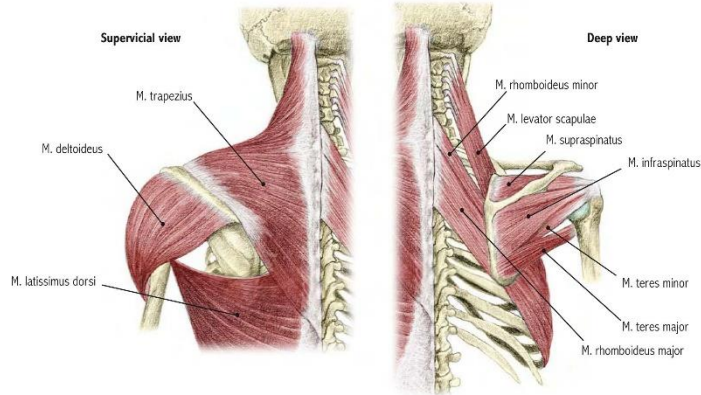


Vücut Geliştirme

Göğüs Bölgesi Antrenmanları

Spor Bilimleri Anabilim Dalı

Omuz Bölgesi



MUSCLES WITHOUT INSERTION IN THE HUMERUS

TRAPEZIUS (posterior, superficial)

Origin: head (descending/upper portion, posterior nuchal line, external occipital protuberance and nuchal ligament); cervical and thoracic vertebrae (transverse/mid portion, 7th to 3rd vertebrae, respectively, in the spinous processes and supraspinal ligament); thoracic vertebrae (ascending/lower portion, 2nd or 3rd to 12th vertebrae)

Insertion: clavicle (descending/upper portion, lateral third); transverse/mid portion in the acromial end and acromion; scapula (ascending/lower portion, in the triangular portion or adjacent to it)

Main functions: raising the shoulders and overcurvature with rotation to the opposite side, and bending to the same side of the head (upper portion); adduction of the scapula (shoulder blade), drawing the shoulders back (mid portion); lowering the scapula, pulling the shoulders down and inward (lower portion); stabilizing the scapula and shoulder girdle; abduction of the humerus

RHOMBOID MAJOR / GREATER RHOMBOID (posterior, deep)

see BACK

RHOMBOID MINOR / LESSER RHOMBOID (posterior, deep)

see BACK

STERNOCLEIDOMASTOID / STERNOMASTOID (anterior, superficial)

Origin: sternum (manubrium sterni, tendon head) and clavicle (internal third, muscular head)

Insertion: head (mastoid process and superior nuchal line)

Main functions: flexing the head and neck; turning the head to the opposite side and tilting it to the same side

LEVATOR SCAPULAE (posterior/superior, middle)

Origin: cervical vertebrae (transverse processes of first four)

Insertion: scapula/shoulder blade (upper angle)

Main functions: raising (and adduction) of the scapula (shoulder blade), mid-rotation of the lower portion

SERRATUS ANTERIOR (anterior, deep)

see CHEST

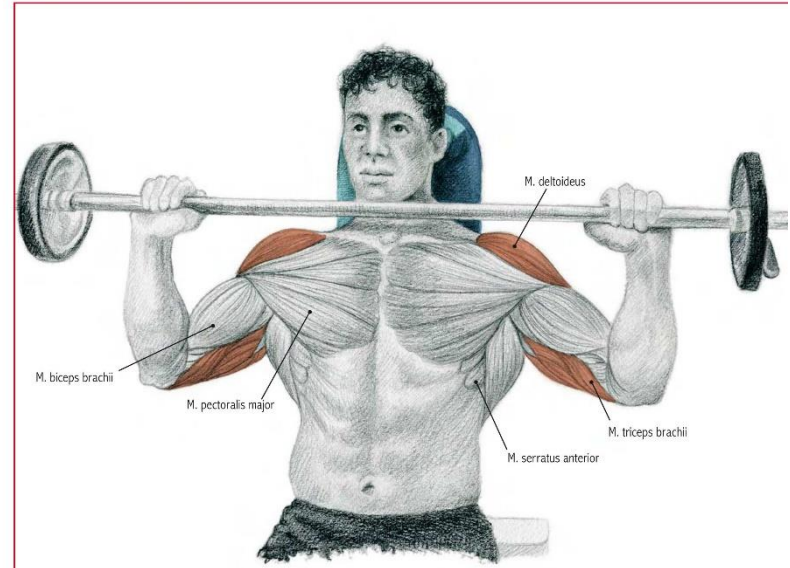
PECTORALIS MINOR (anterior, deep)

see CHEST

1

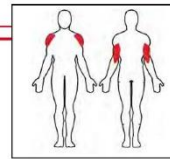
Shoulders,
Free Weights

SEATED BARBELL MILITARY PRESS



Muscles involved

MAIN MUSCLES: deltoid (front, middle), triceps (except long head), supraspinatus
SECONDARY MUSCLES: deltoid (rear), pectoralis major (upper), trapezius (upper), biceps (long head), serratus anterior, triceps (long head)
ANTAGONISTS: latissimus dorsi, biceps, pectoralis major (lower)



VARIATIONS 1-2 ... BEHIND-THE-NECK

MUSCLES USED

deltoid, triceps, supraspinatus

TECHNIQUE

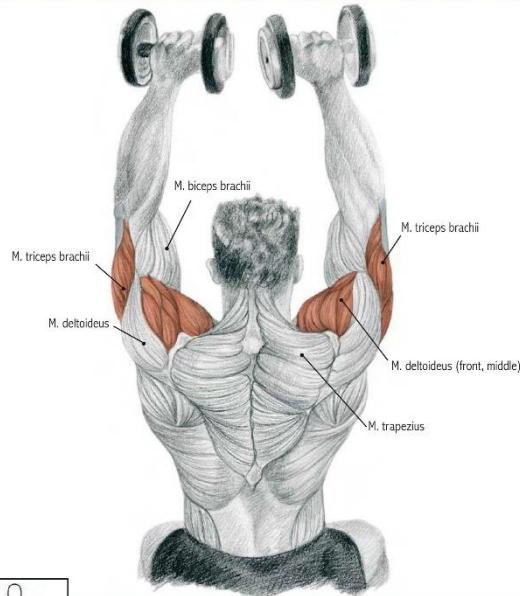
The movement is the same, but the bench should be set at a more vertical angle. You will need to tilt your head slightly forward to lower the barbell behind it almost to the nape of your neck. This is a variant of the Seated Military Press and there is little difference. If anything, it is a worse exercise than the basic one and it can be dangerous. The rear deltoid does not receive more of a workout in a Behind-the-neck Press, despite the claims of many trainers and veteran bodybuilders. You only have to observe the position and movement of the arms in the two variants to see this. They are almost identical. Be careful not to move your elbows backwards as you lower the weight (rotating the arm inward); move them in a vertical line. Avoid heavy weights with the Behind-the-neck Press and do not bring the barbell down too far.



Omuz Bölgesi

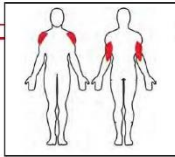
2 Shoulders, Free Weights

SEATED DUMBBELL SHOULDER PRESS



Muscles involved

MAIN MUSCLES: deltoid (front, middle), triceps (except long head), supraspinatus
SECONDARY MUSCLES: deltoid (rear), pectoralis major (upper), trapezius (upper), biceps (long head), serratus anterior, triceps (long head)
ANTAGONISTS: latissimus dorsi, biceps, pectoralis major (lower)



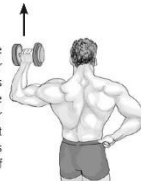
VARIATIONS 2.2 ... STANDING

MUSCLES USED
 deltoid, triceps, supraspinatus
TECHNIQUE
 Standing to do the Shoulder Press allows you to use your legs to give you a bit of momentum when doing forced reps. However, poor technique can put the back at risk and it is more difficult for a partner to help.



2.3 ... ONE-ARM

MUSCLES USED
 deltoid, triceps, supraspinatus
TECHNIQUE
 Hold your torso firmly in place to do the One-arm Shoulder Press. The disadvantages of this variant are that the spinal column may be tilted or rotated to a dangerous extent if you use heavy weights and/or do this with a lack of proper technique.

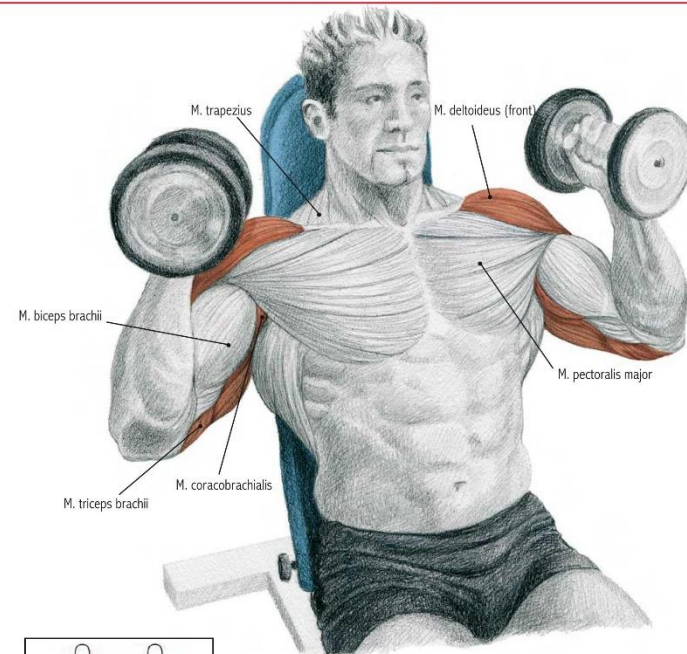


2.4 ... ALTERNATING

MUSCLES USED
 deltoid, triceps, supraspinatus
TECHNIQUE
 This is the same as the basic exercise, but alternating dumbbell lifts with a pause at the top of the movement. The variant increases the intensity of the workout because the arms support the load at all times, as the "pause" involves holding the dumbbell in place.

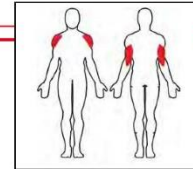
3 Shoulders, Free Weights

FRONT DUMBBELL PRESS



Muscles involved

MAIN MUSCLES: deltoid (front), coracobrachialis, triceps (except long head), supraspinatus
SECONDARY MUSCLES: deltoid (middle and rear), pectoralis major (upper), biceps (long head), trapezius, triceps (long head)
ANTAGONISTS: latissimus dorsi, teres major and minor, biceps, pectoralis major (lower)



VARIATIONS 3.2 ... INCLINE

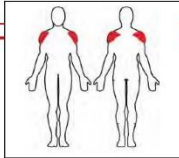
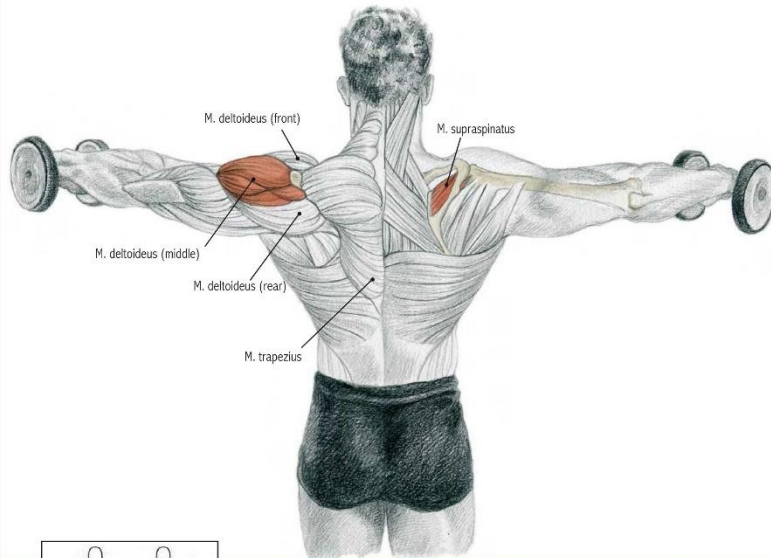
MUSCLES USED
 deltoid (front), pectoralis major (upper), coracobrachialis, biceps (long head), supraspinatus
TECHNIQUE
 The technique used is virtually the same as in the basic exercise, but the bench is set at a 45°-60° angle. Do the press by extending your arms diagonally forward, not completely vertical. The weight used will inevitably be less, but the exercise works the front portion of the deltoid very effectively. (There is less work for the triceps, although a bit more for the pectoral muscles.) You will achieve good muscle congestion (accumulation of blood in the muscle) from light, long sets. It is a good idea to fix your eyes on a point of reference and raise the dumbbells toward it. This stops you from slipping into a vertical Press as you tire during the set.



Omuz Bölgesi

4 Shoulders, Free Weights

DUMBBELL LATERAL RAISE / SHOULDER FLY



Muscles involved

MAIN MUSCLES: deltoïd (middle), supraspinatus
SECONDARY MUSCLES: deltoïd (front and rear), trapezius and serratus anterior (especially from 90 to 150°), biceps (long head), subscapularis
ANTAGONISTS: latissimus dorsi, pectoralis major (lower), teres major and minor, triceps (long head), biceps (short head)

VARIATIONS 4.2 ... THUMBS-UP

MUSCLES USED
 deltoïd (middle and front), supraspinatus, biceps (long head), trapezius (upper)

TECHNIQUE

Turn your arm so that your thumbs face up and your elbows down (rotation of the shoulder blade and humerus). This will shift some of the work onto the front of the deltoïd and to some extent the biceps, especially the long head.

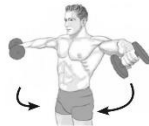


VARIATIONS 4.3 ... THUMBS-DOWN

MUSCLES USED
 deltoïd (middle and rear), supraspinatus, trapezius (upper)

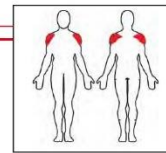
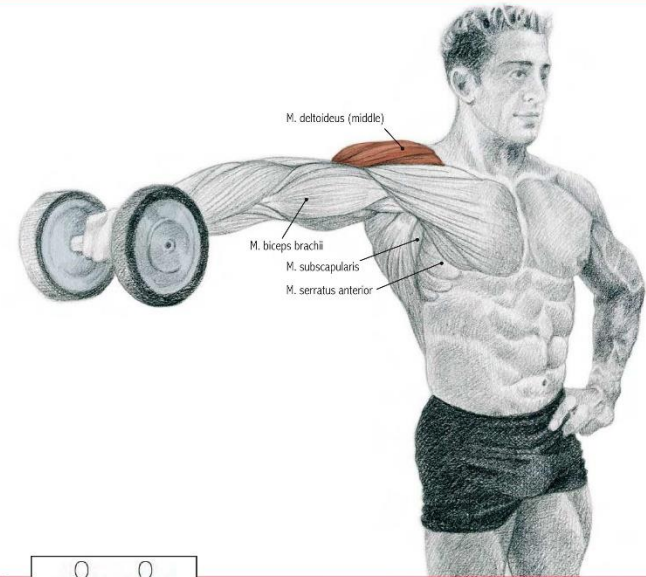
TECHNIQUE

This inward rotation of the arm will allow you to isolate the work done by the middle and rear deltoïd. However, in this position the biceps is no longer able to provide effective protection against the shoulder being dislocated due to internal rotation of the humerus. Do not use too much weight. It is better to lift the dumbbells starting in front of your body and not to raise them above 90° (arms straight out to the side) to avoid putting the supraspinatus and the tendons in the area at risk.



5 Shoulders, Free Weights

ONE-ARM DUMBBELL LATERAL RAISE /



Muscles involved

MAIN MUSCLES: deltoïd (middle), supraspinatus
SECONDARY MUSCLES: deltoïd (front and rear), trapezius and serratus anterior (especially from 90 to 150°), biceps (long head), subscapularis
ANTAGONISTS: latissimus dorsi, pectoralis major (lower), teres major and minor, biceps (short head)

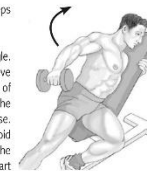
VARIATIONS 5.2 ... INCLINE

MUSCLES USED

deltoïd, supraspinatus, trapezius (upper), biceps (long head)

TECHNIQUE

Lie sideways on a bench set at a 45°-60° angle. The main advantage is that you will achieve constant resistance over the entire range of movement because the position eliminates the "dead spot" at the top in a conventional raise. The variant also works the outside of the deltoïd muscle, which is responsible for the first 30° of the movement, very effectively (the least intense part of the movement in the lying or decline variants).



VARIATIONS 5.3 ... DECLINE

MUSCLES USED

deltoïd, supraspinatus, trapezius (upper), biceps (long head)

TECHNIQUE

Standing, hold on to something that will provide firm support, leaning your body away at a decline. This position allows you to achieve a strong final contraction if you perform the movement strictly. It also involves the trapezius somewhat more at the end of the upward movement due to the angle you will achieve.

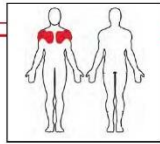
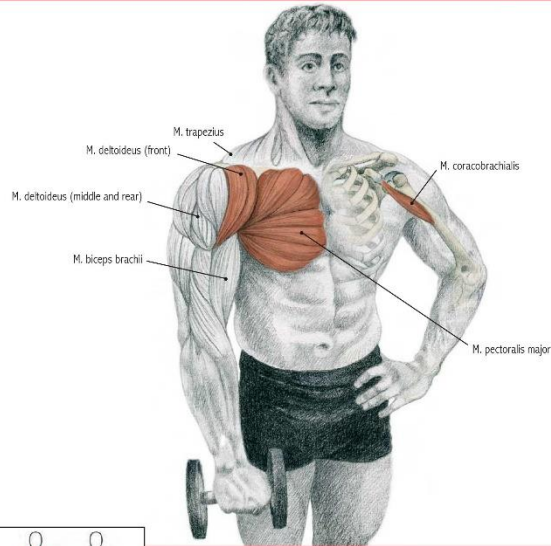


Omuz Bölgesi

6

Shoulders,
Free Weights

DUMBBELL FRONT RAISE



Muscles involved

MAIN MUSCLES: deltoid (front), coracobrachialis, pectoralis major (upper)
SECONDARY MUSCLES: deltoid (middle and rear), trapezius (middle and upper), biceps, serratus anterior
ANTAGONISTS: latissimus dorsi, teres major and minor, pectoralis major (lower), triceps

VARIATIONS 6.2 ... TWO-ARM

MUSCLES USED
 deltoid (front), coracobrachialis, pectoralis major (upper)

TECHNIQUE
 You will find that the strain on the lower back and muscles along the spinal column is greater and it is almost certain that you will need to cheat to complete a heavy set. If this variant has any advantage, it is to allow you to complete the exercise fractionally faster. It also gives the anchoring muscles of the torso an isometric workout.



6.3 ... NEUTRAL / HAMMER GRIP

MUSCLES USED
 deltoid (front), coracobrachialis, pectoralis major (upper)

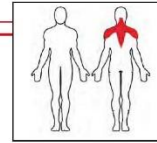
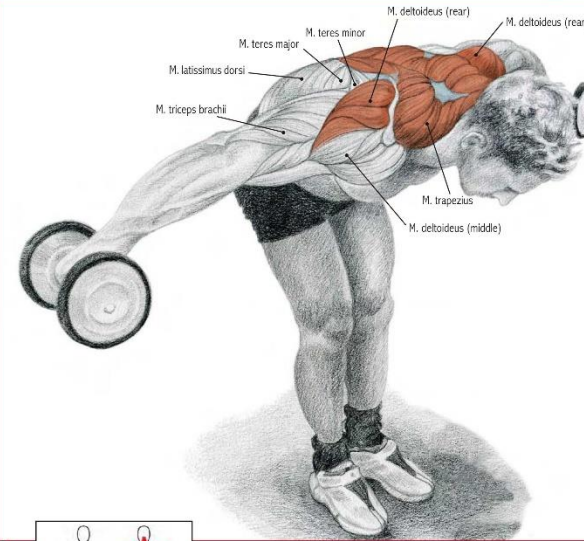
TECHNIQUE
 This is the same as the basic exercise, but using a neutral grip (palms facing) to concentrate the workout on the front of the muscle. The grip is also more comfortable and firmer. Never extend your forearm completely.



7

Shoulders,
Free Weights

DUMBBELL REAR LATERAL RAISE



Muscles involved

MAIN MUSCLES: deltoid (rear), trapezius
SECONDARY MUSCLES: deltoid (middle), latissimus dorsi, rhomboids, teres major and minor, triceps, infraspinatus, muscles of the lower back and along the spine
ANTAGONISTS: deltoid (front), pectoralis major, biceps

VARIATIONS 7.2 ... SEATED

MUSCLES USED
 deltoid (rear), trapezius, triceps

TECHNIQUE
 This is the same as the basic exercise, but you sit on the edge of a bench with the dumbbells below your legs, which should be kept together, bent at the knee and forward. Your chest should be touching your thighs. The main advantage of this position is that it provides better balance and reduces the strain on the lower back. The movement is stricter and so a little less weight is normally used.



7.3 ... LYING

MUSCLES USED
 deltoid (rear), trapezius, triceps

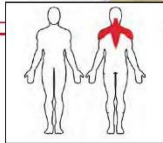
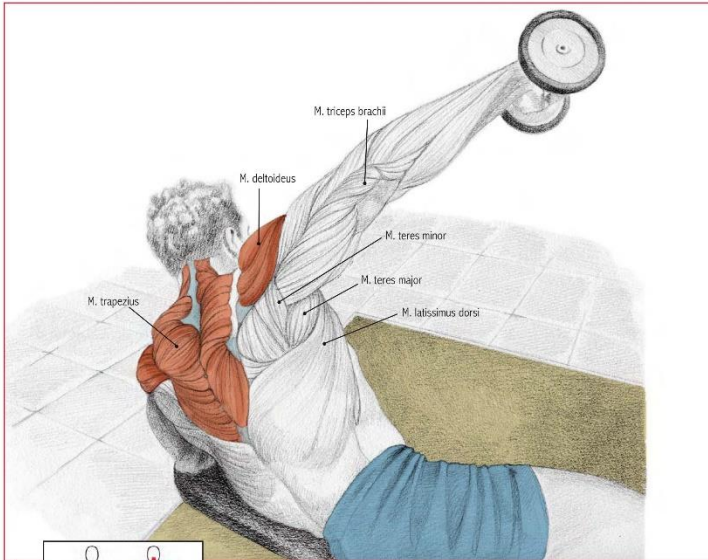
TECHNIQUE
 This is an excellent variant. Lie face down with your chest and stomach on a bench set at a slight incline. The position will eliminate any opportunity to cheat by rocking your body and any uncomfortable (and even dangerous) strain on the lower back. You can work the rhomboids very effectively by doing only the upper part of the movement and raising the dumbbells slightly above horizontal. This is also possible when standing or sitting.



Omuz Bölgesi

8 Shoulders, Free Weights

DUMBBELL LYING LATERAL RAISE



Muscles involved

MAIN MUSCLES: deltoid (rear), trapezius
SECONDARY MUSCLES: deltoid (middle), latissimus dorsi, teres major and minor, rhomboids, triceps, infraspinatus
ANTAGONISTS: deltoid (front), pectoralis major, biceps

VARIATIONS

8.2 ... ELBOW-IN

MUSCLES USED

deltoid (rear), latissimus dorsi, teres major and minor, triceps

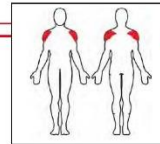
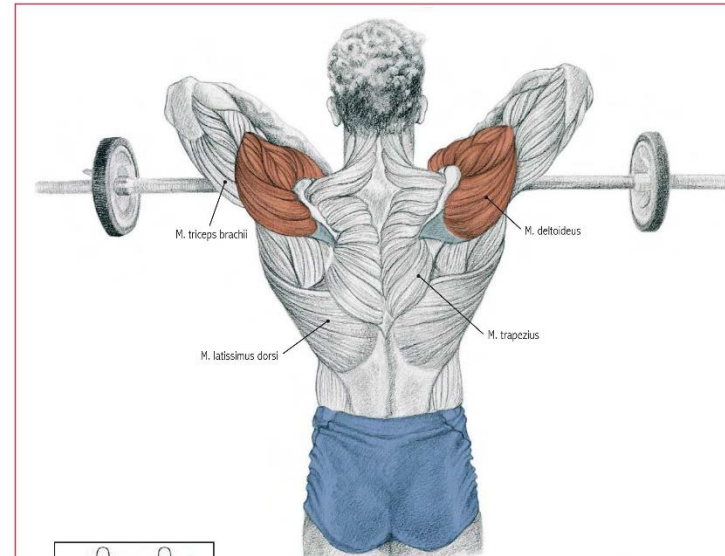
TECHNIQUE

The position is the same as the basic exercise, but the elbow now moves much closer to your body. The advantage is that you can use more weight, although at the cost of involving the lats more. The deltoid muscle holds the arm up almost isometrically, preventing it from resting on your side. This effort can fool you into thinking that it is doing all the work.



9 Shoulders, Free Weights

BARBELL UPRIGHT ROW



Muscles involved

MAIN MUSCLES: deltoid
SECONDARY MUSCLES: trapezius, levator scapulae, supraspinatus, biceps, forearm flexor muscles, rhomboids, lower back muscles
ANTAGONISTS: latissimus dorsi, pectoralis major, triceps

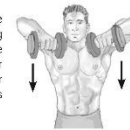
VARIATIONS 9.2 ... WITH DUMBBELLS

MUSCLES USED

deltoid, trapezius (upper)

TECHNIQUE

This is the same as the basic exercise, but using dumbbells instead of the barbell. The shoulder workout does not differ substantially in this variant.



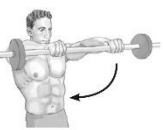
9.3 ... WITH FRONT RAISE

MUSCLES USED

deltoid, trapezius (upper)

TECHNIQUE

The movement is the same until you reach the neck. From here you need to extend the barbell forward and lower it in an arc (the front deltoid contracting as it extends – eccentric contraction). This change does not increase the workload for the trapezius, instead it shifts it onto the front part of the shoulder. Imagine adding the second part of the Dumbbell Front Raise (Ex. 6). However, a powerful isometric contraction of the lower back muscles is necessary to maintain the position.

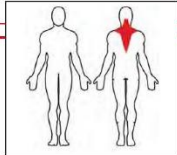
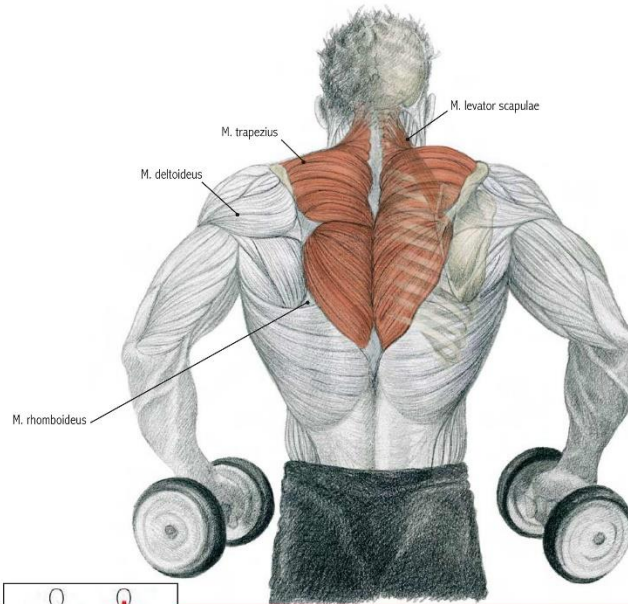


Omuz Bölgesi

10

Shoulders,
Free Weights

DUMBBELL SHRUG



Muscles involved

MAIN MUSCLES: trapezius (upper), levator scapulae
SECONDARY MUSCLES: rhomboids, trapezius (middle), deltoid, supraspinatus
ANTAGONISTS: pectoralis minor, trapezius (lower), pectoralis major, latissimus dorsi

VARIATIONS 10.2 ... ROTATING

MUSCLES USED

trapezius (upper), levator scapulae

TECHNIQUE

This is virtually the same as the basic exercise explained above, but with a circular movement of the shoulders (forward or backwards) as you raise and lower them. You should use less weight in this variant, which is in any case not essential for working the trapezius effectively.



VARIATIONS 10.3 ... WITH BARBELL

MUSCLES USED

trapezius (upper), levator scapulae

TECHNIQUE

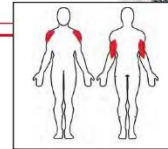
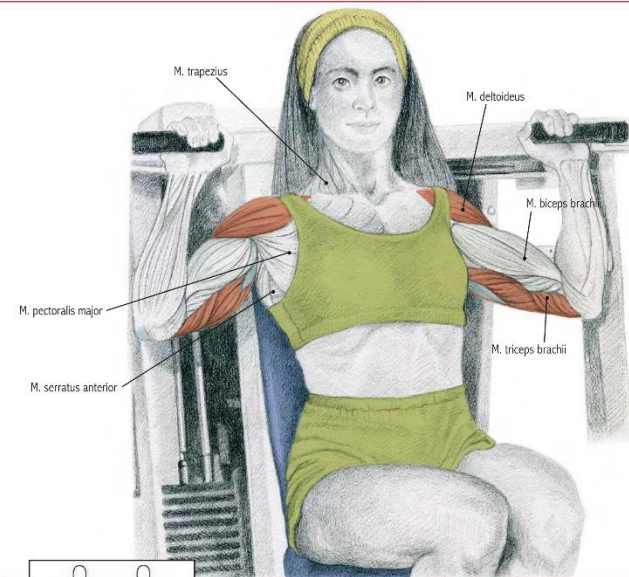
Instead of dumbbells, hold a bar in front of your waist or behind your back. This could also be the bar of a Smith machine or certain bench press machines, a row machine, and so on. The principles and movements are the same as in the basic exercise and the main reason to change is to break up your routine and add a little variety. At the same time, you will benefit from certain minor differences in the angles of the workout. However, dumbbells are the best fit for a natural grip.



21

Shoulders,
Machines

MACHINE SHOULDER PRESS



Muscles involved

MAIN MUSCLES: deltoid (front, middle), triceps (except long head), supraspinatus
SECONDARY MUSCLES: deltoid (rear), pectoralis major (upper), trapezius (upper), biceps (long head), serratus anterior, triceps (long head)
ANTAGONISTS: latissimus dorsi, biceps, pectoralis major (lower)

VARIATIONS

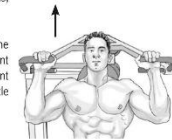
21.2 ... FRONT

MUSCLES USED

deltoid (front, middle), triceps, coracobrachialis, supraspinatus, pectoralis major (upper), biceps (long and short head)

TECHNIQUE

Use the basic position or incline the bench a little more. The movement is the same, but your elbows will come down in front of your body. The aim is to intensify the work done by the front part of the deltoid and the upper part of the pectoral muscle (especially in the first part of the lift).

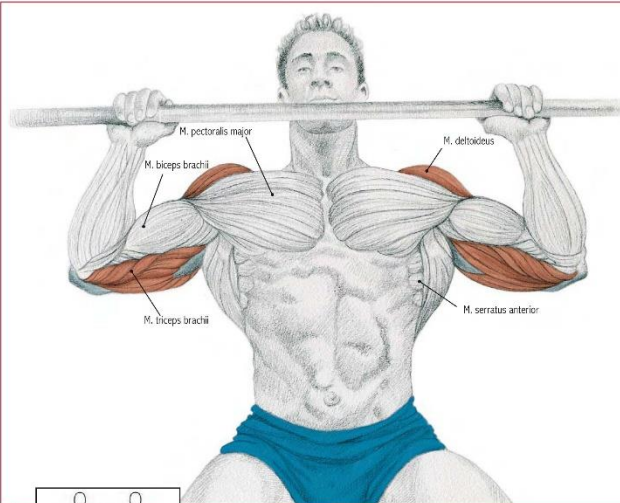


Omuz Bölgesi

22

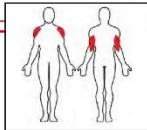
Shoulders,
Machines

SMITH MACHINE MILITARY PRESS



Muscles involved

MAIN MUSCLES: deltoid (front, middle), triceps (except long head), supraspinatus
SECONDARY MUSCLES: deltoid (rear), pectoralis major (upper), trapezius (upper), biceps (long head), serratus anterior, triceps (long head)
ANTAGONISTS: latissimus dorsi, biceps, pectoralis major (lower)



VARIATIONS

22.2 ... BEHIND-THE-NECK

MUSCLES USED
 deltoid, triceps, supraspinatus
TECHNIQUE

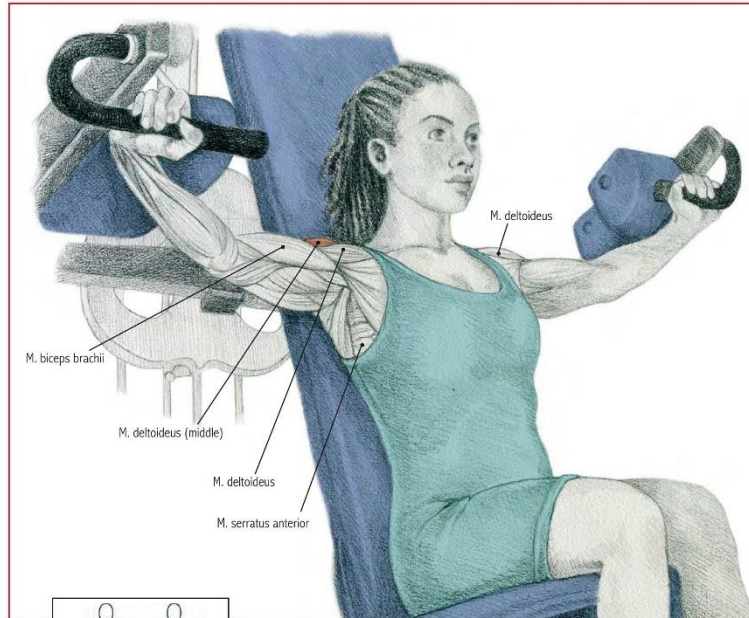
This is almost exactly the same as the Military Press, except that you lower the bar behind your head rather than in front. This means you must set the bench vertically and bend your head slightly forward. Contrary to popular belief, this is not a specific exercise for the rear part of the shoulder. (The arm movement is in fact the same.) It works all three heads (front, middle and rear) very intensively, requiring the greatest effort from the front and middle parts of the muscle. It is trickier than the Front Press and you should therefore use less weight and shorten the downward movement. As in the barbell variant, you need to be careful not to pull your elbows back as you lower the weight.



23

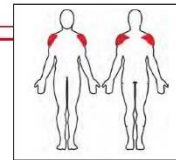
Shoulders,
Machines

MACHINE LATERAL RAISE



Muscles involved

MAIN MUSCLES: deltoid (middle), supraspinatus
SECONDARY MUSCLES: deltoid (front and rear), trapezius and serratus anterior (especially from 90 to 150°), biceps (long head), subscapularis
ANTAGONISTS: latissimus dorsi, pectoralis major (lower), teres major and minor, triceps (long head), biceps



VARIATIONS

23.2 ... ONE-ARM

MUSCLES USED
 deltoid, supraspinatus
TECHNIQUE

The technique is the same as the two-arm basic exercise, but raising only one arm for the entire set or alternating arms.
 There is no change in the muscles involved. However, you should be careful to hold your spine and the rest of your torso steady in position, as in all one-arm exercises. There are no special advantages to be gained from this variant compared to the two-arm version. The design of some machines does not allow you to work only one side. If your machine does, you can pause at the top of the raise (see Ex. 2.4, Alternating Seated Dumbbell Shoulder Press with isometric pause). This provides extra intensity.

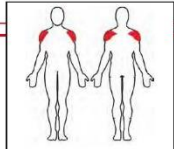
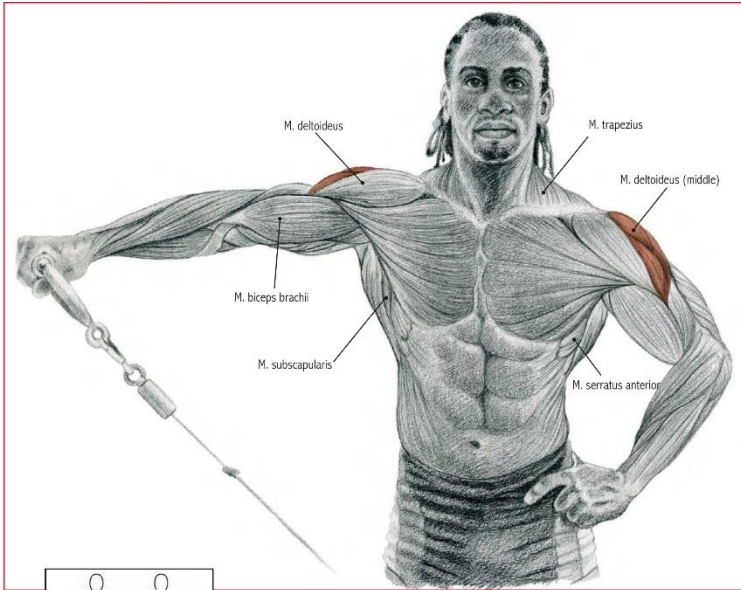


Omuz Bölgesi

24

Shoulders,
Machines

ONE-ARM CROSS CABLE LATERAL RAISE



Muscles involved

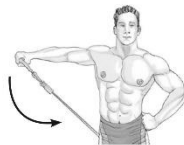
MAIN MUSCLES: deltoid (middle), supraspinatus
SECONDARY MUSCLES: deltoid (front and rear), trapezius and serratus anterior (especially from 90 to 150°), biceps (long head), subscapularis
ANTAGONISTS: latissimus dorsi, pectoralis major (lower), teres major and minor, triceps (long head), biceps

VARIATIONS

24.2 ... BEHIND-THE-BACK

MUSCLES USED
 deltoid, supraspinatus
TECHNIQUE

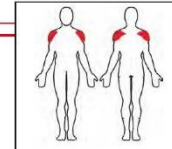
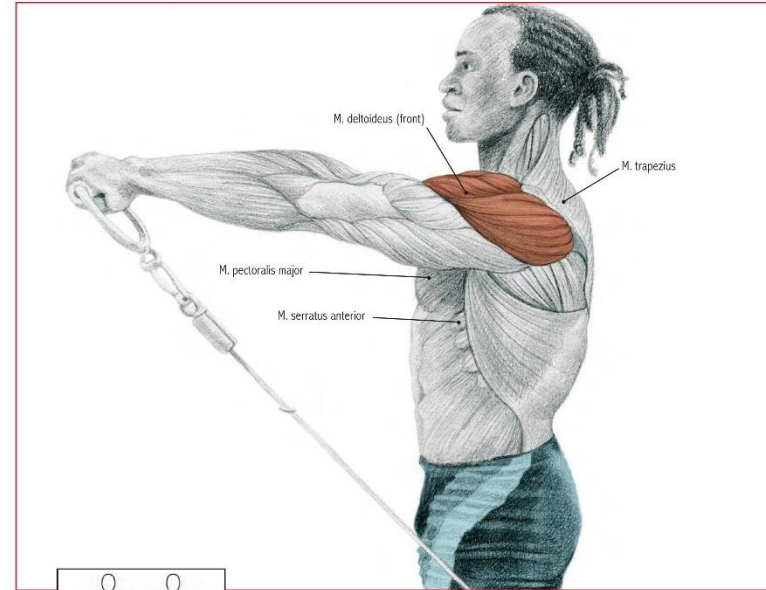
Do the exercise in exactly the same way, but with the cable behind your body. The main difference is greater concentration on the area worked (sometimes), because you cannot let your hand drift forward as you raise the weight. (Your legs would get in the way of the cable.)



25

Shoulders,
Machines

ONE-ARM CABLE FRONT RAISE



Muscles involved

MAIN MUSCLES: deltoid (front), coracobrachialis
SECONDARY MUSCLES: pectoralis major (upper), deltoid (middle and rear), biceps, serratus anterior, trapezius (middle and upper)
ANTAGONISTS: latissimus dorsi, teres major and minor, pectoralis major (lower), triceps

VARIATIONS

25.2 ... TWO-ARM WITH ROPE / BAR

MUSCLES USED
 deltoid (front), coracobrachialis, pectoralis major (upper)
TECHNIQUE

The technique is the same as the basic exercise, but you will be holding a rope or bar with both hands and the cable will run between your legs. Keep your elbows slightly bent. Using two hands will save you a little time, but it puts a lot of strain on the lower back. It is not recommended for people with any problems in that area.

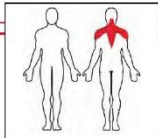
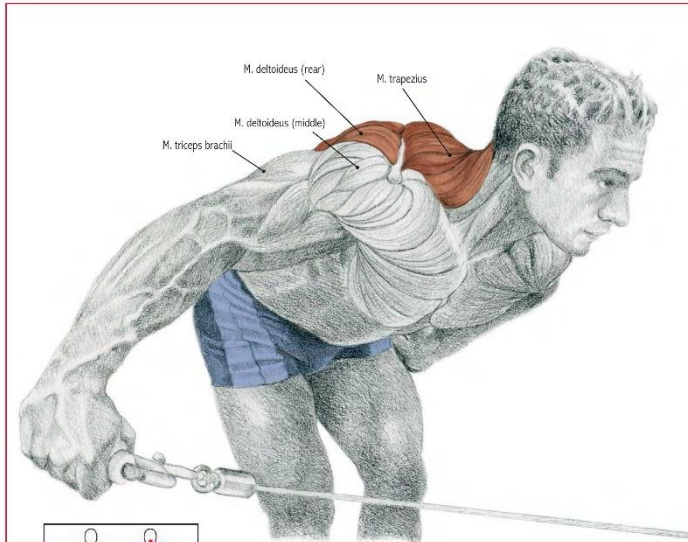


Omuz Bölgesi

26

Shoulders,
Machines

ONE-ARM CABLE REAR LATERAL RAISE



Muscles involved

MAIN MUSCLES: deltoid (rear), trapezius
SECONDARY MUSCLES: deltoid (middle), latissimus dorsi, triceps, teres major and minor, rhomboids
ANTAGONISTS: deltoid (front), pectoral muscles, biceps

VARIATIONS

26.2 ... STRAIGHT-ARM EXTENSION

MUSCLES USED

deltoid (rear), latissimus dorsi, teres major and minor, triceps

TECHNIQUE

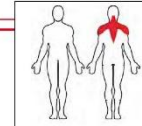
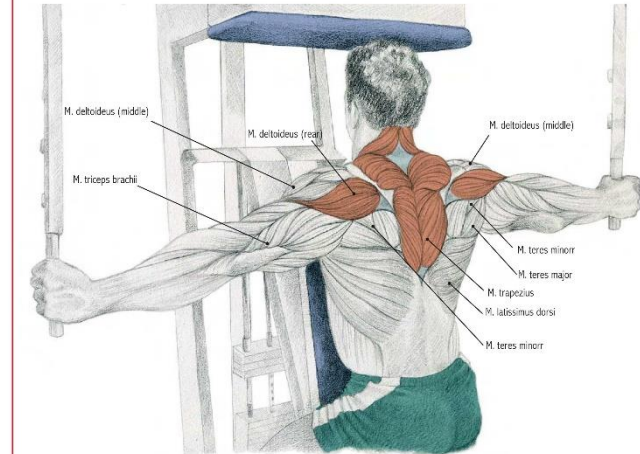
The position is similar to the equivalent dumbbell exercise (Ex. 8.3). Face the cable pulley and stop back with the foot on the side worked. Pull backwards on the grip, keeping your arm straight and close to your torso. The lats do a lot of the work, as when using dumbbells. The movement can also be done with two arms using a rope or bar.



27

Shoulders,
Machines

SEATED MACHINE REAR LATERAL RAISE



Muscles involved

MAIN MUSCLES: deltoid (rear), trapezius
SECONDARY MUSCLES: deltoid (middle), rhomboids, latissimus dorsi, teres major and minor, triceps
ANTAGONISTS: deltoid (front), pectoral muscles, biceps

VARIATIONS

27.2 ... PEC DECK

MUSCLES USED

rhomboids, deltoid (rear), trapezius

TECHNIQUE

This is similar to the basic exercise, but using a pec deck machine. Sit backwards on the machine with your chest resting against the seat back and your arms at a 90° angle to your body. Depending on the design of the machine, you may be able to rest your elbows against the pads designed to be used for the forearms in the chest exercise. Contract your rear deltoid (although this will always be a partial movement). You do not need to use the pec deck if your gym has a purpose-designed machine for the rear deltoid. However, it should not be ignored if you want to work the rhomboids and neighboring muscles involved in short movements and the final part of drawing your shoulder blades together (see the next variant, Ex. 27.3).



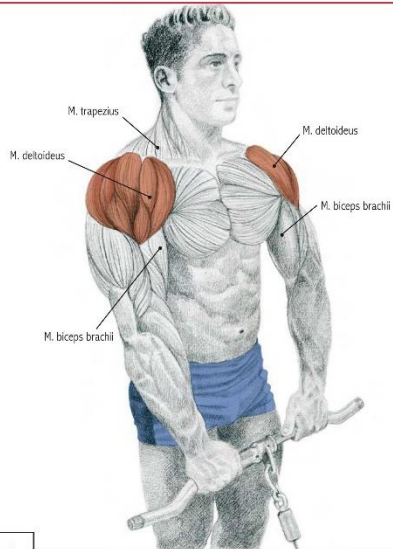
150

Omuz Bölgesi

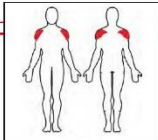
28

Shoulders,
Machines

CABLE UPRIGHT ROW



Muscles involved



MAIN MUSCLES: deltoid
SECONDARY MUSCLES: trapezius, levator scapulae, supraspinatus, biceps, forearm flexor muscles, rhomboids, lower back muscles
ANTAGONISTS: latissimus dorsi, pectoralis major, triceps

VARIATIONS

28.2 ... LYING

MUSCLES USED
 deltoid, trapezius (upper)
TECHNIQUE

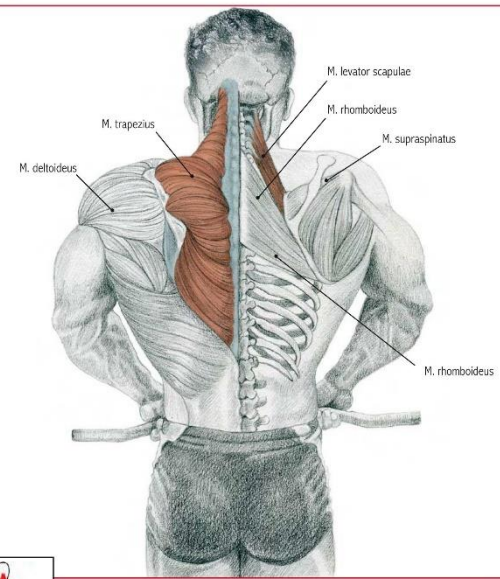
The movement is the same as the Upright Row, but you lie down with your feet toward the cable pulley. This immobilizes your torso and takes strain off the lower back. The only problem may be that your cable machine is designed in a way that will not allow you to lie down.



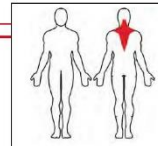
29

Shoulders,
Machines

CABLE SHRUG



Muscles involved



MAIN MUSCLES: trapezius (upper), levator scapulae
SECONDARY MUSCLES: rhomboids, trapezius (middle), deltoid, supraspinatus
ANTAGONISTS: pectoralis minor, trapezius (lower), pectoralis major, latissimus dorsi

VARIATIONS 29.2 ... SMITH MACHINE

MUSCLES USED
 trapezius (upper), levator scapulae
TECHNIQUE

The position and movement are the same as for Cable Shrugs. Using the Smith machine may allow you to load up more weight. You can hold the bar either in front of your body or behind. The difference between the positions is minimal.



29.3 ... WITH FRONT RAISE

MUSCLES USED
 deltoid (rear), trapezius (upper), levator scapulae
TECHNIQUE

The starting position is much the same as for the Cable Upright Row (Ex. 28), and this exercise could in fact be considered a variant. When you reach the top of the movement, however, you extend your arms horizontally, lowering the weight with your elbows almost straight. This involves contracting the front deltoid when it is extended in the downward movement (eccentric contraction). It does not work the trapezius any harder or more specifically.

