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Weight Loss with Aquatic Exercise
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When I first began in the aquatic therapy field my typical client had neurological or orthopedic impairments, or suffered from fibromyalgia and/or chronic pain. However, over the past few years I am seeing a steady increase in referrals for weight management. This is not altogether surprising; the US population has shown a significant rise in obesity. Our fast-paced, automated society includes changes in nutrition and exercise habits that negatively affect adults and children as well.

How Serious is the Problem?
Adults:

- Nationally, nearly 38 percent of adults are obese.
- Nearly 8 percent of adults are extremely obese (BMI greater than or equal to 40.0).
- Obesity rates are higher among women (40.4 percent) compared to men (35.0 percent).
- Women are also almost twice as likely (9.9 percent) to be extremely obese compared to men (5.5 percent).

Children:

- Since 1980, the childhood obesity rates (ages 2 to 19) have tripled.
- Rates of obese 6 to 11-year-olds have more than doubled (from 7 percent to 17.5 percent).
- Rates of obese teens (ages 12 to 19) have quadrupled from 5 percent to 20.5 percent.
- Children, especially adolescents, who are obese will more than likely continue to be obese into adulthood.

What are the Health Consequences?
Being overweight or obese increases the risk of a number of conditions, including:

- Coronary heart disease
- Type 2 diabetes
- Some types of cancer (endometrial, breast, and colon)
- High blood pressure
- Lipid disorders (e.g., high total cholesterol or high levels of triglycerides)
- Stroke
- Liver and gallbladder disease
- Sleep apnea and respiratory problems
- Osteoarthritis
- Gynecological problems (e.g. abnormal periods, infertility)

Creating Effective Aquatic Programming
About seven years ago I was invited to work with a medical exercise board to help develop aquatic exercise programs. The goal was to provide patients with exercise options to improve quality of life. I developed a weight loss fitness program called Hydro-Burn. Key principles of Hydro-Burn included a thorough health screening. It is important to be aware, and accommodate, existing medical concerns and medications for each participant. Participants are encouraged to begin slowly and progress according to his/her unique needs and goals.

For all new program participants, building a good foundational fitness level is necessary. First develop tolerance for 20-30 minutes of exercise, and then gradually progress to 45-60 minutes while increasing intensity, as the individual is able. Frequency of 3-5 times per week should be encouraged. It will take several weeks to build this fitness foundation.

Program Components

- Dynamic Warm-up

A dynamic multidirectional warm up addressing the major muscle groups should be performed for 5-10 minutes to acclimate the participant to the water and prepare the body for exercise.

- Main Segment

Provide training options to meet the needs and goals of your participants, provide training progression, and keep them engaged and motivated. Some ideas for the main segment of the session include the following:

- Shallow/Deep Water Exercises - The majority of training is in shallow water targeting proper alignment and stabilization. Deep-water cardio exercises, such as running or bicycling with breaststroke, help improve overall endurance, while unloading the joints. Running between water depths, while wearing a flotation vest or belt, provides total body training.
- Resistive Exercises - Resistance equipment can help develop muscular strength, endurance, and flexibility, while effectively targeting improvements in body composition. Include functional exercises that can be transitioned to the land environment. Emphasize pushing, pulling, squatting, and lunging movements.
- Compound Exercises - Incorporating combined upper and lower body movements allow you to target more muscles in a shorter amount of time and improve calorie burning.
- Power Training - Shallow water plyometrics can improve overall physical conditioning plus it is often empowering for the participant. Jump training in the water can include both vertical jumps and broad jumps. Ensure proper mechanics and technique is performed by careful cueing, correction and demonstration.
- HIIT - High Intensity Interval Training could be incorporated once the participant has a good base level of fitness. Performing HIIT with 10-15 second bursts of high intensity work cycles can assist with overall fitness and enhance calorie burning long after class is over.
- Circuits – Circuit training keeps things challenging and fun with various stations that incorporate a wide range of exercises. Including stations with kickboards, resistive equipment, plyometrics, and deep-water running can really turn up the intensity and keep participants motivated.

- Cool-down

A dynamic cool down for 5-10 minutes allows improved flexibility and relaxation.

- Education

In addition to the physical training, it is important add an educational component to help participants take control of their health outside of the class setting. For example, I encourage participants to perform some sort of land-based exercise on days when they are not in the pool. I also provide Fit Tips with simple strategies to make their weight loss journey more successful.

By building a strong fitness foundation, each participant will be able to progress to more challenging higher intensity exercises, which will assist with weight loss goals. I have had clients lose over 60 pounds by exercising in the water and incorporating lifestyle changes. Keep your program both fun and functional to motivate your participants and they will see similar results.

RESOURCES

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