

WHY ADD EQUIPMENT?

Adding equipment to your workout can be a great benefit to your participants. Equipment provides an opportunity to add variety to your program to challenge the workout, or to allow participants to enjoy the workout with a child's enthusiasm, and it can be used as a means to attract new participants to your class. However having equipment at poolside does not mean that it is suitable for all participants and all classes.

Most aquatic classes contain a variety of participants of varying age groups, skill levels and personal goals. Instructors must choose appropriate movements to target the intended purpose and goals of the clientele. Making sure that you have a good balanced program is as important in water as it is on land. It is also essential that you do not just "drop" land movements into the pool. All movements should be evaluated for safety, effectiveness and exercise objective. The components of your program (Buoyancy warm -up, CV Warm up, cardiovascular conditioning, muscular conditioning, and warm down,) should promote a healthy, injury free body that works all the components of fitness.

Physical fitness incorporates a combination of flexibility, cardio respiratory endurance, muscular strength and endurance, agility, balance and coordination. Well-conditioned muscles allow movement that will improve aerobic capacity. Improved aerobic conditioning allows people more efficient mobility for daily activities.

In water, it is normal for the upper body muscles to fatigue quicker than those in the legs, especially in the untrained person. A participant with a strong cardiovascular system on land may not have sufficient muscular strength for sustained muscular activity in the water making it difficult to get good cardiovascular training. The multidirectional resistance of water makes it simple to train for strength throughout a workout. As the muscles become stronger overload, using equipment, can be added to the program to develop every component of fitness.

Therefore it is important to train participants the correct movement both for basic cardio movement and muscle targeting and stretching prior to adding equipment to a program, and most importantly pace themselves through this learning process and throughout a total workout

DIFFERENCES BETWEEN BUOYANT AND RESISTIVE EQUIPMENT

...The main difference is control.

Resistive Equipment is initially easier to handle because the water is not fighting to push it to the surface. Some of this type of equipment such as mitts can be used for balance whereby the participant can press the hands into the water and feel the water support the body as if leaning on a table. Most pieces of resistive equipment allow intensity adjustment than can be modified from light to heavy. Most can be used to improve flexibility as well as strengthening exercises.

When using Resistive equipment for upper body strengthening it is easier to keep it under the water and maintain control through both the work and rest phase of the movement. This allows for better body alignment and less stress on the shoulders. The work phase can be powered through good ROM while the return phase can be slowed to allow good positioning for the next repetition.

Using resistive equipment on the lower body creates more work for the muscles in the legs and abdominal core. However, because we are training in the water for life on land, which requires "leg power" it is extremely functional exercise for daily activities.



RESISTIVE EQUIPMENT:

Aquatic Mitts :The primary purpose of a mitt is to aid in balance and body support. By increasing the surface area of the arms, the body is more balanced with the surface area of the legs. The secondary purpose is to increase upper body resistance by using the webbing area to power the targeting move and slicing on the relax phase.

Resistive Flex Paddles offer an opportunity to provide overload for upper body muscular strengthening work. The flex paddles offer 5 levels of progression and should be added only when the participant is ready to progress strengthening exercises. The biggest feature of resistive paddles is that the shoulder is easily submerged to perform upper body strength because the water does not lift it up. This helps to prevent injury such as impingement on the shoulder. A paddle can be used for scapular stabilization exercises and lower body work can be performed by dragging the paddles to create resistance. Participants should be trained to hold a paddle lightly so that palmar circulation is not cut off. There are quite a few ways to hold the paddles to support a neutral wrist position.

Hydro Resistance Arm Boxers The boxer allows multi-directional upper body resistance. The hand can be placed inside the equipment keeping the wrist in line and the hand free from gripping. It can also be held from the opposite end (by the handle) to increase the resistive area. The resistant design does not aggravate the shoulder (by impingement) or wrist (carpal tunnel problems). The Boxers provide a good "in-between" intensity when moving up from mitts to more resistive or buoyant equipment.

Hydro Resistant Leg Kickers work on lower body strengthening or cardiovascular training by creating extra drag. Directional resistance allows the legs to assume a natural position while in drag motion. The equipment sinks so it does not aggravate knee problems (as opposed to buoyancy equipment that can float up and compress the knee). The equipment allows ease of movement in both shallow and deep depths.

An aquatic fitness step provides challenge in terms of balance since it requires the individual to change water depth. Steps allow for increased range of motion for lower body movement and increase stabilization requirements for dynamic balance. Aquatic stepping can help the participant to simulate functional needs such as stair climbing (both ascending and descending), balancing on uneven surfaces, learning to shift & adjust balance, as well as learning to recover from falling in a safe environment. Speedo is not manufacturing the step anymore - however if you look hard - some facilities are not using them (as they obviously don't understand the features and benefits) as well programming on steps requires an instructor to have more skills and experience.

Resistance Bands may be used both on land and in the water. The use of this piece of equipment may be learned in the water, and then taken home for ongoing strength training. Bands provide overload, especially as range of motion increases. They can be used to tether a fragile person in the water for safety without specifically holding them or for balance to train fast twitch muscle fibres. Fit bands may yield more range of motion and safety however tubing has more longevity. There are features and benefits to both but realize that if you make a resistance too tight (or don't have enough range of motion) the strength benefits may be compromised. Not all individual's may use tubing as it is "tougher". Also, resistance bands, although easier to work with need more care. They generally get mouldy if not properly cared for.

