

# Chapter 6

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## Aqua Running

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Upon completion of this chapter, the reader will be able to:

- List positive influences of incorporating aqua running into a training program
- Describe proper biomechanical form for aqua running
- Analyze differences in physiological responses between aqua running and land based running
- Generate specific aqua running workouts utilizing three major means of exercise prescription
- Apply aqua running to the rehabilitation and training of both athletes and nonathletes

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### INTRODUCTION

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Aqua running is an effective form of cardiovascular conditioning for both injured athletes and those who desire a low-impact aerobic workout. Sufficient cardiovascular responses have been demonstrated to result in a training effect. Understanding the bioengineering principles of the aquatic environment, proper technique, physiological response, and methods of exercise prescription help practitioners incorporate aqua running into rehabilitation and training programs. Deep-water exercise is thus being used in the treatment and conditioning programs for a number of populations needing rehabilitation. This is especially true in the field of sports medicine, where aqua running is used as an effective form of cardiovascular conditioning for injured athletes as well as for others who desire a low-impact aerobic workout. Aqua running, or deep-water running, consists of simulated running in the deep end of a pool aided by a flotation device (vest or belt) that maintains the head above water. The participant may be held in one location by a tether cord, thus essentially running in place or may actually run through the water across the width of the pool. The tether serves to increase resistance, to assist in maintenance of a near vertical posture, and to facilitate monitoring of exercise by a physician, therapist, or coach. No contact is made with the bottom of the pool, thus eliminating impact. The elimination of weight load on joints makes this an ideal method for rehabilitating or conditioning injured athletes, particularly those with foot, ankle, or knee injuries for whom running on land is contraindicated. Several positive influences of incorporating aqua running into a training program are summarized in the following: