

Cardio Combos Added Resistance

Ashley Bishop

Take the mystery out of aquatic choreography and gain a better understanding of Add-On, Pyramid & Pure Repetition choreography styles. These cardio combos are an effective way to add diversity, intensity and FUN to your Aqua Classes! Focusing primarily on Shallow Water formats (with a hint of Deep!) and the inclusion of resistance equipment, these cardio combos provide a full body workout for your aqua fitness classes.

Course Objectives

- ✓ Gain a better understanding of Aquatic Choreography Styles
- ✓ Learn how to effectively add diversity to your Cardio Combos with added Buoyancy
- ✓ Develop teaching skills for low impact and non-impact demonstrations and verbal and non-verbal cueing techniques to lead classes safely and effectively from deck.

Resistance in the Water

Submerged movement (without equipment) experiences resistance in all directions and in all planes because the water surrounds you. Both muscles of the muscle pair must perform concentric muscle actions to affect movement on the joint.

Aquatic Equipment will affect the type of contractions by the muscles and the amount of resistance felt when exercising in the submerged environment. The common aquatic equipment includes Buoyant (Foam Hand Bells or Ankle Cuffs), Drag (Gloves, Drag Bells or Drag Cuffs), Flotation (Belts), Rubberized (Tubing or Bands) and Weighted (Dumbbells or Ankle Weights).

Let's Add Buoyancy!

When adding equipment to choreography, we must be cognizant of the how they will affect movement in the water. For today's purposes, our equipment will be in the buoyancy category as we are using foam hand bars. The foam not only increases the surface area of our upper limbs, but also increases the resistance. As we already know, foam floats in the water. Therefore, using hand bars changes the type of muscle actions as opposed to land.

For example, in a bicep curl on land with a dumbbell, we experience a concentric muscle action (shortening on the muscle) when we flex at the elbow joint (moving against gravity) in the bicep, and an eccentric muscle action (lengthening of the muscle) of the bicep when we extend.

In the water with a foam hand bar, we see the opposite occur. When we flex at the elbow joint we experience an eccentric muscle action at the triceps, and a concentric muscle action when we extend.

The following points above are important because the added resistance is going to affect the speed at which movement can be safely executed, and knowing which muscles are being targeted is important so that we can create an effective full body workout.

Cardio Combos Added Resistance

Ashley Bishop

Tempo Terms

The tempo of the music and the speed at which you execute the movement will have a significant impact on what moves can be included in your combos, and how effective the combos will be for your classes.

Beats: Regular pulsations having an even rhythm

Tempo: The rate of speed at which beats occurs

Land Tempo (LT): Movement at the same speed as on land, where the movement occurs on each beat of music.

Water Tempo (WT): An appropriate rate of speed used in the aquatic environment to allow for slower reaction time and full range of motion in water choreography

*Recommended BPM for Aqua classes 125 - 150 used in half time.

Half Water Tempo (1/2 WT): Water tempo movements with a bounce every other beat, using “doubles” and “bounce centre”.

When creating choreography with foam hand bars, it is extremely important to be aware of the tempo and the transitions. For example, doing a Land Tempo Jog with Land Tempo Arm Curls will not be as affective (nor as practical) as doing a Land Tempo Jog with Water Tempo Arm Curls. It is also important to be aware of how long we are asking our participants to be holding on to the hand bars (isometric muscle contractions in the hand and wrist can be detrimental to people with chronic pain like carpal tunnel syndrome). Be sure to integrate rests and reminders to wiggle the fingers and roll the wrists. Alternating the choreography combos with HIIT segments (any variety that makes sense for your population) is also a fun way to add diversity to your class and to alleviate strain in the wrists.

CHOREOGRAPHY

Often when people hear the word “choreography”, they picture intricate dance routines that are not compliant with what they want to bring to their classes. Instructors often say: “I can’t” or “I don’t” do choreography. In this session, we will see how simple and effective choreography can be, and how attainable it is for everyone to bring to their classes

Choreography: The arrangement of a series of movements.

Component/Move: The smallest part or segment in choreography.

Pattern/Combination: Two or more moves linked together to form a repeatable sequence.

Choreography Styles or Types: Different ways of linking together moves or patterns either in sequencing, number of repetitions, or both

We are going to review some of the basic principles of Aquatic Exercise. For more information on the content below, please reference your AEA Aquatic Professional Manual. The most current edition of the manual can be purchased online at www.aeawave.com

Cardio Combos Added Resistance
Ashley Bishop

Choreography Types

AEA lists five types of choreography in their Aquatic Professional Manual:

- **Linear Progression or Freestyle** - Series of moves performed without a predictable pattern.
- **Add-On** - One move is established (A), another move is taught (B) and then added on to the first (A-B). More moves can be added to develop a simple or intricate combination.
- **Pyramid** - The number of repetitions for each move in a combination is gradually decreased or increased.
- **Pure Repetition or Patterned Choreography** - A set pattern of moves is taught in final form.
- **Layer Technique** - A pattern is taught via pure repetition, add-on or pyramid choreography, and then changes are gradually superimposed; moves are replaced with other moves one at a time in the pattern.

Today you will be seeing some of these choreography types demonstrated in the pool. A PDF with the choreography notes will be made available to you after the session. Remember you are the best person to know what will make sense in your pool for your population. Take these combos and make them your own! And always try to get in the pool whenever you can to practice them first!

References

AEA Aquatic Fitness Professional Manual Sixth Edition (2010) Pages 140 - 142, 160 - 167, 172 - 173, 373-375.

ACE Personal Trainer Manual Fifth Edition (2014) Page 167 - 168.