

AQUAJOGGING: HIGH VALUE FITNESS PART IV

David K. Brennan M.Ed. and Charlene Kopansky BSc. H.K., BEd.

Running is a vital aspect of most sports activities. Running for the sake of running satisfies a primal need in humans.

Aquajogging provides the opportunity to enhance running form while working in a safe, resistance based, low impact, high energy environment.

Low intensity training sessions will improve "running economy".

Medium intensity training sessions will improve lactate threshold.

Maintenance of **running form** is essential at all levels of training. It is more difficult to keep good form at very high intensity, but must be done for maximum training results.

Part I, II and III of this ongoing series of articles on Aquajogging focused on the techniques of effective running form; methods to monitor intensity; using the "Graded Wilder Exercise Test"; orientation to equipment; correct fit; specific gravity test; specific training guidelines to improve running economy, lactate threshold and VO₂max.

This article will focus on cross training and shallow water aquajogging for rehabilitation or building confidence.

Naturally, before beginning any training program it is absolutely essential to get the 'go ahead' from your doctor. Let the doctor know the training you are planning to do and then it can be determined whether or not this type of training is recommended by the doctor.

Always include a warm up before and a cool down after each aquajogging session.

Cross Training and Deep Water Running

If the intent of your training is to maintain or increase general aerobic fitness, any aerobic exercise may be appropriate. Training that is intended to maintain or enhance athletic performance however, must be specific and simulate specific exercise motions. There does appear to be some transfer of training effect in maximum oxygen consumption from deep water running and cycling to land based running although the transfer effects never exceeds the effects of running itself. Swimming on the other hand, appears to



Charlene Kopansky sharing Water Running ideas with Peter Fonseca at The Fitness Institute.

have a minimal inter modal transfer effect on running and on maximum oxygen consumption.

For an injured runner seeking to maintain fitness during a recovery period, deep water running and cycling offer greater specificity of training than swimming. Of course, if the lower extremity is injured, swimming may be utilized to maintain general fitness or as a non-specific active recovery between hard running sessions. For the multi-sport athlete, training in each modality is required, and appropriate modifications in intensity, duration or frequency of each training modality must be considered. A word of caution, excessive multi-sport training has also been linked to overuse injury.

Shallow Water Running

If you are in transition from deep water Aquajogging to land running, during rehabilitation, or if your pool is too shallow for deep water running, then shallow water Aquarunning is a good alternative or supplement to deep water running. "Shallow water" jogging or running can also serve to build the confidence level of individuals who are fearful of deep water.

A Rehabilitation Perspective:

When standing in water at shoulder depth, body weight is about 10% of total body weight. This is why shoulder depth water is an effective and safe environment to start the transition to land based running in a rehabilitation situation. After a one to two week peri-

od of time, considering the status of the injury, move to a water depth which is at chest level. This translates to about 30% body weight. After another two to three weeks, progress to water that is at hip level. At this depth the body experiences about 50% vertical load or body weight. At this point, a runner, recovering from an injury can begin to integrate land based running or walking with deep and shallow water running.

Water is a kind and gentle training environment from an impact and resistance point of view. Once orientation to the equipment and good running form is established in the pool, plus techniques for monitoring heart rate, RPE and cadence are perfected, water running can be a valuable tool for preventing injuries, rehabilitating and/or improving fitness and the ability to run. Using various training formats will enable Aquajoggers to meet specific training goals to improve running economy; lactate threshold and/or VO₂max.

A list of references was included with Part I and II.

More on warm ups, stretch cool downs and class formats in a future Aquajogging article.

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