Correcting the Bent-Over Row

Although the anterior chain often receives more attention in most fitness centers than the posterior chain, next to the pressing machines undoubtedly there will be an equal number of machines aimed at training pulling movements. Likely, 50% will address shoulder adduction (lat pulldown) and 50% will serve the actions of horizontal abduction and shoulder extension (seated row). Since many of the machines are done in the oblique plane (somewhere between true sagittal/frontal or sagittal/transverse) the muscles of the shoulder complex work together with the muscles of the shoulder to accommodate the force demands. In a seated high row for instance, where the load is elevated above the chest, the rhomboids are involved in some level of scapular retraction and downward rotation aided by the trapezius, while the latissimus dorsi contributes to shoulder extension and adduction. When the resistance is lowered for the seated cable row, the rhomboids and mid-trapezius dominate but are assisted by the lats and teres major for shoulder extension. Exercises like the lat pulldown, high row, and seated row certainly have merit in a resistance training program aimed at strength and hypertrophy but for performance and function these stable, machine-based exercises pale in comparison to exercises like the pull-up and bent-over row.

Due to the fact that both the bent-over row and pull-up are closed chain activities they have a much better integration of total musculature compared to machine-based training. The trunk stabilizers are important to the maintenance of pull position as well as the total resistance used. This is particularly true of the bent-over row. The ability to establish and maintain a flexed hip position during the concentric phase of the pull is based on hamstring ROM and trunk stability strength. Based on these facts it is not surprising that the bent-over row is performed incorrectly by many (if not most) exercisers due to limitations along the kinetic chain.

During the proper performance of the barbell bent-over row, the back should remain flat and roughly parallel to the floor. To maintain a normal lordotic curve and avoid excessive spinal flexion and consequential kyphosis, a common cue from a personal trainer to their client is chest elevation along with a slight anterior pelvic tilt. The bar should fall just in front of the toes under extended arms and is traditionally held using a pronated grip. When the resistance is pulled from this position the action is initiated by scapular retraction and shoulder horizontal abduction/extension assisted by fairly simultaneous arm flexion. The bar should be pulled through the fullest attainable range.

In many cases the barbell bent-over row is performed incorrectly due to tightness and/or weakness. The two most common errors are incomplete starting range of the hip and excessive back/hip extension during the upward phase of the exercise. As mentioned these errors often occur due to tightness in the back and hip extensors and weakness in the trunk and back. This suggests the first step in correcting the movement is to reduce the weight to a manageable level. In many cases tight hamstrings contribute to the problem, but the flexed knee position can accommodate some level of hip extensor tightness for many people and if so, much of the error is an inability to access the back muscle due to the instability in the trunk. When watching the movement, if the exerciser starts in the correct position but extends the back and hip during the concentric phase of the action, it is due to some level of weakness (stabilizers or prime movers). From a resistance standpoint, it is easier to pull the load across gravity rather than against it. Likewise, the trunk is more stable when the hip is extended.
and the weight moves over the base of support explaining the common compensation of hip and back extension. Extending the hip/back also creates momentum on the bar and a “cheat” effect in force development.

Another common error in the exercise is the pulling location of the bar. The movement of the bent-over row dictates action with the humerus abducted to approximately 50 degrees, in the aforementioned oblique plane. This places the bar between the umbilicus and xyphoid process. The pull should not occur in line with the chest nor should the shoulders be elevated. A high pull position reduces the action of the desired prime movers placing greater demand on the middle fibers of the trapezius. In proper position, the bar should travel upward and downward in an arcing manner through the frontal plane. When the exercise is performed with dumbbells the most commonly observed error is not keeping the resistance in line with gravitational pull.

The last of the common errors comes from incomplete range of motion. As is common during many exercises, participants often reduce the range of motion to utilize mechanical advantage to lift more weight. Errors may occur from incomplete arm extension to limited pull distance, where the biceps dominate the action. This is particularly true when the lift is adjusted by the exerciser using a supinated grip. Arm action is usually accompanied by a slightly rounded back as the shoulder complex experiences limited action. Cueing proper spine/hip position and initiating the action using scapular retraction can fix these problems.

The barbell bent-over row exercise is an excellent choice for strength training, bodybuilding and function-based training because it requires the whole body to work in a unified manner. It is one of the best exercises for the back to also improve with range of motion and stability when performed properly. When done correctly with adequate resistance and appropriate rest intervals, the exercise supports performance strength and anabolic activity for hypertrophy. Regardless of the training goal, the first step is mastering the technique and correcting errors in execution. Below are some suggestions to help in this process.

**CORRECT TECHNIQUE**
INCOMPLETE MOVEMENT RANGE – HALF BENT POSITION

- Assess hip and back extensor range of motion
- Lower the resistance
- Stabilize spine

EXTENDING HIP DURING CONCENTRIC PHASE

- Lower resistance
- Improve core strength
HIGH PULL ACTION AND/OR ROUNDED BACK

- Check resistance
- Elevate the chest and adjust the pelvis
- Cue proper shoulder abducted position and scapular action