

BENCH PRESS KINEMATICS

Taking a close look at technique changes throughout a set



Original Research
Duffey, M., and J. Challis. Fatigue effects on bar kinematics during the bench press. *Journal of Strength and Conditioning Research* 21(2):556-560, 2007.

INDEED, MAX STRENGTH IS KEY. BUT HOW SHOULD YOU TRAIN TO GET THERE? CONVENTIONAL WISDOM IS FALSE...

Clearly, the bench press is one of the most popular lifts performed in any gym. The reason is pretty simple: the bench is *the* best exercise for upper-body strength and size. For that reason it is performed by nearly all recreational lifters, but it is also an important lift used in sport to assess an athlete's upper-body strength, and it is of course a contested lift in the most popular strength sport in the world—powerlifting. As a consequence, a great deal of research has been conducted on the bench press regarding the optimal grip width, the most effective bar path, the most productive set and rep schemes, etc., etc. However, most of this research has focused on max strength; there is a void in research looking at the bar's kinematics, the bar's movement path, during regular training. This issue may not leap to mind first, but it is critically important to know about if you want to maximize your technique, max strength, and size development.

Power Key: technique, bench press strength, kinematics, fatigue, biomechanics