

Why Can I Leg Press 2 Times More Than I Can Squat?

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I find in the gym many clients who persist with performing squats with limited core strength and they wonder why they really struggle with the exercise, don't seem to get any growth out of their legs and often have issues with their lower back during and after training.

To better understand what is going on with the squat exercise, we need to look at what musculature is involved in performing the squat and for comparison, we can look at the Leg Press or Incline Leg Press and see what the differences are both in terms of muscle groups being used and the weight that can be lifted.

What muscles does a squat use?

When you perform a squat, whilst you might think that it is a leg exercise, it is primarily a core exercise because you are having to hold a weight (bar) on your shoulders and in the process of squatting, you will lean forward which will increase the load being placed on the core and in particular the lower back.



If you do not have adequate core strength to maintain a neutral spine during the squat movement, then you will not be able to lift much weight without the core giving way resulting in poor technique and increasing the shearing forces on your lower back.

Whilst the image on the right is an extreme example, I often see clients reaching the bottom of the squat movement, then when they start to try to stand back up, their core is unable to maintain the appropriate angle and their butt rises first (increasing the angle of load on the lower back) followed by the upper body (either with a relatively straight back or a rounded back similar to the image shown here).

The squat is mainly a **CORE EXERCISE**, not a leg exercise.

Why can I leg press more than I can squat?

To further explain, most people (including beginners) will be able to leg press 2-3 times what they can squat – this indicates that their leg strength is far superior to any load they place on their back when they attempt to squat.

If you are after either increasing leg strength or size, then you will not be able to achieve this with squatting a weight that is well below what the leg muscles can handle.

The squat is a great exercise to improve Intra-abdominal Pressure and over time it will lead to your core improving in strength allowing greater loads being added to the squat exercise.



But if you want to maximise the growth of your legs (and don't want to wait a couple of years to get your core up to strength), then I suggest you add a leg pressing activity to your routine so that you can successfully load your legs with enough load, or train to failure without the core limiting this training stimulus.

Are you experiencing lower back pain after you perform incline leg press? [Check out why, here.](#)

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