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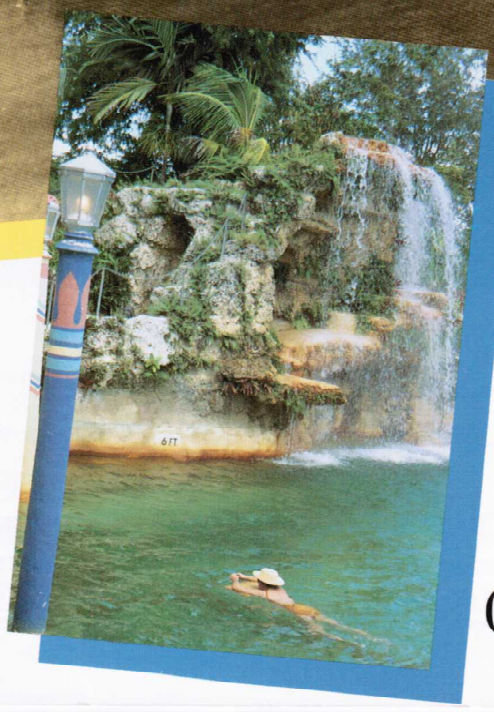

Coral Gables Restores Elegance To Historic Venetian

Water Walking Sets a New Pace

Ohio Church Camp Solves Leak Problem

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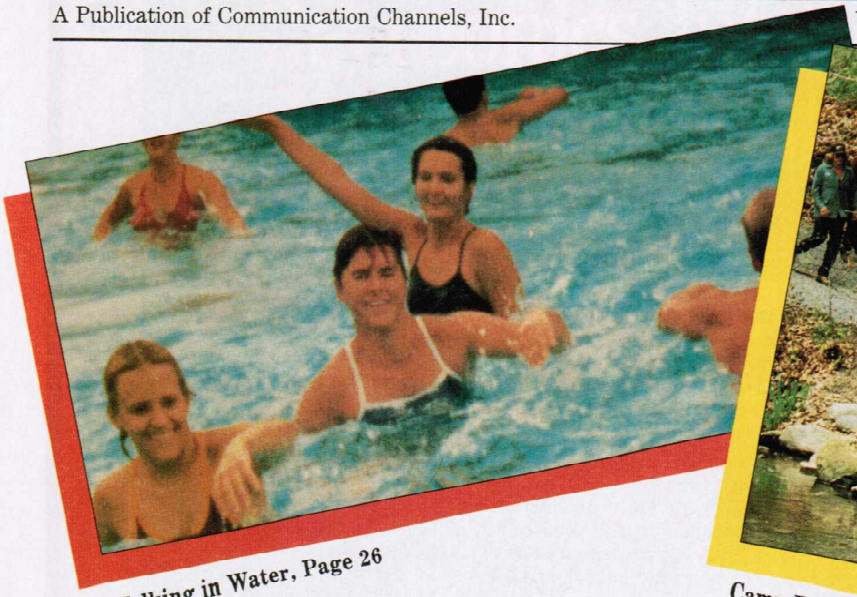


Walking in Water, Page 26

Camp Pool Renovation, Page 21

FEATURES

PRODUCT FOCUS

DEPARTMENTS

On the Cover — Venetian Pool and Casino opened in 1925 as the centerpiece of burgeoning Coral Gables, Fla. Now, after a $2.5 million restoration, the national historic site has been returned to its original elegance.

BY DR. ALISON OSINSKI

Water walking can be done similarly to lap swimming, left, and its proponents are enthusiastic — hence the license plate.

Staying in Step

Water Walking Sets A New Pace

Water walking is not walking on water, as many curiosity seekers come to the pool expecting to see. Rather, water walking is a relatively new form of water exercise in which participants walk, jog or run through water for fun and fitness. Originally prescribed for athletic injury rehabilitation, today's proponents water walk as an effective and enjoyable way to tone muscles, slim down and shape up or maintain fitness levels. Enthusiasts of all ages and abilities are getting involved.

Although water walking can be done in almost any body or depth of water, most participants walk in waist- to chest-deep water using a variety of movements or steps. Water walking can be performed without specialized equipment or swimming skills and is safe for people with physical limitations.

Why Water?

What's wrong with walking on the sidewalk through the neighborhood or at the local mall? Why have people started hiking in the community swimming pool?

John Spannuth, executive director of the U.S. Water Fitness Association and early supporter of water-walking programs, said exercising in the water is better than exercising on land because of the water's continual resistance to each body movement. And for the facility manager, water walking is a good activity to offer because it increases the number of people who can be in the pool and may attract non-swimmers to other pool activities.

"Water walking is like a magic magnet that attracts new people to swimming pools, including people who for whatever reason are not now involved in aquatic programs, but who may have enjoyed the water in the past," Spannuth said.

Properly run water-walking programs are popular because people enjoy the workout and see the physical, mental and social results of their participation, he said.

People water walk for basically five reasons:

- Fitness, either to get or keep in shape.
- Therapy, such as recovery from accidents or sickness or to combat the aging process.
- Socializing, to meet and be with other people.
- Stress relief and relaxation.
- Fun or diversion.

Water walking can take three forms — walking in shallow water, jogging or running in deep water using some sort of flotation device and water running in deep water without a flotation device. Non-swimmers should not engage in deep-water running or jogging, however.

Instruction in water walking can be conducted formally, such as at introductory educational seminars or structured, regularly scheduled classes. Water walking also can be an informal activity in which participants set personal goals for distance or time, using methods common in competitive swim training including long-slow distance, intervals and sprints.

Games and relays can be used to make water walking a playful pastime. Elaine Braden, pools manager for the Barstow, Calif., Park and Recreation District, said, "Unlike swimming, water walking workouts can be very social. We put the hot music on the big speakers and visit as we work out. Some days it just totally falls apart, too. One workout dissolved into a huge game of tag. It was hilarious to

Promoting Water Walking Step by Step

A water-walking program doesn't just happen. What might look simple at first glance needs a good deal of commitment and preparation. In addition to participants, a water-walking program needs a concerned, hard-working individual behind the scenes to make it work.

Following are some steps necessary to coordinate, build and maintain a water-walking program.

• **Consider the basics of water walking.** A prospective coordinator of a water-walking program needs to fully understand the benefits of that particular activity — and how to communicate those benefits to participants. To the individuals involved, the benefits of water-walking are threefold. People water walk to stay in shape, feel better in general and to meet and be with other people.

A water-walking proponent must be informed about other types of aquatic fitness programs that are offered. It is best to always look ahead to increased participation — to get water walkers interested in the other aquatic facility programs.

A promoter must be aware of the type of facility available for water walking. There are generally two kinds of pools that can be used for water-walking programs — those that are easy to use and those that aren't. Some pools are designed in a way that is perfect for a water-walking program. However, some are not. The "other" category includes pools with odd shapes (rounded ends, etc.), odd lengths and odd depths (some pools are concave, some too shallow, some too deep). Coordinators also must be aware of the two types of water-walking programs. Programs may be formal or informal.

• **Determine when water walking programs can fit into the swimming pool schedule.** Prospective coordinators are urged to examine each existing program at their pools. Look at each program as to how it affects the number of participants involved and the overall health and goals of your organization. Always look toward increasing participation — and income — for the facility. Decide which programs should be expanded and which ones should be reduced.

• **Develop a set of goals.** Be specific about these goals. Two of the key goals for promoters should be increasing participation and income. People and organizations with set goals have a much more solid direction in life.

• **Prepare a specific plan.** Promoters should write out on paper the plans to be followed in order to implement a successful water-walking program, including specific dates of when certain goals will be met.

• **Sell the facility staff on water walking.** A promoter needs the support of his or her organization when setting up a water-fitness program. Staff members should be taught how to answer questions from people who are either interested in water walking or upset that other programs have been reduced, rescheduled or eliminated.

• **Sell the community — including pool members and participants — on water walking.** In addition to the support of a promoter's staff and supervisors, spreading the word of water walking to the community is vital to the success of a water fitness program.

To do this effectively, one must make information about water walking readily available. Articles from out-of-town newspapers can be posted around the pool facility. Copies of these articles also can be distributed to members, participants and potentially interested persons around town. Lastly, try to get publicity from the local newspaper.

One way to do this would be to conduct a special 1- to 1½-hour free introductory class to help publicize water walking. During the class, a variety of water walking activities should be explained and demonstrated. Alert the media and advertise the event to encourage greater participation.

• **Educate community professionals.** Professionals include medical doctors, especially those who specialize in geriatrics, cardiovascular diseases, orthopedic surgery, rheumatology, arthritis, sports medicine, chiropractors or physical therapists. These people can help promote your program, if you can get the word out to them.

Doctors can write prescriptions for water walking, and medical insurance companies have been known to pay for memberships to facilities that offer water-walking programs.

It's best to compile a complete mailing list of the professionals in your community who might be of help. Send them two mailings per year of easy-to-read and easily understood information. Offer to place water-walking flyers in their lobbies free of charge. If something of special interest comes along, more than two mailings may be appropriate.

• **Make the promotion of health and safety a top priority.** Strongly urge any participant who becomes involved in any fitness program or activity to first have a complete medical evaluation.

Remind water walkers that it is much better to do too little than do too much.

• **Use special promotions to attract new participants.** In addition to free water-walking seminars, offer to present a program on water walking at local civic club meetings.

• **Be an active water walker.** A coordinator who participates can easily talk to other water-walking participants. A success story can be used to further promote the program. A good people-oriented success story will whet the appetites of local newspaper or television reporters.

Learn what keeps people coming back to the program and what discourages them.

Teach water walkers variety, or different ways of moving in the water, and encourage them to have fun. Help those who may need some special attention to build enthusiasm. Welcome new participants.

— John R. Spannuth

For more information about water walking, send a self-addressed stamped envelope to John R. Spannuth, Executive Director, U.S. Water Fitness Association, P.O. Box 360133, Boynton Beach, Fla. 33436.

see 15 35+-year-old adults running around and laughing while evading being 'it'. The following day, we had even more participants who had watched the chaos of the preceding day."

Water walking championship events have been held for the past three years in Norman, Okla., Miami, and Plano, Texas, during the annual National Water Fitness conference. Competitive events include running distances of 50 yards forward, 50 yards backward, 200 yards freestyle and 100 yards individual medley (back, side, side, forward). Participants compete by age group, then age group finalists compete for the championship. The competition is co-educational and still small and friendly. Participants race in water ranging from 3½ to 4½ feet deep, depending on their height.

Other functions of water walking include assisting in the bonding experience between parents and their children soon after birth and offering on-land runners an indoor alternative during the winter, especially in colder climates where running may be impossible outdoors.

How to Water Walk

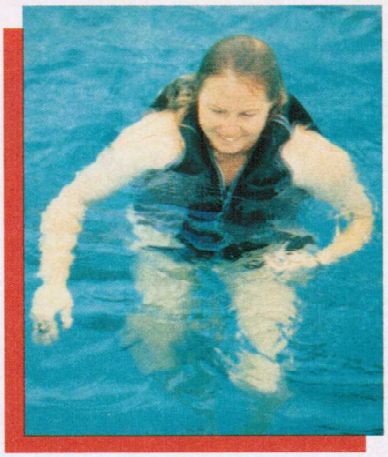
Spannuth suggested that participants learn to water walk in introductory water walking classes, that participants get the approval of a physician before beginning a new exercise program and that they gradually work into the exercise program without overdoing it.

As with most other workouts, each water walking session should consist of a warm-up to prepare the body for exercise, a main set lasting 20 to 30 minutes and a cool-down to allow the body to return gradually to its normal resting heart rate, he said.

Participants should walk using their whole foot, not just their tiptoes. They also should be creative, use a variety of steps, use antagonistic muscle groups, walk both forward and backward, increase the intensity of workouts, remember to use proper breathing techniques and, most importantly, have fun.

In order to increase the workout intensity, walkers can use their arms more, lifting them out of the water, lift the knees higher and increase the pace, Spannuth said.

The U.S. Water Fitness Association suggests that participants walk at least three times per week and that they be aware of warning signals indicating overheating or overexertion. Warning signals might include breathlessness, abnormal heart action, pain or pressure in the chest, arm or throat, dizziness, lightheadedness, sudden uncoordination, cold sweat, nausea, flare up of arthritic condition or muscle cramps.



Deep-water running can be done with the use of a flotation device.

All Jammed Up

How can participants water walk when pool space is at a premium? Unfortunately, most pools were not designed specifically with water walkers in mind. Space is often limited in multi-use aquatic facilities where aquatic directors are trying to accommodate several, often conflicting, activities at once.

Nevertheless, it is possible to integrate water walking into the total program and to expand the number of people who can engage in pool activities at any given time by being innovative in arranging formations and assigning areas for use. Laps, circles, circles within circles, straight line and diagonal formations, marches and waves are several space-saving methods that can be applied.

Benefits of Water Walking

Some of the benefits of water-walking include:

• **Improvements in cardiovascular fitness, muscular strength and endurance, flexibility and range of motion** due to the increased resistance provided by water overload training and water's effectiveness as an overall fitness and conditioning medium. Water walking is helping bring improved fitness to people who previously might have avoided physical activity.

• **Therapeutic rehabilitation.** Water walking can help shorten post-operative and injury-recovery time. Buoyancy of the water reduces harmful impact and stress on the body caused by gravity on land. Walking in the pool after an intense land workout will help decrease muscle soreness and stiffness as well as speed up the healing process during recovery from arthroscopic knee surgery. Water walking is a preferred activity for rehabilitation of runners, primarily because it is biomechanically sport specific. Unlike biking or swimming, water walking can be an effective substitute for running.

• **Swimming ability is not a necessity.** Water walking provides benefits independent of aquatic skill levels. People who would not otherwise come to a swimming pool due to a lack of swimming proficiency are being introduced to the benefits of water activity. These non-swimmers who were attracted to the water through water walking eventually may choose to become proficient in swimming. Many aquatic professionals believe that half the battle is won in just getting non-swimmers to walk into the pool area for the first time.

• **Relaxation and stress reduction.** Water running is relatively free of mental and physical stress. You don't have to get your hair wet if you don't want to. There are no dogs to chase you. There are no potholes to step into, no dodging of taxis, busses or irate motorists and no breathing of exhaust fumes. It is not necessary to concentrate on what you're doing and where you're going, because getting lost is almost impossible. Water walking is easy to learn and nearly anyone can do it.

• **It's inexpensive.** There are no immediate pre-participation costs other than purchasing swimsuits and possibly shoes to increase traction and decrease chance of blisters.

• **Participation is not limited to any particular age group or population.** Young, physically fit individuals as well as elderly and physically challenged persons can enjoy water walking.

Kim Holtz, water fitness instructor at the Fitness Advantage at the Plunge, San Diego, Calif., teaches a formal water walking class composed of persons with a wide range of abilities. Many class members have limitations such as arthritis, back problems and athletic injuries, although highly fit healthy individuals and cross-training athletes also participate in the same class sessions.

"Everyone can work at their own pace by increasing or decreasing the water's resistance by changing the position of their hands," said Holtz, who keeps class participants motivated and meets the fitness needs of her students. She said she frequently hears comments such as, "I can't believe how hard this really is," or, "I never thought I could get as good of a workout in the water."

• **Lack of gravity related problems.** Walking in water is a low-impact aerobic exercise resulting in few overuse injuries. The shock of impact from hitting the pool bottom is minimal. On land, a runner's feet strike the ground approximately 2,000 times per mile. The density of water allows for slower and more exaggerated movements than on land. Exercise in a water medium provides relief from arthritis, joint and range-of-motion problems.

• **Water walking is relatively safe as a participation activity for sedentary and overweight individuals.** No instances of cardiac arrest suffered during participation have been recorded. Participants can work at their own speed and chose to do as much or as little walking as they are able. Even those with an aversion to exercise might enjoy walking across a pool.

• **Variety.** Water walking can be used as an alternative or supplement to a regular running program or when injuries interrupt land training. The overload effect of water can be used to increase training load without the damaging effects associated with increasing mileage on land.

• **Weight loss.** Evidence shows that weight reduction can be achieved primarily due to changes in body composition or exchange of body fat for muscle.

• **Social benefits.** Water walking can be fun. Exercise can be done to music or during conversation with friends. It's a co-ed activity, and similar skill or athletic ability is not necessary.

While water walking offers numerous benefits, problems can arise for both participants and the facility. These include: lower back pain, leg muscle cramps, slips and falls, blisters from running barefooted, space conflicts with lap swimmers and dehydration. Luckily, solutions do exist.

If walkers experience lower back pain, encourage them to use their arms while water walking to help pull themselves through the water. Leg muscle cramps can be avoided by properly warming up, stretching and cooling down.

Proper pool design, adequate daily maintenance and seasonal repairs will eliminate many of the common causes of slip-and-fall accidents, such as flooring with inadequate friction coefficients, algae growth, inlets not flush with the pool bottom or cracked or chipped surfaces.

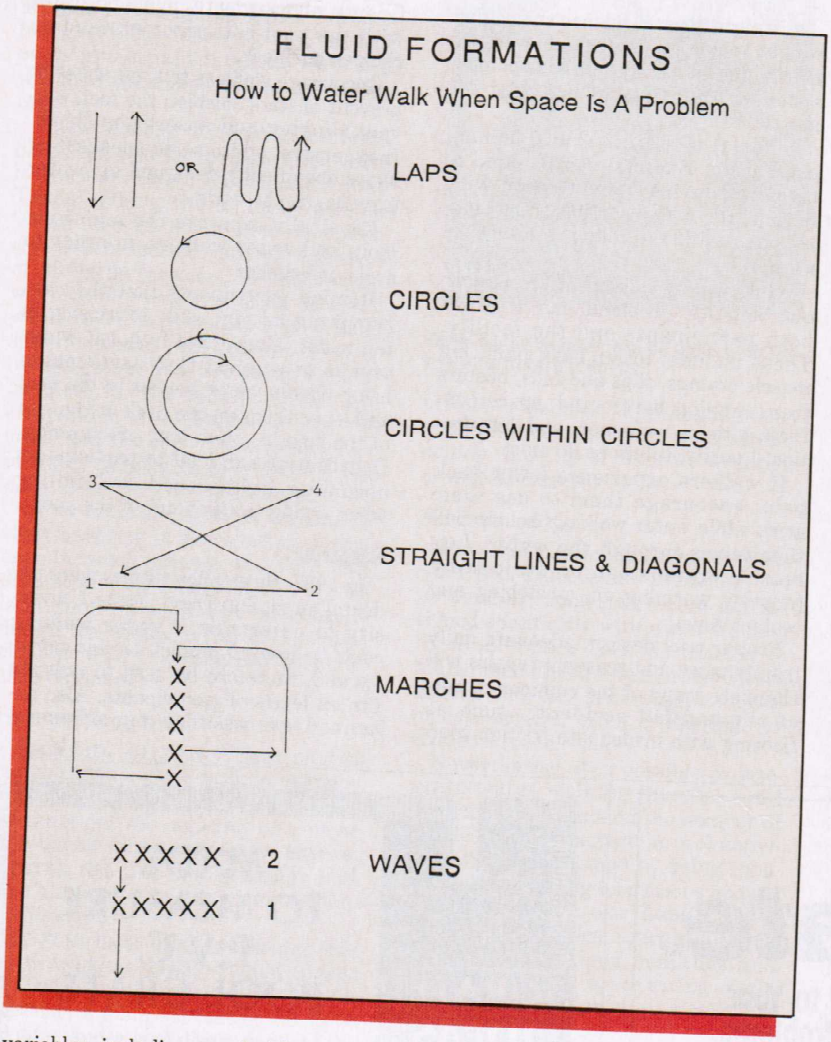
Encourage walkers to wear shoes to prevent blisters, cushion the feet, prevent slipping and absorb the shock. Inexpensive, white-soled sneakers or shoes specifically designed for water exercise can be worn.

Physically separate the lap swimmers and water walkers, in order to avoid collisions.

Remind participants that they are perspiring heavily while exercising in the water. Encourage frequent water breaks or suggest that participants bring plastic water bottles to the pool and leave them on the deck at the end of the lane in which they are running. Dehydration can lead to participants becoming lightheaded and falling when trying to climb out of the pool.

Research

In 1987, three pilot studies were undertaken at San Diego State University to determine if water walking could be used to predict aerobic capacity and, therefore be used to indicate fitness levels of participants. Also examined was whether any of several



variables, including age, height, sex or water depth, would affect post-exercise heart rates or running times.

Data was collected and analyzed using college-aged student volunteers. Study results showed no significant trend with post-exercise heart rates after running at different depths, although times were an average of 65.1 seconds faster over the quarter mile when run in waist-deep water than in chest-deep water.

Neither leg length nor body height coordinated with times, which did not decrease in direct relation to height. Percentage of body fat also did not correlate with water walking times.

Mean times for one-mile water runs were 30.55 minutes as compared to 6.63 minutes for land runs. In one study, men's times in both the water run (14 percent lower) and land run (28 percent lower) were significantly lower than women's times. In another study, no significant differences in water running times were recorded between male and female subjects.

Researchers found that an individual can run one-fourth mile in water in approximately the same time it takes to run one mile on land; however, water walking times were only 47 percent accurate in predicting land running times. Land run times predicted maximum oxygen intake with more than 90 percent accuracy. Water walking, which had only a 62 percent accuracy, was not found to be an accurate indicator of maximal oxygen intake.

Perhaps the most significant finding of the studies was that, unlike other aerobic fitness activities, water walking allowed most subjects to exercise at their target heart rates, when calculated to take into consideration the cooling and hydrostatic effects of water, for more than 30 continuous minutes on the very first day of participation. It is unlikely that sedentary individuals if asked to go out on the track and run or get in the pool and swim for 30 continuous minutes would be similarly successful.

Bob Beasley, a professor at the University of South Florida in Tampa, has investigated some of the common myths and exaggerated claims surrounding water walking and water fitness programs in general. He has found that both forward and backward running are excellent aerobic activities. Water walking is equal to an equivalent period of walking or jogging on land relative to caloric expenditure. As may be commonly thought, 90 percent of body weight is not necessarily lost when exercising in water, because the buoyancy effect on the body depends upon the depth of submersion as well as the body composition. Water offers more resistance to exercise movements than does air, but the amount of that resistance depends on factors such as surface area, length of lever, speed of movement of body parts and water depth, temperature, current and turbulence.

In another 1987 research project, Jim Whitley and Lori Schoene compared heart rate responses of female college students after water walking and treadmill walking to determine whether heart rate responses were of sufficient magnitude to elicit cardiorespiratory training effects, which is considered to be above 70 percent of predicted maximal heart rate. They found water walking heart rates were significantly higher than the responses from treadmill walking at each of four speeds and that water walking could serve as an effective cardiovascular exercise for individuals not able to perform weight-bearing fitness activities.

"Water walking, even at relatively slow speeds, resulted in heart rates that were high enough to reach the intensity requirement for achieving cardiorespiratory fitness," the research report said.

Walking Devotees

Elaine Braden, of the Barstow, Calif., Parks and Recreation District, a recent convert to water walking, has become one of its major proponents in the desert communities of Southern California. She said that after 35 years of swimming laps the thrill was gone and she no longer enjoyed the effort of her regular swimming workouts. On vacation last summer, she became frustrated and bored at the repetition of attempting to swim laps in short hotel pools and decided to start walking instead.

"I usually (water) run five to six days a week now, for about an hour a day. On stressful days I work out longer. I find I actually look forward to working out. Some days I accomplish more work running in the water than I do sitting behind my desk, because it gives me time to arrange my thoughts or logically work out some sticky problems," Barstow said.

"I have found that running has enhanced my swimming endurance. My resting pulse and blood pressure have dropped and I have more energy for other activities. The most obvious benefit since I began the regimen two months ago is that I have lost 25 pounds without changing my eating patterns," she said.

Jamie Whitlock, aquatic director for the town of Herndon, Va., is in the process of organizing an Aquathon biathlon. According to Whitlock, the water biathlon is being organized to help promote water walking as a sport and as a promotional event to increase use and attendance of the city's aquatic center. While training for participation in the annual Marine Corps Marathon, Whitlock started running at the pool. His staff began to join him on his daily pool workouts and soon curious patrons began asking if they could join in, too.

Whitlock decided to capitalize on recent community interest in water walking by sponsoring a competitive event. The Aquathon will consist of a half-mile swim, followed immediately by a half-mile run in chest-deep water. Participant height will be measured prior to the event, and contestants will be assigned to run in water lanes corresponding to their height. For example, participants who are 5 feet 6 inches tall to 5 feet 10 inches tall will run in a lane that averages 51.3 inches deep. Participants who are between 5 feet 11 inches tall and 6 feet 2 inches tall will run in water an average of 52.9 inches deep. And, those participants taller than 6 feet 3 inches tall will run in water averaging 53.9 inches deep.

Whether performed for competitive, fitness, recreational or therapeutic reasons, water walking is becoming a sport in its own right. With some ingenuity and persistence, aquatic directors can use the new activity to increase participation at their facilities.

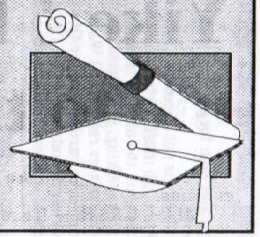
References

1. Barol, B. and Cohn, B. "Running as a Water Sport," *Newsweek*, October 1981, p. 84.
2. Buono, M., Osinski, A., Sjoholm, N., & Micale, F. "Water Running to Predict Aerobic Capacity," Unpublished raw data, 1987.
3. Costill, D. "Energy Requirements During Exercise in the Water," *Journal of Sports Medicine and Physical Fitness*, Vol. 11, 1971, pp. 87-92.
4. Cox, L. "Swimming: Aqua Aerobics," *Runner's World*, June 1987, pp. 21-33.
5. Delaplane, G. "A Walk on the Wet Side," *Reno Gazette-Journal*, January 2, 1989, pp. 1D, 6D.
6. Fain, J. "Waterwalking for Exercise Floats on a National Wave of Popularity," *The Atlanta Journal-Constitution*, February 18, 1989, p. 10J.
7. Fain, J. "Waterwalking: Fun and Easy Thing to Do, May be Best Way to Stay in Shape," *Star Tribune*, July 17, 1989, p. 3E.
8. Fasbinder, J. "Aerobics in the Deep End," *Pool & Spa News*, June 1987, p. 36.
9. Green, L.G. "Just Jogging Along: Aqua Cizer Joins Computerized Treadmill With Hydrotherapy," *Pool & Spa News*, p. 164.
10. Groves, D. "A New Wave of Fitness Through Water Exercise," *Los Angeles Times*, September 30, 1986, pp. 1, 5.
11. Koszata, L.E. "Water Exercise Causes Ripples," *The Physician and Sports Medicine*, October 1986, pp. 163-167.
12. Mount, D. and Kosik, B. "Effect of Varying Water Depth on Water Running Time and Post Exercise Heart Rate," 1987, Unpublished manuscript.
13. Osinski, A. "Effect of Age, Height and Sex on One-Mile Water Run Times," 1987, Unpublished raw data.
14. Osinski, A., "Water Running," *National Aquatics Journal*, Vol. 5, 1989, pp. 3-6.
15. Ross, S.A. "Thermic Effect of Food at Rest and Following Swim Exercise in Trained College Males and Females," 1987, Unpublished Master's thesis, San Diego State University, San Diego, Calif.
16. Stavish, J. "Walk-Jog vs. Swim Training: Effects on Body Composition and Aerobic Capacity," 1987, Unpublished Master's thesis, San Diego State University, San Diego, Calif.
17. Stemle, L. "Water Walkers: Swimming Pool Technique Lets Swnior Citizens Receive Proper Physical Conditioning Without Stress or Strain," *Palm Beach Sun-Sentinel*, October 12, 1989, p. 6.
18. Whitley, J. and Schoene, L. "Comparison of Heart Rate Responses: Water Walking vs. Treadmill Walking," *Physical Therapy*, Vol. 67, October 1987, pp. 1501-1504.

Dr. Alison Osinski, the 1990 National Water-Walking Champion, is an aquatic consultant with Aquatic Consulting Services, San Diego, Calif. Her specializations within the field of aquatics include risk management, facility design and renovation, swimming pool chemistry and operation, and water fitness and safety training program development.

MARKETPLACE

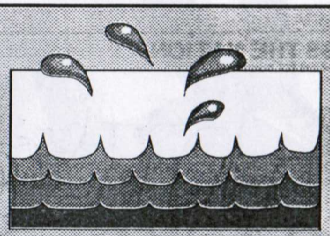
Your Money gives tips on how to find aid for college/**8A**



HEALTH

WATER WALK

National champ extols benefits of sport most anyone can do/**4C**



SPORTS

BU bowl invitations depend on outcome of Rice game/**1C**

TUESDAY
Nov. 13, 1990
Waco, Texas
25 CENTS

Waco Tribune-Herald

A COX NEWSPAPER

Serving the Heart of Texas

Staff photo — Bobby Sanchez

Women's National Water Walking Champion Allison Osinski leads a water walk demonstration at the YWCA pool.

WALKING THROUGH WATER IN WACO

By LYNN BULMAHN
Tribune-Herald staff writer

Women's National Water Walking champion comes to town to promote the challenging, low-impact sport.

Water walking — or running — is an effective way to tone muscles, slim down and shape up or maintain fitness, the women's National Water Walking champion said Monday in Waco.

Giving a demonstration at the Central YWCA, Dr. Allison Osinski of Aquatic Consulting Services in San Diego, Calif., said the sport is enjoying tremendous new popularity all across America.

Osinski was in Waco to promote the sport and to help raise support for the YWCA's proposed new pool facility in northwest Waco. Agency spokeswoman Nan Holmes said the YWCA's present indoor pool is more than 40 years old. The YWCA hopes to construct a larger, multipurpose pool for community use.

Osinski, who last year held both men's and women's national water walking titles, was recently dethroned in the men's category of competition. But she still holds the women's title, and her fast form chugging through the Y's pool showed why.

In the 1989 water walking championship, the 35-year-old Osinski ran forward in the 50-yard dash in 36.01 seconds. "I can't swim 50 yards in 36 seconds but I can run it in that time" in the water, she said.

In the '89 races, she ran backward in the water for 50 yards in 41.85 seconds. Her 200-yard freestyle event was performed within 182.34 seconds, while the 100 IM — a combination event in which contestants go backward, sideways and then forward — was run in 351.54 seconds.

Swimming ability is not necessary for water walking. Although most participants actually run in the pool, the official term for the sport is water walking, said Osinski, whose car license plates read "H2O Walk."

The sport improves cardiovascular fitness, muscle strength and endurance, flexibility and range of motion. It is also therapeutic.

"Water walking will help shorten post-operative and injury recovery time," she said, adding that it is especially beneficial for runners who have had knee injuries and aerobic exercisers who can no longer tolerate high impact activities.

Water walking is a low-impact aerobic exercise. It causes few overuse injuries, she said. It is relatively safe for sedentary and overweight people.

"In water walking, on the very first day people can exercise 20 to 30 minutes at their aerobic heart rate," Osinski said. "You can start getting benefits from exercise the first day. Nobody's ever had a heart attack water walking."

It's possible to lose weight by water walking, primarily due to changes in an exerciser's body composition, she said.

"This is not a sport just for young men," Osinski said. Young people, physically fit individuals, pregnant women, the elderly and handicapped people can all enjoy and benefit from water walking. Each person exercises to his own ability, she said.

"A mile workout will take most of you anywhere from 32 to 35 minutes to walk in the water," Osinski said. "It would take about eight minutes on land."

The deeper the depth, the longer it takes to run in the water, she said. Participants should run in water at least waist-deep.

"The best depth is at the bottom of the sternum," Osinski told participants. "Lean forward slightly and use your arms like you're swimming. Pull them through the water."

She said improper position may cause low back pain. She cautioned participants to warm up and cool down, as with any other exercise, lest they experience cramps in their leg muscles.

To avoid slipping and falling — and blisters — Osinski recommends wearing either specially designed water shoes or old sneakers.

Dehydration is a concern with water walking, she said. "You may not know it but you sweat when you swim," Osinski said. "When you exercise you create heat that needs to be dissipated."

She said water walkers typically lose one-half to two pints of perspiration for every hour exercising. Osinski recommends keeping a plastic water bottle poolside and taking frequents sips of water during a workout.

THE UNITED STATES WATER FITNESS ASSOCIATION

NATIONAL WATER FITNESS CHAMPIONSHIPS

THE USWFA the national governing body for water fitness competitions in the United States.

LOCATIONS OF NATIONAL CHAMPIONSHIPS

1994 Fort Lauderdale Fl.
1993 Salt Lake City UT.
1992 Philadelphia (West Chester) PA.
1991 Portland (Beaverton) OR.
1990 Dallas (Plano) TX.
1989 North Miami Beach FL.
1988 Norman OK.

WOMEN
NATIONAL CHAMPIONS

1. **WATER RACING** (Formerly called Water Walking)

1994 Sue Consentino	New York NY.	Time 310.8
1993 Alison Osiniski	San Diego CA.	Time 369.63
1992 Alison Osiniski	San Diego CA.	Time 252.86
1991 Alison Osiniski	San Diego CA.	Time 360.87
1990 Alison Osiniski	San Diego CA.	Time 362. 57
1989 Alison Osiniski	San Diego CA.	Time 351.54
1988 Alison Osiniski	San Diego CA.	Time 6.38

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