- › Weight walking may also prolong independence and prevent age-related health conditions such as sarcopenia

Walking is an excellent form of physical activity for which your body was designed. But depending on your fitness level, you may find that you're looking for more of a challenge. Rucking is one way to take walking up a notch. It involves walking while wearing a weighted pack or vest.

The extra effort required to carry the weight will have your heart pounding much faster than an ordinary walk and can lead to significant gains in physical performance and health.

What Is Rucking?

The term rucking comes from rucksack marches, or rucks, which are strenuous exercises commonly used during military bootcamp training. In order to earn an Expert Infantryman Badge, for instance, U.S. Army recruits must complete a 12-mile ruck carrying 35 pounds of gear or more, in three hours or less.¹

In the military, these intense training exercises are sometimes associated with soldier fatigue and traumatic and overuse injuries,² including rucksack palsy.³ This includes symptoms of weakness and pain in the arms or shoulders, believed to be the result of damage to the brachial plexus — a network of nerves in the shoulder — caused by wearing a heavy rucksack.⁴

However, it's possible to gain the fitness benefits of rucking without the risks by starting gradually and carrying a weight that's the right size for your fitness goals. Not only is it low impact, but you can do it virtually anywhere. All you need is a place to walk and a backpack.

"We like to say that rucking is active resistance training. If you're carrying weight, you're rucking. Hiking is rucking in the mountains," Emily McCarthy, a former CIA case officer who cofounded GoRuck, a rucking gear company, told Women's Health.⁵

Are Humans Made to Ruck?

In 2004, a study in the journal *Nature* suggested that humans are not only remarkably good at endurance running but the activity may be intertwined with the evolution of the human body form.⁶ But Michael Easter, professor at the University of Nevada, Las Vegas, argues that we're not born to run, we're born to carry.

"As we evolved, running was relatively rare. It was reserved mostly for hunts. Modern day tribes like the Tarahumara, for example, never run for the fun of it. Running is reserved for rare hunts and religious ceremonies ... Carrying, on the other hand, is something us humans did all the time as we evolved. So all the evidence suggests that we were more so 'born to carry,'" he writes.⁷

Humans carried loads of 10 to 20 pounds regularly as hunter-gatherers. After hunting, humans would also carry larger loads of 80 pounds or more. The agricultural revolution changed humans' need to carry, and our physical fitness may still be suffering because of it. According to Easter:⁸

"New technology killed our need to run or carry. We went from mules and oxen carrying our stuff to, now, shopping carts, wheeled suitcases, and Amazon Prime dropping anything and everything off at our doors. But unlike running, most of us never reengineered carrying back into our days – except for ruckers."

After spending time in the Arctic on a backcountry hunt, including carrying 100 pounds of caribou over a great distance, Easter says he experienced the benefits of rucking firsthand, ending up in the "best shape of my life, despite not running or touching a single dumbbell or barbell for more than a month." The activity offers both cardio and strength-training benefits and may help you lose weight, build muscle or both. He says:⁹

"It corrects for body type. If you're too big, it'll lean you out. Too skinny? It'll add muscle to your frame. This, he explained, is why carrying is the foundation of military fitness training. It builds humans who one hour can hike 75 pounds of gear up a mountain and the next powerfully breach an enemy cell."

And this makes sense from an evolutionary perspective ... scientists at Harvard told me that early humans weren't strong like today's gym rats – back then, having extra weight, even in the form of muscle, was a liability. We needed enough strength for day-to-day tasks and were 'extreme' in our ability to hoof heavy items from point A to B, according to a study in PLOS One."

Health Benefits of Rucking

Rucking increases your heart rate due to the increased demand on your body. You'll also burn more calories – about 30% to 45% more – walking with a weighted pack than you

would without one.¹⁰ Along with working all the typical muscles you use while walking, rucking engages your legs, back, shoulders and core muscles throughout the activity.¹¹

In one study of walking while carrying a load, the weighted walking led to significant improvements in psychophysical responses, including increases in squat jump maximal force, pushups, situps and estimated maximal oxygen uptake, after 10 weeks.¹²

In another example, 11 women between the ages of 65 and 74 took part in an exercise program while wearing a weight vest. Lower limb muscle power improved by 10% to 11%, while stair climb time improved by 9%. Stair climbing power also improved by 10%.

"The magnitude of observed training improvements suggest that weighted step training has the potential to prolong independence and prevent age-related health conditions such as sarcopenia," the team explained in the *Journal of Clinical Medicine*.¹³

An added benefit is that rucking is typically done outdoors, adding in the benefits of nature and green space to your workout while providing opportunities for socialization.

How to Get Started Rucking

You can give rucking a try simply by loading a few books into a backpack, putting it on and going for a walk. Start gradually, even beginning with an empty backpack and working your way up to 10 or 20 pounds of weight before increasing the load further.

You can also start out with a weight vest instead of a backpack, which helps distribute the weight more evenly and reduces strain on your back. Then, work your way up to a specially designed rucksack, with wide, padded shoulder straps and a waist strap to help keep weight distribution even. Add only 5 or 10 pounds of weight at a time, eventually working up to carrying one-third of your body weight.¹⁴

You should also start out at a slow pace and limit the distance, gradually increasing your pace and distance traveled. "If you are moving slower than 20 minutes a mile, you should lower your ruck weight," fitness coach Katie Knight told *Women's Health*.¹⁵

Further, "Heavy items should be centered in the middle of your back near the shoulder blades, not at the bottom of the pack near your lower back. Sharp items can be uncomfortable, too," CNN reports,¹⁶ so you'll need to be careful with what types of items you're using to add weight. A sandbag, which can mold to the shape of your back, is one option.

Backpacks designed for rucking will also have pockets made to carry weighted plates or sandbags in the appropriate spots. Many also have handles, so you can perform other exercises while holding the bag in various positions.¹⁷ If you have shoulder problems, rucking may not be the best exercise for you. But generally, rucking a few times a week is a safe, inexpensive way to dramatically improve your fitness level and health.

According to GoRuck:¹⁸

"15 minutes/mile is a good goal in terms of your pace. If you're moving slower than 20 minutes/mile, consider reducing the weight. Start with 1-2 rucks per week to get the hang of it. If you're brand new, you'll probably have some muscle soreness. That's a good thing!"

... The next step, is to use your ruck for ruck workouts. A rucking workout brings together the cardio benefits from weighted walking with the muscle building benefits of ruck PT (Physical Training). The backpack can be a complete gym on your back, a true functional fitness workout."

Nordic Walking Is Also Beneficial

Variety is key when it comes to physical activity. In addition to rucking, Nordic walking, sometimes referred to as Nordic pole walking, is another way to take your walking workout to another level. It involves walking with fixed-length ski poles using a movement similar to cross country skiing, but without the snow.

Nordic walking originated in Finland, where it's commonly used by cross country skiers for training during the off-season.¹⁹ While typical walking or running activates about 40% of your muscles, Nordic walking uses 90% of your muscles, providing a lower and upper

body workout in one. It also requires about 18% to 25% more oxygen consumption compared to walking without poles at the same speed.²⁰

Nordic walking may be an ideal form of exercise for people with coronary heart disease, as it leads to greater increases in functional capacity – or the ability to carry out activities related to daily living – compared to other forms of exercise, including high-intensity interval training (HIIT) and moderate-to-vigorous intensity continuous training (MICT).²¹

And, like rucking, Nordic walking is low impact, making it suitable for people of all fitness levels. For instance, in a systematic review, Nordic walking programs were found to be an effective modality for weight loss in overweight and obese patients, with additional benefits to risk factors for cardiovascular diseases.²² The use of poles also makes Nordic walking appealing for those with mobility impairments, including Parkinson's disease.

Try Backward Walking to Give Your Brain a Boost

Once you've mastered rucking and Nordic walking, consider switching up your routine by walking backward. In a study published in the journal *Cognition*, researchers from the University of Roehampton (UR) in London found doing so can boost your memory,²³ while research published in the journal *Psychological Science* asserts walking backward benefits your brain by sharpening your thinking skills and enhancing cognitive control.²⁴

It's also a simple way to work a new variety of muscles. Performing the same type of exercise over a long period of time is likely to cause your fitness gains to level off. Walking backward gives you a chance to work out the muscles in your legs, such as your quadriceps and calves, that take a backseat to your hamstrings and glutes during forward walking.

As such, one study suggests walking backward for just 10 to 15 minutes four days a week for four weeks can increase your hamstring flexibility.²⁵ Like rucking, what's great

about backward walking is that you can pick up and do it virtually anytime, anyplace. And that's the beauty of simple, inexpensive forms of activity.

You gain significant benefits with very little input on your end, other than the physical effort and time you devote to the activity. In terms of rucking, you can get started anytime, even right now. As Steve Stonehouse, USATF-certified run coach, told Well+Good. "Don't overthink it, just go. What many people love about rucking is it's extremely cheap (if not free), and you can go anywhere, anytime."²⁶

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