

BACK RAISES

By
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During the past years a great deal of confusion has arisen between the back raise and hyperextension exercises. The reasons for this are two-fold. First many people believe that both of these exercises are identical. They are not. Second, hyperextensions are usually used by body builders to develop the lumbar portion of the erector spinae muscles. But, in most cases, the erector spinae muscles are held in isometric contraction as the exercise is done. As is known, isometrics do develop strength, but not as effectively as a concentric contraction, which is also best for definition. Hyperextensions are a poor exercise to develop the erector spinae muscles.

But the back raise is very effective in isolating and developing the lower erector spinae and the deep posterior muscle group of the spine. Following is its description:

Correct execution: Assume a face-down position on a Roman chair (hyperextension bench) or a Glute-Ham Developer. When your feet are placed in support under the rear padded bar or rollers or between 2 rollers your pelvic girdle (hips) should be on top of the seat. Your navel, or the abdomen slightly lower than the navel should be at the edge of the front of the seat.

Hang over the seat with the trunk from the waist until your trunk hangs at a 45-60° angle to the horizontal. Cross your arms on your chest or place your hands behind your head.

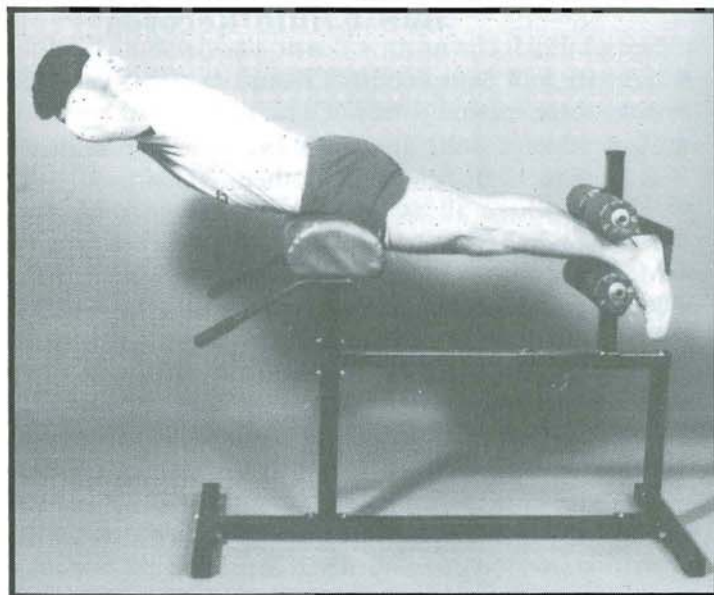
Raise your upper body until it is in line with your legs or slightly higher. In the ending position, there should be slight arch in your lower spine. Return to the initial position and repeat. Keep movements smooth with no snapping or jerking to raise the trunk. Concentrate on pulling with the erector spinae muscles.

Incorrect execution:

— Assuming a position so that the trunk hangs down from the hip joints. When you are in this position you must hold the back firm (isometric contraction of the erector spinae) and pull your trunk up with the gluteus maximus and upper hamstring muscles. However, in this position there is a tendency to arch the back when beginning to pull up. The arching continues until the back is hyperextended to maximum at which point the glutus maximus and upper hamstrings take over. Such bending and arching can be very dangerous to the spine. In fact, this may be how the name **hyperextensions** came about. The body builders had hyperextended (maximally arched) backs when doing the exercise.

— Doing the exercise very quickly. It is important to realize that whenever the spine is involved in an exercise, the movement should always be relatively slow. Doing quick, fast, actions can injure the spine.

— Doing the exercise with snapping jerking movements of the trunk. Whenever this occurs, there is a very strong possibility of injuring the back. Such movements place extreme pressure on the outer edges of the vertebrae and spinal discs which can result in vertebrae fractures or disc



Back Raise: Correct Position

Be careful not to extend hips too far forward and assume an incorrect hyperextension position.

ruptures.

— Having the legs angled downward when assuming the initial position. When you do this and then bend over to a 45 or more degree angle you must round your back excessively. Such bending places too much pressure on the anterior portion of the discs which in turn can create a rupture of the disc or a pinching of the nerves.

— Using a Roman chair or hyperextension bench that does not allow you to properly position yourself. If you can not place your pelvis in full support you should not do the exercise (unless you already have well-developed erector spinae that can hold your spine straight). Also, if the pelvis is not in full support you will not isolate the erector spine.

— Doing a twist when in a hyperextended position. When you do this, you can severely injure the spine. By arching excessively you squeeze the outer edge of the spinal column. This is a vulnerable position. Then when you twist the spine you can easily fracture the vertebral bones that overlap each vertebrae and squeeze the discs so that they can easily rupture.

Comments: 1) The most effective exercise apparatus on which to do back raises (or hyperextensions) is the Glute-Ham Developer (GHD). The reason for this, is that the GHD is adjustable horizontally so that you can accurately stabilize the pelvic girdle. Its range of adjustment is quite great so that it can be made to fit both tall (long legs) and short (short legs) people. In addition, the foot support can be adjusted so that the legs are in line with the upper body. (For information on the GHD, contact Bigger, Faster, Stronger at 800-628-9737.)

2) If you only have access to a Roman chair or hyperextension bench, you must try to adjust your body for

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proper — and safe — positioning. Usually this will entail sliding backwards if you are tall or of medium height so that the support will not be on your ankles but on the shins or Achilles tendon.

3) To produce an even stronger effect on the erector spinae place a folded up towel under your abdomen if using a Roman chair or hyperextension bench. By so doing you create greater abdominal pressure which presses against the spine and works the deep posterior muscle group. These muscles are very important in holding your spine in place and in giving it support. The increased pressure also works the erector spinae muscle group more effectively.

If you use a GHD you do not have to place a folded towel under the abdomen. Because of its rounded seat it creates sufficient abdominal pressure and the added towel is not needed.

4) When doing back raises, you should raise the trunk until there is a slight arch in the lower spine. This is not considered a hyperextension movement since in its normal position the spine is slightly arched. Thus, you are merely returning to the anatomical position which is the safest position to be in. However, if you have a very flat back, you can safely go into some hyperextension. If you are sway backed do not go past the anatomical position since it will only exaggerate the curve and may cause future problems.

SUCCESS STORIES



Jamey Rossbach of North High School in Eau Claire, Wisconsin Dead Lifting 500 lbs. at a 142 Body weight. Coach Shepard in the background spent 4 days at North High School for a BFS Super Clinic. Coach John Phelps says that the football team enjoyed a very successful season with many offensive records being set.

Dick Dullaghan had a BFS Clinic at Ben Davis High School in Indianapolis. This year they started slow but kept the dream alive and won the 5-A Indiana State Championship.

Paul Billiard won his second State Championship in West Virginia since his BFS Clinic. The Bruins of Brooke High School did it again!

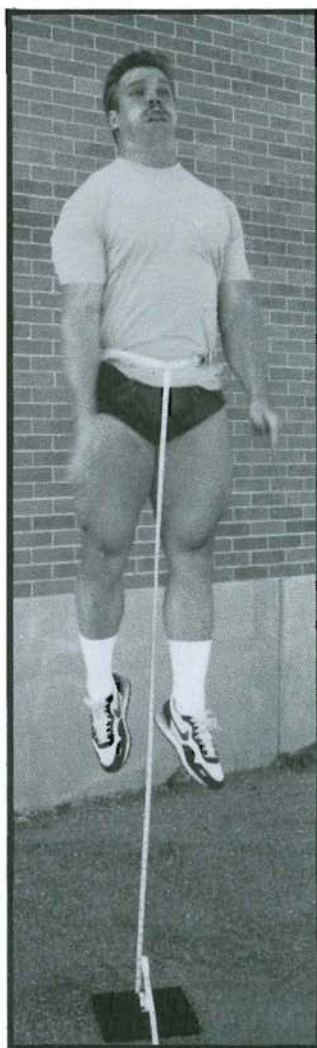
George Machado's Hueneme Vikings of Oxnard, California were picked to come in last just like they had for so many years. They won the conference championship and did well in the C.I.F. Playoffs. The dream was established at the January BFS Clinic. George received Coach of the Year honors.

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