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THEME: GROUP EXERCISE

Evolution of Group Exercise: Where Have We Been and Where Are We Headed?

by Jan Schroeder, Ph.D.



Long gone are the days of leotards, leg warmers and record players. Today's group exercise classes are a far cry from the original concept of aerobics that began 40 years ago.

Dr. Kenneth Cooper developed the term "aerobics" to describe a system of exercises that he formulated to help prevent coronary artery disease. His scientific programs included walking, running, cycling and swimming. He introduced his concept to the general public in his 1968 best-selling book *Aerobics*. By the 1970s, aerobics had become synonymous with

Popularity of Group Classes

Format	% of facilities that offer format
Abdominals	74
Strength training	74
Core-conditioning classes	73
Circuit classes	69
Pilates	68
Stability ball-based programs	61
Yoga	61
Aerobics (including high-impact, low-impact, mixed impact)	49
Boot camp classes indoors	47
Combination/hybrid classes	47
Cycling-based classes (indoor)	46
Step aerobics	46
Dance (e.g., urban street, funk, hip-hop)	40
Boxing-based/kickboxing	39
Water fitness	38
Tai chi	24
Martial arts-based aerobics	21

Source: Schroeder, J.M. and Friesen, K. (2008). "2008 IDEA fitness programs & equipment survey: Overview" *IDEA Fitness Journal*, July-August 2008. 22-28.

cardiorespiratory exercise that combined traditional calisthenics with popular dance styles. This new form of exercise was generally credited to Jacki Sorensen, a former dancer, and Judy Sheppard Missett, founder of Jazzercise.

Throughout the 1970s and early 1980s, aerobics consisted mostly of high-impact movements (jumping, running and leaping), which became a cause of concern due to an increase in overuse injuries. By the mid- to late 1980s, low-impact aerobics gained popularity because of the less-intense movements used in the classes. In 1989, another new form of aerobics came onto the scene: step aerobics. Gin Miller developed step aerobics following a knee injury and successfully brought it into the mainstream. Since the early 1990s, the term "aerobics" has been steadily replaced by the term "group exercise," due to an influx of innovative formats that do not include aerobic conditioning.

The number of group exercise formats currently offered is staggering. In the 2008 IDEA Programs and Equipment study, more than 30 different types of group exercise formats were surveyed to determine their popularity in the fitness industry. Hi/lo and

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Letter from the Editor

by Dixie Thompson, Ph.D., FACSM

Welcome to the Winter 2008/09 issue of the *ACSM Fit Society* Page! As many of us have discovered, there's power in numbers. Group exercise can keep us motivated, help add variety to our fitness routines and encourage us to stick with an exercise program.

We'll look at how this form of fitness came to be, what types of group classes are out there, how to pick the right instructor and more. Use this information to incorporate group exercise into your life — and maybe even try a new activity!

Thanks your continued readership and for helping make the *ACSM Fit Society* Page one of ACSM's most popular public education tools.

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Top 10 Predicted 2009 Fitness Trends from ACSM

1. Educated and experienced fitness professionals
2. Children and obesity.
3. Personal training
4. Strength training
5. Core training
6. Special fitness programs for older adults
7. Pilates
8. Stability ball
9. Sport-specific training
10. Balance training

Group Exercise (continued from page 1)

step aerobics have managed to retain their popularity despite the increase in newer formats, such as Pilates and core-conditioning classes. Strength-training classes, dance and stability ball-based programs are a few of the formats that have experienced increases in popularity during the past 10 years. Activities that have traditionally been held outdoors, such as boot camps and cycling, have moved indoors with great success.

Group exercise has evolved from high-impact aerobics classes geared toward women to a wide range of activities for people with different skills and interests. Classes no longer revolve solely around dance moves to improve cardiorespiratory fitness, but now incorporate every aspect of fitness, such as strength, flexibility, balance and sport moves through a variety of formats. The classes are no longer directed to women, but are open to both genders and all ages from the child to the

senior. Group exercise has changed considerably over the past 40 years and will continue to grow to meet the ever-changing needs of the consumer.



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Q&A

By Anthony Luke, M.D., FACSM

Q: My son is 8 years old. He loves soccer and is pretty good. When is he ready to start serious team sports?

A: Organized team sports are becoming increasingly popular on the youth sports scene. Kids are starting at earlier ages in heavy practice and competition. Some kids will even be playing on several teams of different sports at the same time. One of the determining factors on how children will do in team sports is their neuromotor development. Typically, at 6 to 7 years old, children start to have the ability to track moving objects and judge velocity, which are vital skills for sports. By 7 and 8 years old, the athlete develops better posture and balance, which allows them to do more complicated skills, like throwing and kicking. Often, it isn't until 10 to 12 years old before the child has the attention span and memory strategies to learn sports and work as a team player. Like all child development, the process is individualized, and some children progress faster and some slower than others. It's important to observe how they're doing while playing outside and during organized sports to get an idea of where they are in their development. We always hope that children succeed, but don't put too much pressure on them or over-schedule their events. We always want young athletes to have fun first and foremost.

Q: I've decided to run a marathon! Should I train alone or with a group?

A: As a marathon medical director, I find everyone has her/his own favorite ways to exercise and train. Because of busy schedules and individual preferences, some people enjoy running on their own at their personal time and pace. This is the way to go if you prefer an exact schedule or if you're a disciplined runner. On the other hand, seeing people at the finish line who have run and trained together celebrating their accomplishment is truly inspiring. Running with others can help motivate you to stay consistent. Also, it's valuable to learn from other people's experiences and advice, which you can gain through group running or a running coach. Finally, it can be fun and social to participate with others, since training can take several months. If you do prefer to train alone, you can still occasionally run with others and talk to people you know who are runners to make sure you get tips for training. Following a prescribed schedule or book is good for marathon beginners. You can also talk to your local sports medicine specialist (i.e., doctor, therapist or trainer). Marathon training should be an enjoyable experience and will certainly be a highlight life achievement.

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Different Types of Group Exercise Class Formats

By Cheryl Hultquist, Ph.D.



Choosing a group exercise class can be quite overwhelming these days, as class formats have developed and evolved tremendously over the years. Class offerings will vary between fitness facilities, but most classes will fall into one of the following four categories: cardiorespiratory, strength, mind/body, or specialty.

Classes can be further described as beginner, intermediate or advanced. Beginner classes will break down the format and introduce a person to the terminology and basic moves of the class. If a class does not designate a level, intermediate is assumed. If you are new to a format, just let the instructor know so that he or she can explain the class for you. Advanced classes are for those who have been long-time participants and are looking for a challenge. Advanced classes are not recommended for beginners. Group exercise classes are designed to be both fun and challenging for the participant, with the added benefits of being taught by a fitness professional and being in a

positive social environment. Take a look at some of the available options – and don't be afraid to try something new!

Cardiorespiratory: Classes under this category are most frequently associated with the group exercise format, and focus on getting the heart rate up for the duration of the class. Classes generally begin with a light aerobic warm-up, some stretching, and then moderate- or vigorous-intensity exercise for the majority of the class. This category includes long-time favorites such as step and hi-lo floor aerobics, and some more recent favorites such as kickboxing and indoor cycling.

- **Hi-lo aerobics:** This type of aerobic exercise has been around for many years and is considered the original group exercise format. It combines both high- and low-impact moves where the goal is to get you up and keep you moving. Instructors may incorporate moves from hip-hop, jazz, salsa, and kickboxing, along with classic floor aerobics moves. This format is choreographed, but routines can be broken down and simplified to where the most novice participant feels comfortable.
- **Step aerobics:** Step aerobics is unique with its use of a platform (the step) and risers that can be adjusted for a participant's intensity preference. Step height can be varied from four to 10 inches. These classes have a choreographed routine that utilizes both the step and the floor for a moderate- to vigorous-intensity workout.
- **Kickboxing:** This format is a fusion of boxing moves, a variety of martial arts, and aerobics that combine for a high-intensity cardiorespiratory experience. Some classes involve contact with punching bags, including kicks and jabs.
- **Indoor cycling:** This format involves the use of specially designed bikes that take the participant through a high-intensity workout that utilizes simulated climbs, sprints, flat roads and interval training. Caloric expenditure can be high as long as there is resistance on the bike. It is important to arrive early for the first class to get fitted on the bike to maximize comfort and energy expenditure, and reduce the chance of injury.

Strength: The main goal of this format is to use light dumbbells, barbells, resistance bands, kettle bells or body weight to build muscular strength and endurance. These classes usually involve all the major muscle groups, but can be broken down into formats that focus on just abdominal, upper body or lower body exercises. These classes are considered non-aerobic, but are a great way to incorporate resistance training into a weekly

routine without getting out on the weight room floor.

Mind/body: The most recognizable mind/body classes are yoga and Pilates, but these can include stretching or core strength classes. These formats focus on flexibility, core strength and balance with an emphasis on connecting the mind to the physical work of the body. These classes have become more common at mainstream fitness facilities, but can still be found at specialty studios that offer no other formats.

Specialty: The classes in this category tend to be nontraditional and require special training by the instructor. Examples of specialty classes are several forms of dance (hip hop, salsa, belly dancing), self-defense, aerobic striptease, or group personal training. While these classes are becoming more common, they do require a specialized instructor and can often require an additional fee per class or series of classes.

Group exercises classes have become a staple in the fitness industry. While there are four categories, many classes can fall into more than one category, as they can include multiple elements of group exercise classes. It is important to always inquire about a format that is unfamiliar to gauge the difficulty level, if special equipment is required of the participant, or if a fee is involved. Don't be afraid to try something new, as one of the most effective fitness strategies is to participate in a variety of activities. To ensure a well-rounded fitness routine, if you can regularly commit to several types of group fitness classes, you will cover all essential elements of fitness and have a huge dose of fun!



Benefits of Group Exercise

By Shawn Dolan, Ph.D., R.D., CSSD



As kids, we loved to get together to play with our friends. As teenagers, our world revolved around our friends; oftentimes, our friends dictated our choice of activities. As adults, we still enjoy being active with friends, but don't always feel like we have the time or opportunities to do so. Group exercise provides us with an opportunity to feel young again and be physically active with others.

Group exercise is typically described as exercise performed by a group of individuals led by an instructor. A variety of group exercise formats exist, including (but not limited to) aerobics and dance choreographed to music, BOSU, core conditioning, Pilates, yoga, muscle conditioning, step, indoor cycling, kickboxing, sculpting, fall prevention and boot camp. Your choice of classes depends on the club or studio you attend, the expertise of the instructors, and the amount of time you have.

Group exercise offers a variety of benefits you might miss out on if you choose to work out on your own. Some of the benefits include exposure to a social and fun environment, a safe and effectively designed workout, a consistent exercise schedule, an accountability factor for participating in exercise, and a workout that requires no prior exercise knowledge or experience. Let's take a look at how these benefits might apply to you.

A common reason given for quitting an exercise program is boredom. A variety of class formats will keep you motivated and interested, as well as give you different instructor styles, music selection, and interaction with other participants. For many, an hour-long workout goes by very quickly when there is music playing and you are trying new exercises. People stay interested because of the social atmosphere provided by group exercise. This offers camaraderie and accountability among participants, as well as between participants and instructor.

Most people know exercise is good for them and want to begin exercising. However, they do not know the first step to take. They are bombarded with urgent messages from the media to exercise, but receive little guidance on how to initiate that process. This can be a very overwhelming task, especially when our lives are hectic. Group exercise offers a workout for all levels, ranging from beginner to advanced. Participants do not need to know how to develop a safe and effective workout or which machines to use or for how long; it is already done for them. They simply have to show up with a positive attitude, participate, and most importantly, have fun.

An exercise class structured with a purpose can be beneficial for people with limited knowledge about safe and effective exercise programming. An appropriately designed class includes warm-up, cool-down and flexibility in addition to the conditioning section. When people exercise on their own, they often skip portions of a workout they know less about or are not their favorite to perform. Furthermore, the fitness professional is not only designing the components of the workout, but also the intensity, so the class is designed appropriately to improve cardiorespiratory and muscular fitness. The fitness professional can also serve as a resource for class participants and encourage them to engage in other healthy behaviors outside of class.



Many people quit an exercise program because of time constraints. Participating in group exercise may help overcome this obstacle. Some facilities offer 30- and 45-minute classes for individuals with limited time. In addition, the consistency in scheduling offered by group exercise programs allows participants to choose a time and schedule it in their planner as they do other daily activities.

Lastly, group exercise appeals to many people because of its diversity. Traditionally, group exercise was available inside a fitness facility in the format of dance choreographed to music. While this still exists, many non-traditional group exercise formats are emerging, some even outside. There are boot camps at your local park, yoga on the beach, ski conditioning at the soccer field, trekking on the bike trails, stroller-walking classes in your neighborhood, and Latin dance at the local recreation facility. Regardless of your passion or interest, what is most important is to move. Group exercise offers an outlet for people to do this while having fun!

Follow these simple steps to begin your journey in benefiting from group exercise:

1. Find a local facility or organization that offers group exercise classes. Do not limit yourself to traditional gyms.
2. Try different group exercise formats and instructors to find out what style appeals to you.
3. Once you discover formats and instructor teaching styles you enjoy, keep participating, and get others to join you!
4. Introduce yourself to the instructor and let them know you are a beginner and if you have any special needs that may require modifications.

Q&A (continued from page 2)

Q: I'm embarrassed to exercise since I'm overweight. I'd like to go to the gym, but feel out of place. What can I do?

A: First, congratulations on making the commitment to be fit! If you're interested in improving your health and fitness, you should definitely go to the gym, especially if the gym provides activities that you enjoy. Most people who exercise at gyms are there for their own health, and they know the sacrifice it takes to stay fit. You will find most people will praise you for your commitment to fitness, not criticize you for imperfections. If you do feel extremely self-conscious in exercise settings, look for specific exercise classes or facilities that have weight loss as a focus point. These settings may be more comfortable and provide you the type of support and encouragement you need. As you will read in this issue of the *ACSM Fit Society*® Page, there are many exercise options available. Finding the ones that you enjoy and that fit your health and fitness goals are keys to success.

What to Look for in a Group Exercise Instructor

By Joy Prouty



Group fitness has undergone many changes since the surge of the popular “aerobic”-based classes of the early 1980s. The role and responsibilities of the fitness professional, or group instructor, have also changed from that of the stereotypical aerobic instructor with little or no training (but a “great personality”), to one that is expected to have knowledge of the basic sciences as they apply to group exercise. Great energy and motivation still attract participants, but these are now only part of the total package. A higher level of knowledge and the expectation of creative — but sound — application skills have significantly raised the bar and increased the demands placed on the group fitness instructor. These are important considerations to keep in mind when looking for a qualified group instructor. The list below may serve as a guide to help you focus on some things to consider when looking for the best group trainer for you.

1. **Education** is essential, either through a formal science-related degree and/or through a nationally recognized certifying

organization such as the American College of Sports Medicine. A base level of knowledge in science and theory as it applies to class design and teaching is important because it assures not only safe, but effective, workouts. Continuing education is also important, bringing together the latest research and trends as they apply to the fitness industry. To stay current, there are a number of areas where instructors can get up-to-date information: local workshops, national and regional conferences, and professional journals and publications, to name a few. A willingness to learn, and to implement new information and classes if appropriate, is vital to staying on top of an ever-changing and growing profession.

2. **Communication** skills are necessary for a successful connection between the participant and the group trainer. These skills bring the instructor and student together through the transfer of information, whether verbal or non-verbal, and help build rapport, establish a bond, and in turn, contribute to the successful implementation of classes and class adherence. Communication keeps us “on the same page,” making sure our goals and the goals of the classes we have signed up for are all headed in the same direction.

3. **Leadership** is shown in every area that brings you into contact with the group instructor. It includes everything from being welcomed to a class to keeping order and discipline throughout the workout. A group exercise leader is in charge, while at the same time has the skill to involve each individual, making everyone feel important and successful. The leader is prepared (classes are organized, start and end on time, music and equipment are in order) but can also adapt and shift gears, giving people options, modifications, and challenges when appropriate. An effective leader is also a role model. Dressing appropriately for the class, looking clean and neat, and reflecting a healthy lifestyle, realizing this is important for themselves as well as their students, all contributing to setting a good example and establishing leadership.

4. **Motivation** of class students is another important trait of the group instructor, and one that will keep class members coming back time after time. When meeting an instructor or taking a class for the first time, take notice of the energy, consideration, commitment and excitement of the instructor. A passion for teaching and working with people to help them change their lives will come through loud and clear,

and will separate the average instructor from that special one who excels in her/his profession and brings you back to class time after time!



Finding the right group fitness instructor may take a little time and patience. Trust your intuition, but also realize that sometimes fitness needs change, and this may be reflected in our choice of classes and instructors. If fitness is new to you, or your current program just doesn't seem to be working for you, be willing to get out of your comfort zone and make some changes or take some risks; try a class and/or an instructor you don't know — you just might find a situation and person that will challenge, motivate and help lead you to a healthier lifestyle! The bottom line: pay attention. Use this list as a general guide, but trust that using your mind and “gut,” in addition to this knowledge, will tell you how to select the best instructors and classes for you.

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Tips for Coaches, Parents, Friends & Teammates of Athletes with Eating Disorders

By Nancy Clark, R.D., FACSMM



“I am worried about my daughter. She exercises too much and eats too little. She says she’s fine, but I think she’s becoming anorexic.”

“My dad yells at me when I binge/purge and says I’m wasting his money. I am working hard to recover from my eating disorder, but he just doesn’t get it. I don’t even try to talk to him anymore.”

Eating disorders can be devastating not only to teams, but also to families. Coaches and parents alike want their athletes to eat well and be healthy. The struggling athletes just want people to stop policing their eating and exercise. The athletes have difficulty talking about why they struggle with food; instead, they communicate unhappiness by starving or stuffing their bodies. This distracts them from the pain of feeling “not good enough” and other hard feelings.

Unfortunately, too many athletes struggle with food issues. A survey of more than 400 female collegiate athletes indicated they typically believed their bodies were not good enough and wanted to lose five pounds.

- 43% reported feeling terrified of becoming overweight
- 22% were extremely preoccupied with food and weight
- 31% had irregular or absent menstrual periods (a sign of inadequate fueling)
- 34% had had a stress fracture or broken bone (weakened bones and stress fractures are common in athletes who experience loss of regular menstrual periods).
- 18% of the women had/were at risk for having anorexia
- 34% had/were at risk for having bulimia (Beals, *Int’l J Sports Nutr* 2002)

While there are no easy answers to resolving disordered eating, Dr. David Herzog, a psychiatrist at Harvard Medical School who specializes in the treatment of eating disorders, has addressed common issues in his book *Unlocking the Mysteries of Eating Disorders: A Life-Saving Guide to Your Child’s Treatment and Recovery*. Here are some key points that might be helpful if you are the parent, coach or friend of an athlete with food issues. The goal is to help you understand what’s really going on. If you yourself are the struggling athlete, you might want to highlight pertinent information in this article (or Dr. Herzog’s book), and then ask those who care about you to read the passages. This is one way to start a conversation.

- First, eating disorders (such as anorexia and bulimia) are a psychological diagnosis, not a nutritional diagnosis. Eating disorders have little to do with food. Food is just the symptom, not the problem.
- Eating disorders affect both girls and boys alike. For boys, society’s rule “men don’t cry” means they are not allowed to express sadness, fears, or hurt. If they do, they can easily be ridiculed and rejected. So instead, they may starve or stuff themselves to numb difficult emotions. Some exhaust themselves with excessive exercise. Others take up body building, believing a muscular body means a perfect life. They need to be assured that having feelings is not a sign of weakness.
- Athletes with eating disorders tend to dislike themselves and their bodies. They feel inadequate, not “good enough.” Dieting seems a good way to fix what is wrong with them and allows them to be good at something — losing weight!

- If the athlete had at one time been pudgy and nagged by parents to slim down, he can now feel praiseworthy and acceptable. Remind him of the many good inner qualities he has that makes him special — kindness, caring, humor, leadership. The athlete needs to learn he is valued as a person, not for what he looks like.
- Athletes with eating disorders tend to be very talented, hardworking people who ache inside and fail to see their strengths. Something inside them says they should always be working or studying or exercising. Taking time to hang out and chat with others makes them feel guilty. They need to learn that being “human” — like the rest of us — is a more attainable goal than being “perfect.”
- Athletes with eating disorders often fear they won’t be able to stop eating if they start, so they try to avoid eating. Some consistently restrict their intake; others yo-yo between starving and stuffing. In either case, they endure not just physical hunger but also the mental anguish of feeling alone. It’s hard to have much of a social life if you are afraid of (over)eating food.
- If the athlete does not want to eat with the team, nor join family meals, don’t try to force the situation. Rather, just acknowledge, “It must be so hard for you when something inside you holds you back.”
- If the athlete starts talking to you about how fat she is, don’t try to correct the misinformation because the athlete will not believe what you say. Rather, try to understand the turmoil. “It sounds like you are very unhappy with your body...” Allow an opening to share her concerns.
- If an athlete shares the dark secret of having an eating disorder, acknowledge the effort. “I know this was hard for you to tell me, but I am really glad you did.”
- On the other hand, if you want to confront the athlete who denies, let’s say, struggling with bulimia, do not become a detective to prove him wrong. Rather, try to understand why the athlete hides this and has trouble letting you know. Is he trying to safeguard you from being stressed? Or does he feel ashamed?
- Telling an athlete to “just eat” does not solve the inner emptiness that is intense, enduring, hard to recognize, and hard to talk about. Plus, the athlete believes eating will make him or her feel worse. Recommend counseling, not as a means to “fatten her up,” but to end the loneliness of the disorder and to find inner peace. Just as it’s important to have a good coach to improve athletic performance, it’s also important to have a good “mental coach” (a therapist skilled with eating disorders) to improve quality of life.