

5 Steps to a Better Bench Press & Healthier Shoulders

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Apart from squatting, no other exercise has been the subject of debate than the bench press. Some say that it is dangerous for the shoulders, or that you must restrict the range of motion to keep it safe, or that it must be performed on a Swiss ball to allow the scapulae to move more freely. Many sports physicians and physiotherapists advise that the bench press should not be used at all due to the high incidence of shoulder injuries they treat.

As with practically all strength exercises, the issues are quickly resolved by addressing the technique, the loading parameters and the person's qualification to perform the lift. Blanket statements that damn certain exercises for everyone are typically made by health professionals who do not fully understand exercise technique and biomechanics. If these people better understood exercise progression, appropriate screening tests and correct technique, then we wouldn't have so much controversy about certain exercises being dangerous or non-functional. All this does in the long run is confuse the trainer and gives the client less exercises options.

Follow these five steps to train the bench press while keeping the shoulders strong and healthy.

1. Train through full range of motion.

When training the pressing movements, it is crucial for shoulder health to take the bar or dumbbell through the fullest range of motion. For the bench press, that is from 99% of full extension to full contact with the chest. For a dumbbell press, the range is even greater, as the hands clear the side of the torso in the low position

If a client cannot do this without pain, then the client is not yet qualified to perform the lift. Spend several programs addressing the limiting factor. In my experience, the inadequacies are usually weak external rotators and tight internal rotators.

As for lifters who have overtrained the bench press, I would recommend taking 12 weeks off barbell pressing per year to allow the soft tissue to recover from years of unchanged repetitive stimulus.

The shoulder joint is designed to load and de-load. The position of most instability for the glenohumeral joint is when the humerus is in line with the body. If the bar is stopped before contact with the body, particularly when the bar is a fist or so from the chest, then the shoulder is part way through a loading phase and at the position of least stability. Reversing the movement here places the most stress on the shoulders, inadequately utilizes the pressing muscles and should therefore never be advised. Lowering the bar until contact with the chest, on the other hand, evenly distributes the joint loads and fully activates the critical muscles to perform the lift and should be the only technique used for the bench press

As for hand position, the safest position for shoulder health in the bench press is with the humerus at 45 degrees to the torso during the movement and the widest the grip should be is when the forearms are at 90 degrees to the upper arms when the bar touches the chest.

2. Strengthen the shoulder stabilizers

One of the primary limiting factors for bench pressing is weak external rotators. Poliquin's data suggests that in order for the external rotators to be in structural balance with the bench press, the seated dumbbell external rotation from the knee exercise should be performed with almost 10% of the bench press 1RM for 8 repetitions¹.

If the external rotators have tested weak, then consider the following 5 points:

- Perform external rotations twice per week until the ratio is corrected;
- Perform external rotations at the end of total body workout, at the end of a chest/back session or at the beginning of a shoulder or arm workout.
- Use hypertrophy based methods: 3-4 sets, 8-12 repetitions;
- Perform one exercise with the elbow high to target the infraspinatus and one with the elbow low to emphasize the teres minor.
- Use a combination of cable and dumbbell exercises with enough load to permit full range of motion. Remember, there are no world records in the rotator cuff lifts!

Avoid using repetitions over 15, as there is insufficient stimulus to develop rotator cuff strength and don't use therabands. The point of overload in the strength curve is incorrect and is usually reserved for trainers who should know better and think that performing exercises with one leg on a BOSU ball is actually doing something other than making their clients look stupid!

3. Maintain structural balance

According to Charles Poliquin, many people with achy shoulders after years of bench pressing usually have inadequate structural balance between upper body muscles. To avoid these imbalances, make sure that the following 3 lifts are in ratio with the bench press:

Bench press to chin up ratio:

The 1RM for the bench press should be roughly equivalent to the 1RM for the chin up. Both lifts are performed with a shoulder width grip and the bar must touch the chest in the top position for the chin up as well.

Bench press to seated dumbbell overhead press using a semi-supinated grip ratio:

For the bench press to be in balance with overhead pressing strength, Poliquin suggests that 30% of the bench press 1RM should be overhead pressed for 8 repetitions. And that's 30% in each hand!

Bench press to single-arm bent over dumbbell trap 3 lift:

For the bench press to be in balance with the upper back muscles, Poliquin suggests that the bent over trap 3 lift should be able to be performed for 8 repetitions with around 10% of the 1RM bench press.

¹ All exercises used for structural balance ratios discussed in this article must be performed with a 4010 tempo. That is, lower in 4 seconds, no pause, lift in 1 second, no pause. For further information on structural balance norms, see Poliquin, C. (1998). Achieving Structural Balance. Available at www.t-nation.com

4. Emphasize dumbbell work more than barbell

When compared with the barbell, dumbbells allow greater range of movement, increased motor unit activation, higher recruitment of stabilizing muscles, including the serratus, and a more comfortable movement through the shoulders. Therefore, I would recommend 3 programs that emphasize dumbbell pressing to every 1 program emphasizing the barbell.

Personally, I use a semi-supinated grip for all dumbbell pressing movements, as this has resulted in less shoulder complaints over time than the traditional pronated grip.

5. Stretch the internal rotators

The subscapularis muscle frequently becomes shortened with excessive bench pressing. Developing flexibility in the internal rotators is an excellent way to create longevity in the shoulders with prolonged lifting. Aim to stretch the latissimus dorsi, pectoralis major, short head of the biceps brachii, and the subscapularis three to four times per week. Use a combination of PNF and static stretching methods.

The bench press is an excellent exercise to train the pectoralis, deltoids and triceps. It is widely regarded as the best measurement of upper body strength. There is no reason to avoid this exercise due to fear of injury, as suggested by some professionals. Follow the above 5 rules and you won't have to lie next time you're at a party and someone asks you how much you bench!