

The Fitness Journal

a newsletter for personal trainers and aquatic instructors

Management and Staff Development Focus of New Training Courses

What's inside ...

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Next time ...

Getting prepared for the summer season ... preview of the IAFC 2005... more personal trainer tips

March is already upon us. It is that time of year that we start finalizing our plans for summer programs. It seems as if summer will be here before we know it.

As always, we have been busy securing new vendors. We are working on finalizing an agreement with a new vendor to supply us with fitness swim wear at a lower cost as well as everything you need from a life guard's point of view. We are excited about this new partner.

We have also received approval for two more workshops. The first is Building a Marketing Machine which will focus on various strategies employed to market aquatic programs. We will cover topics that include marketing the aquatic industry, facility programming and your-



self. Learn how to give your programs credibility through various marketing techniques. Gain that competitive edge through marketing. Learn how to make any program successful through proven techniques for the fitness industry. This course is approved for 2.0 CEC's through AEA.

The second course is Departmental Development Training. This course offers a weekend staff development training program. This program will be customized to your staff and facility needs. We will meet with the department

Common Questions about Strength Training in the Water

By Judi Powers, M.S.

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head and any other employees to put together an agenda based upon the needs of the program. Some of the topics include:

- Program development
- Staff evaluations and training
- Risk Management
- Marketing
- Choreography
- Management
 - ◆ Hiring
 - ◆ Training
 - ◆ Administration

This program is offered to facilities for a flat fee regardless on the number of employees that attend. This is one of the most beneficial and cost effective programs out there for facilities and employees. This course has been approved for 6.0 CEC's through AEA.

Another vender we have reached an agreement with is Fitness Learning Systems. They allow us to bring you a variety of CD-ROM CEC courses with CEC credits from AEA, ACE, and NSCA. As always, we are excited about this opportunity to bring you a high quality of educational resources.

I want to thank everyone for their desire to learn and bring the highest level of programming to their clients and classes. Please keep up the good work and never stop learning. ♣

Q. Can I strength train in the water?

A. "Strength is the maximal amount of force a muscle or muscle group can generate in a specified movement pattern at a specified velocity of movement," states Knuttgen and Kramer, 1987. To produce this type of action you must overload the system (the specific muscle or muscle group) by asking it to do more work than it normally does. By doing this with adequate resistance for a sustained period of time your muscles will grow stronger and adapt to the changes. In the water, you must use equipment or movement patterns that utilize the water's resistance to generate a reasonable force that the muscles must overcome. If this is accomplished, then you can effectively strength train in the water.



Q. Why don't I have sore muscles the next day when I strength train in the pool?

A. The muscle contractions that take place in your aqua exercise class when you move your joints are called "Isotonic Contractions". These movements in isotonic contractions are part of a two-phase system called concentric and eccentric contractions. The concentric contractions occur when the muscle fibers shorten against the force or a "positive contraction". The eccentric contractions occur when the muscle fibers lengthen (towards the muscles resting length) with the force. Sometimes called a "negative contraction". I call it "putting on the breaks". When you exercise in the water there is resistance all around us. So, whenever you move (without buoyant equipment) the muscles are doing only concentric contractions. Researchers have found that the "Eccentric-only training does produce more muscular soreness than concentric-only training, especially during the first few weeks of the program" (Atha 1981; Carpinelli and Gutin 1991).

Q. Will my muscles turn into fat when I stop strength training?

A. Muscles and fat tissue (called adipose tissue) are two totally different types of tissue. Muscles cannot turn into another type of tissue, but the term "use it or lose it" is very true in this case. If the muscle is not

pushed and expected to work, it will begin to “atrophy”, which refers to the shrinking process of the muscle fibers. With an increase in muscle fiber you will increase you need for more energy. In the long run you will probably see a change in your body composition (the ratio of your lean body weight to your fat weight) with increases in muscle and decreases in fat weight.

Q. Will strength training cause me to build larger than normal muscles?

A. The enlargement of the size on your muscle is called “hypertrophy”. The amount you will hypertrophy is dependent on the level of the hormone testosterone in your system. Women have lower levels of testosterone than men and they will not hypertrophy to the extent that a male can. Most “Body Builders” train for hypertrophy and not strength. “One study concludes that changes in limb circumference do not necessarily accompany increased strength” stated Fleck and Kramer.

Q. Why should I strength train?

A. There are many advantages that strength training provides. Researchers have found participants who strength trained had an increased resting metabolic rate, bone density, and lean body mass. Strength training has also been proven to help you control your weight, reduces the risk of injuries, prevents lower back pain, increases functional living, and slows down the aging process.

Q. How do I start strength training?

A. The guidelines for muscular fitness established by the American College of Sports Medicine are: one set of 8 –12 repetitions to near fatigue of eight to ten exercises for the major muscle groups of the body for two to three times per week. Remember to go to “volitional muscular fatigue” at the end of each set to get the most effective results from your training session. You should feel the muscles working at the end of your tenth repetition.



Risk Management: The Basics

Risk management can best be described as the process of analyzing exposure to risk and determining how to best handle such exposure. As instructors and trainers, we are constantly engaged in "risk management". We are always looking at possible hazards and safety concerns for our participants. I want to talk about several of these "areas of concern". We will mention the areas for you to

develop protocols for handling them.

The first one I want to talk about is the pool deck. What is the condition of the deck? Is there a lot of clutter on deck or is there a clear area for participants to get into the pool and the instructor to teach from? So many times, I see cluttered pool decks around the instructor or pool entrance for the participants. We want to

make sure that the deck is clear of any obstructions. Also, please make sure as the instructor that you are not teaching on a slick surface or yelling during class. Many facilities have poor acoustics and you need to protect your voice.

Another area that I see all too often is mistakes with stereo safety. I could not begin to tell you how many times I have seen electrical extension cords lying on the pool deck where water could reach them. Just in the last month, I saw

a class being taught where the connection at the extension cord was under about a ¼ inch of water. When the instructor noticed it and moved the cord, the entire stereo shorted out. This could have been a really bad situation. Please make sure those connections are well out of the reach of the water.

A very real and scary situation I have encountered is emergencies in the pool area. Where is the nearest phone and what is your facility emergency procedures? You should be aware of these emergency procedures. Too often, we are the only staff members in the pool area during classes and with clients. We need to be ready to respond to any situation.

One of the most common areas I see that needs to be addressed is education. Instructors and even some trainers that do not know what they are doing in the water. They are working different muscles that they think because of the equipment being used or having participants doing contraindicated exercises for the clientele. It is important for instructors/trainers to know how to use the equipment and how that equipment affects the body.

Another common error I see from both instructors and trainers is not knowing the temperature and chemical readings in the pool before their workout. The temperature of the water can have an affect on the type of class or training session you do that day. It may also force you to not workout in the water at all. Now, the chemicals are a bit more serious. If the chemicals are outside the recommended limits, you could be placing your participants in serious harm. This is a much more serious



Lightning's behavior is random and unpredictable. We recommend a very conservative attitude towards it. Preparedness and quick responses are the best defenses towards the lightning hazard.

Swimming pools are connected to a much larger surface area via underground water pipes, gas lines, electric and telephone wiring, etc. Lightning strikes to the ground anywhere on this metallic network may induce shocks elsewhere.

The National Lightning Safety Institute recommends the following swimming pool safety procedures:

- Designate a responsible person as the weather safety lookout. That person should keep an eye on the weather. Use a "weather radio" or the Weather Channel or other TV program to obtain good localized advanced weather information.
- When thunder and/or lightning are first noticed, use the Flash-To-Bang (F-B) method to determine its' rough distance and speed. This technique measures the time from seeing lightning to hearing associated thunder. For each five seconds from F-B, lightning is one mile away. Thus, a F-B of 10 = 2 miles; 15 = 3 miles; 20 = 4 miles; etc. At a F-B count of thirty, the pool should be evacuated. People should be directed to safe shelter nearby.
- Pool activities should remain suspended until thirty minutes after the last thunder is heard. The distance from Strike A to Strike B to Strike C can be some 5-8 miles away. And it can strike much farther away. Why take a chance with lightning?

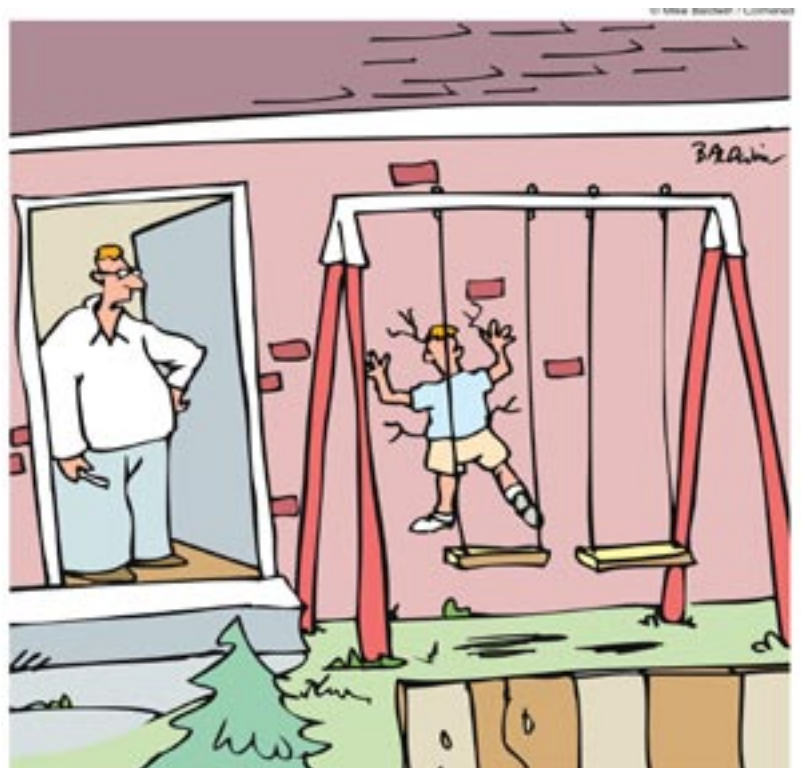


National Lightning Safety Institute, Louisville, CO

problem with indoor pools. Please take the time to check the levels before each session.

The last thing I want to remind you about is lightning and pools. The rule for pools when lightning is around is the same for indoor and outdoor pools. Please do not fall into the thought process that you are safe in an indoor pool. I have heard of too many indoor pools being struck by lightning or pools being shocked by lightning striking the building. Review the guidelines above and please error on the side caution when dealing with lightning.

All of these can result in injury to the instructor and/or participants. Anytime a participant is injured in one of your programs, you are at risk of being sued. What we need to do is try to eliminate any possible hazard that could lead to injury and a law suit. Like I mentioned before, most of it is common sense and the rest is just staying current and continuing your education. So, the next time you go to work, look for possible hazards. I would be willing to bet that there are some that you have not thought of. 'Y



"See? I told you our yard was too small for a swing set."

Choreography: Simple Combinations — Part 1



Good choreography is an essential tool in keeping classes fun and students motivated.

I want to take the time this month to do something I very rarely do...give out choreography. One thing to remember about any choreography, not all choreography is going to work for all teaching styles and populations. But, most choreography can be adapted and changed slightly to fit a wide range of teaching styles and populations.

What I want to do is give you one combination this month. This combination is usually done at water tempo and around 135-145bpm.

1. Jogging with knees and arms in front-16 cts
2. Jogging with knees to the side and arms swing side to side-16 cts.
3. Pendulum in place- 16cts
4. Pendulum traveling forward- 16cts
5. Single leg kicks to the side in place- 16 cts *
6. Pendulum traveling forward- 32 cts *
7. Pendulum in place in 3's - 32 cts

8. Pendulum in 3's with side karate kick- 32 cts
9. Pendulum backwards- 64 cts
10. Single leg kicks to the side in place- 32 cts *
12. Center bounce- 16 cts

* **We are adding a squat (with an arm curl in front) between each side kick.**

This combination works well with a class that is used to choreography. Sometimes, I will alter the counts in some segments for a class of new participants or participants less familiar with choreography.

Remember, if you choose to use this choreography, you need to modify it for your classes and your teaching style.

I hope you enjoy it and look forward to more combinations in future issues. Please let me know if you have any questions. 🙋

Cross Training in Water and How It Can Improve Land Performance

By: Ronda Brodsky

Have you started cross training as the craze continues to soar? Cross training is usually two or more types of exercises performed in one workout or used alternately in successive workouts while blending or combining a series of different workouts. It can be a series of different activities that are used in your workout as you alternate between activities. Aquatics activities are a stress free method of exercising while utilizing all major muscle groups in addition to the cardio and respiratory system all in one workout.

cross training activities should enhance and not prevent or deter from your aquatic fitness activities.

Using cross training as a motivational tool is an easy thing to do. It rejuvenates your body as it keeps you fresh and helps you fight the boredom of the same routine or exercise over and over. It can help you become more well rounded as it gives you a mental break from the stress of single sport training. Cross training may also allow you to learn a new and different skill and it may

Areas of Cross-Training

Endurance	Strength	Flexibility	Balance
Swimming	Free Weights	Yoga	Yoga
Running/Jogging	Weight Machines	Pilates	Tai Chi
Brisk Walking	Bands/Tubes	Ballet	
Dancing	Calisthenics	Martial Arts	
Cycling	Aqua Exercise	Stretching	
Rope Jumping	Stair Climbing		
Rowing	Pilates		
Cross Country Skiing	Martial Arts		
Stair Climbing			

Over the years many athletes have realized how beneficial cross training can be to your body. Cross training should be used as a method to enhance your total conditioning and your performance as an aquatic fitness leader. You should stick to your aquatic exercise while cross training with other activities. You must also remember that too much of a good thing can hurt you and your training capabilities. If you train on a scheduled rest day your body may not be ready and able to function when it needs to be ready. Your

allow for more flexibility in your workouts. In addition to all of this cross training may help decrease your body fat as you burn more calories. These advantages should help you realize the many benefits of cross training while enhancing your skills as an aquatic fitness leader. You are not leaving the pool or aquatic area but you will enter it every time in a new and fresh light.

There are also many benefits of others to use aquatics as part of their cross training routines. It will keep you interested as you are

adding spice and variety to your workouts. Aquatics will develop your entire body while distributing the training load amongst your entire body in a lower impact environment. If you are or you do get injured you are in luck as most of the time you may still train in the water. The water has a cushioning impact as you cross train in the aquatic environment.

Benefits of Cross Training:

- Aerobic endurance: maintenance of aerobic capacity without some repetitive motions
- Anaerobic endurance: gains through intermittent high intensity workouts
- Injury Rehab: by using muscles other than those injured low impact helps you maintain aerobic fitness
- Injury Prevention: allows more muscles to share training stress and it helps to prevent overuse injuries.

Cross training should not be and is not intended to replace any exercise but to enhance it. As an aquatic fitness leader cross training helps to keep us refreshed and motivated. You should also allow for at least one day per week to be set aside as a rest day. Prior to your teaching it is important for you to be well rested and mentally prepared for your aquatic classes. While cross training in your favorite activities can be a means to lose weight do not overdo it as you need your rest day.

Cross-Training

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Over training can lead to a variety of injuries. Stretching should also be done with all workouts as you need to gradually warm up your muscles as you prepare your body to work out. As an aquatic teacher you know all about proper form, technique and posture but you must remember to utilize these skills yourself. If you are in proper form, using good technique and posture will help you maximize your workout benefits.

Cross training has many vital benefits but you must remember to focus on what you are doing as you enjoy all of your activities. Exercise is a total body workout and tune up. It can strengthen your heart, bones and joints while enhancing cardiovascular fitness. Exercise (especially aquatics) can help decrease your body fat levels while aid in flexibility. Now go dive in your cross training and keep smiling. Remember to stay refreshed as you show up with vibrance and vigor to your aquatic classes. ♣

Coming Events



San Diego

June 11-12, 2005
Franklin, WI

September 10-11, 2005
E. Jefferson General Hospital
& Wellness Center
Mettarie, LA

October 1-2, 2005
The Claremont Club
(outdoor pool)
Claremont, CA

Sponsors and Suppliers



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