chest

The chest has **three parts: upper, middle and lower. the middle and lower portion make up 80% of the mass of the chest, so it makes sense to focus on working these portions with a greater number of sets in flat bench presses/ splits than in inclined ones.**

to train it we must do 2 types of movement: 1. bench presses and flat splits (priority) 2. bench presses and inclined splits

additional note:

the chest has a greater mechanical advantage when it is stretched, so movements such as dumbbell presses where the peak of resistance is in the stretched position will be more efficient for working the chest than movements such as machine presses or peck deck where the peak resistance training prioritizes the deltoid.

shoulder

The shoulder has 3 parts: anterior, middle and posterior. almost all of them are responsible for abducting the arm, so they will work on a lateral elevation, with the most recruited being the middle part.

to train it we must do 2 types of movement: 1. lateral elevations (priority) 2. developments

additional note:

in a development the lateral part has a greater mechanical advantage up to 90º, from 90º upwards the one with the greatest advantage is the anterior one, so only the development from 90º upwards.

trapeze

The trapezoid has 3 parts: upper, middle and lower. however, functionally the three have the same main action. This main action is scapular retraction, being the only movement necessary to fully develop the trapezius.

to train it we must do 1 type of movement: 1. rowing with a pronated grip or scapular retractions (priority)

additional note:

If you choose to row for trapezius, you will have to do unnecessary direct work afterwards (unless it is a priority of yours). otherwise, if you opt for scapular retractions, I suggest you include a movement towards the back of the shoulder as a reverse opening in the machine.

dorsal

the dorsal has 3 parts: the upper, middle and lower. In practice we can add the last two. the upper part will be heavily used in pull-ups or rows with the arm in front of the body, while the middle and lower part will be used in pull-ups with the arm at the side of the body.

To train it, we must do 2 types of movement: 1. pull-ups or pull-ups with a pronated grip (priority) 2. pull-ups/lifts or rows with a neutral and supinated grip

additional note:

If we want to give more emphasis to the middle and lower portion when pulling with a pronated grip, we can still

use an elastic band to make the movement more difficult in the contracted position, where both are more recruited.

biceps

Although we call the entire front part of the arm Biceps, we actually have 3 muscles: the biceps, the brachialis and the brachioradialis. the biceps and brachialis are more recruited in an exercise with the peak resistance in the elongated part, such as a Scott Bench curl, while the brachioradialis is more recruited in the contracted part.

to train it we must do 2 types of movement: 1. flexion of the forearm with emphasis on the elongated part (priority) 2. flexion of the forearm with emphasis on the contracted part

additional note:

supination and pronation of the forearm also affects their work, with a supinated grip the biceps have a greater mechanical advantage, with a neutral or pronated grip the brachialis and brachioradialis gain an advantage.

triceps

The triceps has 3 heads, the long, middle and lateral. the long head, which is the most voluminous near the armpit, is more recruited when we have our arm down next to our torso, while the middle and lateral head are more recruited when our arm is making an angle of 90° or more with the our trunk.~

to train it we must do 2 types of movement: 1. extension of the forearm with the arm next to the torso (priority) 2. extension of the forearm with the arm at 90º or more to our torso

additional note:

the middle and lateral heads are already heavily recruited in bench presses and overhead presses, hence the priority is to work the long head of the triceps with direct work.

quadriceps

The quadriceps is a muscle group made up of 4 muscles, the rectus femoris, the vastus medialis, the vastus intermedius and the vastus lateralis. They all extend the leg but the rectus femoris is the only one that is bi-articular and in addition to straightening the leg, it bends the hip (pulls the thigh towards the chest).

to train it we must do 2 types of movement: 1. extensions or substitutes (priority) 2. squats and presses

additional note

the rectus femoris will not be well recruited in movements such as squats or presses (in which it will act as an antagonist to hip extension) and for its good development it will be necessary to include movements that only extend the leg or only flex the leg. hip, hence the priority is extensors and substitutes such as reverse nordic curl or sissy squats.

later

The hamstrings are a muscle group made up of the biceps femoris, the semimembranosus and the semitendinosus and they all perform both hip extension and leg flexion. Hip extension movements will better work the part closest to our butt, leg flexion in

whichever flexor is closest to our knee.

to train them we must do 2 types of movement: 1. leg flexion (priority) 2. hip extension like Romanian deadlift or lumbar extensions at 45º

additional note:

internal or external rotation of the leg will influence their work. If we rotate the leg internally we recruit the medial posteriors better, if we rotate the leg externally we recruit the lateral posteriors more.

glute

The gluteus has two parts, the lower part that will mainly extend the hip and the upper part that, in addition to extending the hip, will externally rotate the thigh and abduct it.

to train it we must do 2 types of movement: 1. pelvic elevations (priority) 2. abductors

additional note:

in the 3 movements, hip extension, external rotation of the thigh and abduction of the thigh, the glute has a greater mechanical advantage in the most contracted position of the movement and for this reason it makes sense when selecting movements to prioritize those that have a peak of resistance in this position such as pelvic lifts with a bar instead of pulley kickbacks. ~

twins

the calves are a muscle group called triceps surae that we can divide into 2: the soleus and the gastrocnemius (what we normally refer to when we say calves).

to train them we must do 1 type of movement: 1. any plantar flexion (priority)

additional note:

both are heel flexors but the gastrocnemius are also knee flexors, which raises the hypothesis that we can preferentially work the Soleus in movements in which the leg is bent like the seated calf machine, but recent studies indicate that in its entirety The Triceps Surae develops best in plantar flexors with straight legs.