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LIFTING "LIQUID WEIGHTS": WATER WORKOUTS WORK!



If you think exercise only counts if it leaves you gasping for breath, counting the minutes until it is over, and nursing aching joints, think again. Water exercise provides an excellent way to get and stay in shape without pain and, it seems, with little effort.

Water exercise, also known as aquacize or water aerobics, is not only gentle on the joints and fun, it improves cardiovascular conditioning, develops muscles, and increases endurance. "Water's safety allows us to exercise like the athletes we are in our minds--the ski experts, the

marathon runners, the hurdlers--without risk of injury," says Mary E. Sanders, an exercise physiologist and water-exercise researcher at the University of Nevada in Reno, and one of the country's most renowned water fitness experts.

It is not necessary to know how to swim. Many of the estimated 7 million Americans who regularly participate in water exercise are non-swimmers.

Aquacize is a non-impact activity if your feet do not touch the bottom of the pool. It is low-impact if they do. This means there is less stress on bones and joints and little risk of injury to areas affected by high impact sports, such as knees, feet, hips, and lower back.

When you walk or stand on land, you, your feet, legs, and so on, support your body weight. If you are in hip-deep water, you support about half of your weight and the water supports the other half. If you are in neck-deep water, you support about 8% of your weight and the water supports 92%. If you are in deep water and floating, you are supporting none of your weight and you are essentially weightless.

This is in direct opposition to most exercise, which involves moving or supporting full body weight and

more in activities such as lifting weights, walking, and golfing.

Though you are weightless when submerged, water provides almost 12 times the resistance of air. So, your muscles are working as you move your limbs against this resistance. You are pushing against the force of water every time you move and this strengthens muscles, the heart, and the lungs.

"Moving through water is like lifting liquid weight," explains Sanders. The more effort you use against the water, whether by upping the intensity or using water resistance tools such as dumbbell-shaped paddles or web-shaped gloves, the higher the resistance and the harder the exercise.

Water exercise strengthens not just the limbs you are moving, but also strengthens your trunk muscles, particularly those of the abdomen and lower back. You use these muscles to stabilize yourself as you move in the water. "Performing crunches [or traditional sit-ups] on land, while you're lying on your back, doesn't prepare those muscles for the way you use them in real life," says Sanders. "In the water, however, you work them in an upright position by simply walking through the water."

Aquacize promotes what Sanders calls "functional fitness," the ability to do tasks in everyday life without discomfort or the threat of injury, something that is important particularly for seniors.

In one of her recent studies, Sanders enlisted a group of 61 women, aged 60 to 89, to participate in three aquacize classes each week for 16 weeks. In each class the subjects engaged in cardiovascular and strength-training activities. In addition, they practiced falling and getting up in shallow water, and stepping on and off a small submerged platform.

By the end of the study, the women had increased walking speed and improved arm and abdominal strength. They also reduced their body fat and showed improved balance and agility. "Older women are especially prone to falls, which often causes broken bones," says Sanders. Their improved balance and agility means they are less likely to fall on land.

But no matter what your age, chances are that when you try water aerobics, you will be hooked. One unanimous refrain from dedicated aqua-exercisers: class never feels like work. It's too much fun.

To find a water exercise program in your area, contact your local health clubs and community and private swimming pools.

Welcome Darryn L. Appleton, MD



Virginia Cardiovascular Specialists is pleased to welcome Darryn L. Appleton, MD to our practice. Dr. Appleton specializes in cardiac and vascular interventions. Dr. Appleton is a graduate of the University of Auckland School of Medicine in New Zealand. He completed his interventional cardiology fellowship at Virginia Commonwealth University Health System in Richmond.

Dr. Appleton will be based primarily out of our west end offices including Forest Medical Plaza and St. Mary's. To schedule an appointment with Dr. Appleton please call (804) 288-4827. To learn more about Dr. Appleton please visit our website at www.vacardio.com.

Focus On... Metabolic Syndrome

Metabolic syndrome is a cluster of risk factors related to the body's metabolism that increase your risk of developing cardiovascular disease and type 2 diabetes mellitus. These risk factors include extra weight

around your waist, abnormal cholesterol levels, high blood pressure, and elevated blood sugar (glucose). Lifestyle changes, such as losing weight, quitting smoking, or lowering your cholesterol, can be your first step to preventing and reversing metabolic syndrome. By reducing the risk factors, you also decrease your risk of developing heart and vascular diseases and type 2 diabetes.

To read the full article, click [here](#).