

One Repetition Max

Strength tests to measure **maximal strength** are required for most athletes. For the reasons why maximal strength is important to you as an athlete see the [**strength training programs article**](#).

The one rep max (1-RM) is still considered the 'gold standard' of strength tests by most coaches. The procedure usually consists of the **bench press** and **leg press**. Why those two?

They are **compound movements** incorporating most of the large muscle groups in the upper and lower body. It isn't set in stone though...

If you play football, rugby or soccer you may want to perform a 1-RM test on the **leg extension**. The movement closely matches a kicking action. You would do this for both legs and compare you're left to right side. While you're at it...

Perform a 1-RM test on the **leg curl** for both legs. Compare your hamstring to quadriceps strength for both sides.

Should you use **free weights** or **machines**?

It depends. What do you plan to train with, free weights or machines? No point in performing a 1-RM on a fancy bench press machine if you're going to train at home with your dumbbells! If you have the choice...

Free weights offer more sport-specific movement patterns because they incorporate more **stabilizing muscle groups**. They also require more co-ordination.

Testing Procedure

1. Warm up thoroughly with light aerobic exercise and 10mins of stretching to all major muscle groups.
2. Chose a weight that you think is about 80% of your 1-RM. Don't sweat over this -- just guess!
3. Perform the exercise... the bench press or leg press or whatever with perfect form for one rep only.
4. Rest for **at least 5mins**. You're not working out!
5. Add as small a weight increment as possible and try again. Remember to have your spotter with you.
6. Keeping resting and repeating until you find a weight that you can't quite manage on your own. The weight before that is your 1-RM.

Results

Take your 1-RM weight for the bench press and leg press s and **divide it** by your **body weight**. So for example if you leg pressed **300lbs** and you weigh **175lbs** your score is **1.7**. Check your score with the chart below...

One Rep Max Scores					
Bench Press	Poor	Fair	Good	Very good	Excellent
Men	0.6	0.8	1.0	1.2	1.4
Women	0.3	0.4	0.5	0.6	0.7
Leg Press	Poor	Fair	Good	Very good	Excellent
Men	1.4	1.8	2.0	2.4	2.8
Women	1.2	1.4	1.8	2.0	2.2

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