# **Water Exercise for the Obese Population**

By Elizabeth Kovar, MA



According to the Centers for Disease Control and Prevention (CDC) 2009-2010 statistics, 35.9% of the U.S. population (age 20 or over) are classified as obese. In addition, 33.3% of adults are classified as overweight. Fitness professionals recognize that obesity is an epidemic and the industry is looking for ways to make positive changes.

Today, we are bombarded with magazine articles and television shows that illustrate advanced fitness training techniques, often incorporating heavy resistance or challenging body positions. Although there is a time and place for these exercises, these techniques might not initially be appropriate for obese individuals. It is vital to develop proper movement patterns in each exercise prior to adding excessive joint loading, resistance and/or other intensity challenges.

The obese population may experience other hypokinetic diseases (conditions associated with a sedentary lifestyle), such as arthritis, diabetes, heart disease, low back pain and joint disorders. Mobility issues and range of motion may also be limiting factors for safe and effective exercise. For example, getting up and down from the floor may present a barrier for some land-based training formats.

Aquatic exercise may be an appropriate form of exercise prior to implementing a land-based exercise program. To assure continued lifelong participation, one must perceive exercise to be enjoyable. Water exercise can be enjoyable due to the increased comfort of the buoyant environment. June Chewning, MA, Aquatic Exercise Association Research Committee Chairman and owner of Fitness Learning Systems, states, "Water fitness is important to the obese exercise participant because it is a low impact to non impact form of exercise. Postural alignment throughout the kinetic chain will benefit from the reduction of gravity and impact on vital joints." Monique Acton, AEA Trainer and owner/president of Personal Health Trac Inc., explains, "Water fitness is an excellent way for anyone, including the obese population, to exercise. Movement in this environment, as opposed to exercising on land, is more forgiving to the joints due to the buoyancy factor of the water."

Beyond body composition changes, there are other benefits that water exercise provides to the obese individual. "Benefits seen from water fitness include increased muscular strength and endurance. The body has to move against resistance in all directions, so the muscles are constantly being utilized," states Acton. "Flexibility can be improved as the joints can often move more freely when submerged under the water. Additionally, the support of the water assists with body positions for stretching that may not be achievable on land." And of course, cardiovascular gains can be achieved through a wide array of class formats in both shallow and deep water.

Depending upon personal preferences, monetary investment and program availability, options exist for group exercise, small group training or personal (one-on-one) training in the pool. An obese individual may initially benefit from working with a personal trainer to develop proper technique and learn how to correctly monitor and adjust exercise intensity. However, a water personal trainer may be more difficult to locate. "There is an acute shortage of qualified aquatic personal trainers, but aquatic group exercise classes will be appropriate, as long as the instructor is knowledgeable and can guide the obese individual effectively in class," states Chewning.

Acton also recommends the obese individual train with a qualified aquatic personal trainer when possible, but recognizes that water classes can be very beneficial as well. Even though group exercise does not cater to each individual's specific needs, the water is accommodating to all levels of fitness and a well-trained instructor can provide a variety of movement modifications. Additionally, some people are better motivated and encouraged when exercising with a group.

Instructors and trainers should strive to educate participants/clients on the purpose of the exercise and the targeted muscle groups. Additionally, instructors and trainers can implement heart rate monitoring to better assess exercise intensity and caloric expenditure during classes or training sessions. "Research clearly indicates that aquatic exercise at the correct intensity and duration burns just as many calories as comparable land exercise. You must monitor intensity to make sure the client is working in the fat burning zone. The trick is monitoring

intensity correctly in the water, which is very complicated. The Kruel Individual Aquatic Heart Rate Deduction formula is now recommended for finding target heart rates in the aquatic environment," states Chewning.

Understanding the research behind water exercise and recognizing the unique needs of training obese individuals allows trainers and instructors to expand their reach within the community. Keep in mind that water exercise may be the first step towards a lifelong exercise routine. Be prepared!

EDITOR'S NOTE: Check out additional resources for monitoring exercise intensity and weight loss at the AEA Website, www.aeawave.com. Select RESEARCH at the left menu bar, then choose RESEARCH RESOURCES. Here you will find downloadable files for The Kruel Method and Aquatic Programming for Weight Loss.

#### Author



Elizabeth Kovar, MA, resides in Seattle, Washington and is a fitness professional, freelance writer and workshop presenter. She currently manages corporate wellness programs in Seattle. To

send questions or comments, please visit: www.elizabethkovar.com <a href="http://www.elizabethkovar.com">http://www.elizabethkovar.com</a> For more information on exercise and caloric consumption, check out the following online course from FLS that is approved for 1.0 AEA CECs

# **Fitness Learning Systems Course**

www.fitnesslearningsystems.com

A Simple Study of Exercise and Caloric Consumption by June M. Chewning, MA

**Education Level:** Beginner **Prerequisites:** None

**Target Audience:** Aquatic Fitness Professional, Group Fitness, Personal Trainer

## **Course Description:**

It's such a satisfying experience to finish your workout knowing you have created a calorie deficit. Many clients are trying to manage their weight and want to know "How many calories did I burn in this workout?" In order to answer this commonly asked question, it is important to understand the many factors that affect caloric consumption. This quick study will help you guide your clients to better exercise choices and help you better understand the "skinny" on measuring energy production and intensity and the variables that affect caloric consumption.

### **Course Objectives**

After reviewing this course the participant will be able to:

- 1. Define several terms related to the measurement of energy production.
- 2. Describe variables affecting caloric consumption during exercise.
- 3. Understand how caloric consumption is measured.
- 4. Understand how intensity is measured in exercise.
- 5. Describe the variables that affect caloric consumption in the aquatic environment.

