

Leg Press Machine

Do it Right!
Exercises you Should Do

Form: Start Position: Back and sacrum (tailbone) flat against the machine's backrest, keeping neutral curve. Place your feet on the resistance plate, toes pointing up or slightly out and adjust your seat and foot position so that the bend in your knees is at approximately 90 degrees with your heels flat. You should be able to see toes and they should be in line with the knees. Lightly grasp any available handles to stabilize your upper extremity. Contract (“brace”) your abdominal muscles to stabilize your spine, be careful to avoid movement in your low back throughout the exercise. Press through your heels and mid-foot to almost full extension and then pause. Return to start position without letting weight stack touch. Do this all in a controlled manner breathing throughout. **DO NOT LET MOMENTUM DRIVE THE MOTION.**



I consider this a Great and Safe Novice Exercise if done properly. Like many other machines it is easy to set up and understand. It is not as much of an isolation exercise as other machines though, like the leg extension machine, since it works several muscle groups. The great thing about this exercise is that you can load the musculature of the lower body without stressing the spine if done properly as it would be with squatting with similar loads. It is a bodybuilders favorite because it helps build muscle. But which is best in building muscle, free weights or machine, is highly debatable. I say do both. **A study found no difference between them both when building muscle is the goal (See Study). Training with free weights did induce a slightly greater increases in free testosterone in men in this study.** This exercise has often been suggested to be ineffective and nonfunctional, like many other exercise machines have been. Many trainers and coaches cite that it is not functional since when compared to the squat leg presses showed less transfer effect to sports performance compared to a squat training program (See Study). Just because it is not as good in improving jump performance as a squat, the leg press has been shown to be very effective in the general population. One study showed that maximal strength leg press training restores walking mechanical efficiency and significantly improves one repetition maximum and rate of force development in coronary artery disease patients after 24 training sessions each lasting only 20 min (See Study). Another study had similar results where strength improvements led to a significant increase in walking economy of 9.7% when walking horizontally, and to a significant increase in walking performance of 13.6% measured on an incremental treadmill test to exhaustion (See Study). Balance recovery tasks increased by 30% after training the lower body through leg presses and other lower body exercise machines (See Study). As formerly cited research suggest the leg press probably won't be as effective for improving athletic performance as the conventional back squat in trained populations, but many authorities suggest research points to the fact that there are benefits to both free weights and leg machines. **A combination of the two workouts may be just what you need to get a leg up on your fitness goals says [healthline.com](https://www.healthline.com).** REHAB: Jill Cook, a leader in tendinopathy research, suggest using the leg press as well as other isolation exercises in the rehab process because it can improve strength without overloading the 'spring loading and energy storage capacity' of the the tendon. Dr. Stuart McGill, a leader in spine care, explains that the Leg Press causes your pelvis to come off the back pad as the weight lowers, causing stress that increases your chance of suffering a herniated disc. It is imperative you keep your spine in neutral and your pelvis on the pad to avoid this. Please use proper form.

But what is functional strength? It is the ability to display muscular strength in a basic human movement, such as walking, running, jumping, squatting, deadlifting, lunging, carrying, and dragging. The term “functional strength” comes from the field of gerontology, where researchers look to what helps elderly people become more mobile, more independent, and less likely to fall down.