

WHAT TO DO WHEN DEADLIFTS BECOME A FOREARM WORKOUT



Deadlifts are one of the most common exercises used to develop strength in the lower extremities and back stabilizers, and are one of three exercises assessed in powerlifting competitions. Even though the prime movers in the deadlift are the glutes, hamstrings, and to a lesser extent the quadriceps, the deadlift requires significant isometric strength in the back muscles and the forearm muscles used for gripping.

The conventional grip used for the deadlift is the overhand grip, where the trainee places both hands over the barbell, such that his/her palms are facing backwards. It is often reported that using the overhand grip is limiting to a lot of individuals, who report that they cannot go heavier not because their prime movers cannot lift anymore, but because of all the tension and fatigue in their forearms. This is even more annoying for individuals with relatively smaller hands.

LIFTING STRAPS VS. MIXED GRIP

Due to these restrictions, powerlifters and deadlift enthusiasts may rely on two alternatives for the overhand grip: using (a) weightlifting straps (figure 1) and (b) using a mixed/alternated grip (figure 2):



Figure 1 Weightlifting straps



Figure 2 Mixed or alternated grip

a) Weightlifting straps are usually leather or nylon-made straps that are supported by the wrist and tied around the barbell. Their main purpose is to reduce the amount of force required by the gripping muscles, so that the lifter can focus on the pull instead of the grip.

Pros: lifting straps may allow the lifter to add more weights to his/her lift and also to feel a higher activation of the prime movers during heavy lifts (1).

Cons: straps may place a lot of tension in the wrists due to the traction force of the heavy load pulling on the wrist and forearm. One study showed correlation between using straps and prevalence of injuries in the thoracic region (2).

b) Mixed grip consists of placing one grip in underhand position and the other in an overhand position. This allows the lifter to push the barbell with the underhand grip and pull the barbell with the overhand grip. The opposing forces of push/pull reduce the pressure and tension on the grip muscles.

Pros: a mixed grip allows the lifter to add more weight to his/her lift without the need to use assisting tools and equipment. The lift feels more natural compared to the use of straps. Advocates of mixed grips avoid using straps due to their external assistance that doesn't challenge the grip and eventually doesn't allow the lifter to progress when he/she takes off the straps.

Cons: a mixed grip requires the scapula of the underhand grip to push in protraction and the scapula of the overhand grip to pull in retraction. Lifters who avoid mixed grips report doing so because of the fear of mixed grips creating muscle imbalances in the shoulder region, especially that alternating the overhand and underhand grips may not always allow the lifter to lift the same load, and hence force them to rely on the same hands in an underhand and overhand positions. However, the more pronounced disadvantage of a mixed grip is the tension placed on the biceps brachii of the underhand grip, which is reported to cause biceps brachii rupture (1,3).

CONSENSUS AND TAKEAWAY MESSAGES

There is no current consensus on which modification from the underhand grip is preferable, and there probably won't be anytime soon, as the studies comparing both alternatives and any association with injuries are very limited and based on low levels of evidence. Injuries resulting in powerlifting and heavy weightlifting are by far due to faulty techniques and other factors independent of the way the lifter handles the barbell (2,4,5). There is only one study to date that shows an association between lifting straps and the prevalence of thoracic injuries (5), but it should be noted that the association does not mean causality in any way. Following the Evidence-Based Practice recommendations, the decision making on using lifting straps or a mixed grip should be based on the trainer/instructor's experience and the lifter's preferences. Make sure to use the Gradual Progressive Overload (GPO) principle, regardless of what method you use to MOVE more and better!

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