

Anatomy 101 MUSCLE GROUP: RHOMBOID MAJOR AND MINOR

Article by Marie-France Hebert in CALA's Newsletter



Living in a world that is constantly changing and evolving, it is good to know that at least one thing does not change as fast as everything else: our anatomy! Anatomy is not a scary topic. As an aquafitness instructor, you do not need to know the name of every bone and muscle in your body in order to create safe, fun, and well-balanced workouts. Knowing the basics, however, will help you become more aware of how the body moves; it will also increase your confidence level when using anatomical terms while teaching a class.

MUSCLE GROUP:

RHOMBOID MAJOR AND MINOR Location: Upper-middle back

Description:

Two rectangular muscles located underneath the trapezius. The rhomboid minor is the superior muscle. They originate, respectively, from the 6th and 7th cervical vertebra, and from the first 4 thoracic vertebra to the medial (inside) border of the scapula (see diagram.)

The rhomboids, along with the middle fibers of the trapezius, are shoulder girdle adductors. They help draw the scapula toward the spine, while supporting it and drawing it upward; they also play a big role as one of the key stabilizers of the scapula. They have been called 'postural muscles,' because they pull the shoulders back, when contracted. This action opens the chest and straightens the back - resulting in good alignment.

Question: How do we focus on these muscles?

Answer:

- Use the supine hand position (palm facing up as if you are holding 'soup' in the palm of your hand) and/or keeping an external rotation at the arm.

Exercise:

- Horizontal shoulder joint abduction (same as shoulder girdle adduction) of the arms in a standing position.

Starting position:

- Stand with feet on pool bottom, with one foot in front of the other, to stabilize the body.
- Keep pelvis in a neutral position, with a long spine and shoulders back and down.

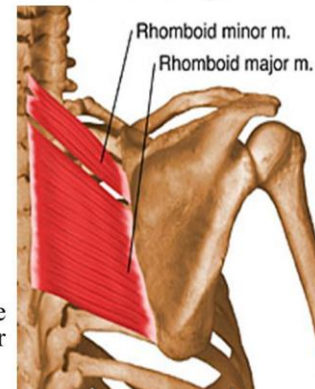
Rhomboids Minor and Major

Origin:

- Minor: Spinous Process of C7-T1
- Major: Spinous Process of T2-T5

Insertion:

- Minor: Root of the Spine of the Scapula
- Major: Between the Root of the Spine of the Scapula and the Inferior Angle of the Scapula



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- Activate the abdominal muscles - all 4 of them.
- Flex shoulders and lift arms to chest level. Keep arms and hands under the water.

Action:

- Open the arms (horizontal shoulder joint abduction/shoulder girdle adduction) while keeping hands in a half-supine position until the hands and the elbows are just past the shoulder line.

Hand options:

- Hands are in an open ('flat hand' or closed ('fist') position.

Explanation:

- It is difficult to perform this exercise correctly while keeping a round back; therefore, it is imperative that the spine is erect with a level pelvis and open chest. If the thumbs are facing up throughout the exercise, the rhomboids will be solicited at the end of the movement. The same exercise, performed with the thumbs facing down, allows those with poor upper-body strength to compensate by using the latissimus dorsi muscles while opening the arms and simultaneously pulling them down and back toward the bottom of the pool.

Variation:

- Start the exercise with arms in a 'T' shape. The emphasis will then be primarily on the retraction phase of the scapula. Remember to cue your participants to contract the abdominals otherwise they may over-arch (hyper extend) their backs.

Application:

- By maintaining perfect posture all day long, the rhomboid muscles will be isometrically activated. The general population has a tendency to round the shoulders and release the abdominals - a good reason to include rhomboid-specific exercises in the aquafitness class. The resistance of water makes it simple to effectively train this muscle group. Add on clear and concise verbal and visual cues and you have the formula for successful exercise execution. This will ensure our participants know not only where their rhomboids are, but also how to use them and why they are an important muscle group in daily living.