PUSH UP PROGRESSIONS FOR ATHLETES By Ray Eady

Probably the most underrated, undervalued and underappreciated exercise is the push up, despite it being one of the oldest, safest, and most effective exercise for upper body strength development. Push-ups were largely regarded as a measure of a man's strength and fitness. In more modern times much of this reputation has been passed on to the bench press. Some athletes and coaches view the push-up as being simple and easy to execute. However, walk into any gym and you will notice some athletes struggling to perform the movement with proper technique; or in many cases, avoiding the movement entirely (hint: females). Although there are many variations of the push-up, athletes should first understand the basic principles of performing the movement before progressing to advanced variations.

Every strength and conditioning coach knows that push-ups are a fantastic exercise for developing upper body general strength, and more specifically, muscle hypertrophy. However, if performed correctly, the push-up is great for developing spinal stabilization (anti-trunk extension), body control, increasing the activation of the serratus anterior, and for developing scapular and shoulder stability (resulting in rotator cuff efficiency). It is safe to say that the push up demands more "total body" muscular recruitment when compared to the bench press.

In my opinion, if an athlete can not demonstrate the proper technique in performing a push-upor struggles to perform an optimal number of repetitions, then they should not be allowed to bench press.

At the University of Wisconsin, our push up progression with our athletes starts with teaching them how to maintain and stabilize proper body positioning isometrically. Our second step teaches our athletes how to control body movement eccentrically while still maintaining proper body positioning. Lastly, we teach the athlete how to maintain and control proper body positioning while performing the movement dynamically.

While performing these progressions, strength gains will still be achieved because of the isometric and eccentric work. This is favorablewhen working with athletes with limited weight training experience.

One final note, only progress your athletes when ready. Some athletes will struggle, typically females, larger athletes, or athletes with long arms. Make sure they master a specific movement before advancing to the next progression.

Progression 1: 3 – POINT ISOMETRIC HOLD ON A BENCH



The 3-point isometric hold (on a bench)teaches the athlete how to get into the proper push up positions while training the CNS (central nervous system)to properly recruit the correct muscle fibers to help the athlete maintain and stabilize that position. In this first progression, the athlete learns to stabilize their spine, brace their abdominals, and activate their glutes and scapulae at 3 positions. The athlete's body generally forms a straight line from the shoulders through the hips to

the ankles at all 3 positions. The isometric holds occurs at the top, mid, and bottom positions of the movement. Decrease the height of the bench (or box) or increase the time under tension for a greater challenge. Click <u>here</u> to seevideo.

Progression 2: ECCENTRIC (YIELDING) ONLY [BENCH HALFSEY PUSH-UPS]



The eccentric only (halfsey) progression teaches the athlete how to control and stabilize their body during the eccentric action of the movement. The key points taught in the first progression are still emphasized. For a greater challenge decrease the height of the bench or box or increase the time under tension. Click here to see video.

Progression 3: DYNAMIC ACTION WITH PARTNER [BENCH]



This step involves the athlete performing the eccentric, isometric and concentric actions of the push-up; however, a partner provides some assistance during the concentric action (if needed). For a greater challenge decrease the height of the bench or box or increase the time under tension during the eccentric and/or isometric actions. Click <u>here</u> to see video.

Progression 4: KNEE PUSH-UPS



The knee push-up removes the athlete from the bench to the floor. The athlete performs the eccentric, isometric and concentric actions of the movement while still maintaining a straight line from the shoulders through the hips to the knees. Click <u>here</u> to see video.

Progression 5: 3 – POINT ISOMETRIC HOLD ON THE FLOOR



Same as progression #1 but the movement is performed on the floor. Click <u>here</u> to view video. For a greater challenge, reverse the action to the starting point of the movement. Click <u>here</u> to see video.

Progression 6a: ECCENTRIC (YIELDING) ONLY [FLOOR HALFSEY PUSH-UPS]



Same as progression #2 but the movement is performed on the floor. Click <u>here</u> to see video.

Progression 6b: OVERLOAD ECCENTRIC (YIELDING) WITH PARTNER

This movement is a continuation of progression 6a but with a partner providing resistance during the eccentric action. Click <u>here</u> to see video.

Progression 7: DYNAMIC ACTION [ASSISTED]



The athlete performs the standard push-up but is being assisted by a band suspended from a rack.For a greater challenge, use a lighter band. This method can also be accomplished by having a partner hold the band. Click<u>here</u> to see video.

Progression 8: DYNAMIC ACTION [NON-ASSISTED]

The athlete is ready to perform a standard push-up without assistance.

After demonstrating the ability to perform a good push-up your athletes can progress to more complex variations. This may include weighted push-ups, push-ups on unstable surfaces, feet elevated push-ups,

etc. Push-ups should be included in training programsregardless of sport, gender, or training age. The benefits are extraordinary!

My next article will explore chin-up progressions. Stay tuned!

References

Lear LJ, Gross MT. An electromyographical analysis of the scapular stabilizing synergists during a pushup progression. Journal of Orthopaedic and Sports Physical Therapy, Sept. 1998:28(3), pp146-57.

Thibaudeau, Christian (2006). Theory and Application of Modern Strength and Power Methods: Modern methods of attaining super-strength. F. Lepine Publishing.

Robertson, Mike (2008). Top priority for lower traps. Training the bodypart you forgot was there. www.t-nation.com