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Aquatic Therapy offers benefits to both healthy and injured individuals. In both untrained and post-operative individuals, aquatic therapy offers:

- ▷ Increased strength
- ▷ Increased VO2 Max
- ▷ Improved cardiovascular endurance
- ▷ a non or partial-weightbearing component
- ▷ Improved neuromuscular control and proprioception
- ▷ Decreased heart rate (10-12 beats per minute) and increased RPE due to resistance of upper extremities and lower extremities against water
- ▷ Increased venous return resulting in decreased edema

The benefits of aquatic therapy in trained individuals and athletes include:

- ▷ VO2 Max values similar to land-based training (within 3.8 ml/kg/min)
- ▷ Improved running economy, core strength, and proprioception
- ▷ Improved strength, respiratory function, and endurance
- ▷ Decreased compressive loading of the spine
- ▷ Active rest from running without effects of detraining

Further evidence of the value of aquatic training include:

- ▷ **Bushman et al** demonstrated that distance runners on a 4-week program of aquatic only training maintained running performance, VO2 Max, maximum heart rate, and lactate threshold
- ▷ **Bushman et al** noted no difference in 5K time after 4 weeks of deep water running only
- ▷ **Wilber et al** report that 32 recreational distance runners maintained a 2-mile run performance after only 6 weeks of deep water running only
- ▷ **Tartaruga et al** report that distance runners replacing 30% of their training with deep water running demonstrated no change in maximal O2 uptake, ventilatory threshold, maximal expiratory volume, running economy, maximal heart rate, stride frequency, length, and time
- ▷ **Martel et al** demonstrated an increased in vertical jump of volleyball players with aquatic plyometric training, and an 11% improvement in jumping performance on land
- ▷ **Robinson et al** demonstrated that aquatic plyometrics resulted in the same benefits as land-based plyometrics with less muscle soreness

Recommendations for aquatic therapy in trained individuals:

- ▷ Intensity must be similar to land-based training 2-3 days per week
- ▷ Durations of 50-90 minutes (90-100% VO₂ for 30 minutes, 70-75% for 60 minutes)
- ▷ Deep water running for distance running training
- ▷ Shallow water training for vertical jump training
- ▷ Water shoes/socks are recommended for shallow water running and jumping

Resistance Training

- ▷ Begin a resistance training program in the off-season
- ▷ Perform resistance training on “lighter training days
- ▷ Taper resistance training before an endurance event
- ▷ Perform resistance training before endurance training to limit to limit fatigue and poor form
- ▷ Incorporate bilateral movements into training program and variable routine.

Benefits:

- ▷ Faster running times
- ▷ Decreased injury risk
- ▷ Achievement of goals
- ▷ Increased enjoyment of running

Aquatic Running Workout Programs

Speed Workout

- 10 minutes easy pool running
- 10×1’ at hard effort with 1’ active recovery
- 10×30” at sprint effort with 30” active recovery
- 5-10 minutes easy warm-down.

Ladder/Pyramid Workout

- 10-15 minutes easy pool running.
- 1’, 2’, 3’, 4’, 5’, 4’ 3’, 2’, 1’ at hard effort except the 5’ session which is at tempo effort
- Each interval has 1’ of active recovery
- 5-10’ easy warm-down

Tempo Workout

- Warm up 10-15 minutes.
- 5 minutes hard, 5 minutes recovery. Repeat this 10-minute interval 4 times.
- Cool Down 10-20 minutes.

Long Run Workout

- Warm up 20-30 minutes.
- 3 minutes hard, 2 minutes recovery
- Repeat this 5-minute interval 6 times.
- 5 minutes recovery “jog.”
- 3 minutes hard, 2 minutes recovery. Repeat this 5-minute interval 6 times.
- Cool down 15-20 minutes.

***All pool workouts should be done in shallow water (waist height) with water shoes or deep water with a water jogging belt.**

Local Pool Facilities:

Catch the Wave Swim Club

1917 Blackhawk Blvd, South Beloit, IL 61080 815-713-4481
\$5.50 (one day admission)
or Yearly membership \$660

Dolphin Swim Club

6501 Rock Valley Pkwy, Loves Park, IL 61111 815-282-3488
\$6 (one day admission)
or Gold Membership \$1,400 Family
or Club Membership
 \$655 Family
 \$455 Single
 \$455 Senior Single

Peak Sports Club

4401 Peak Dr, Loves Park, IL 61111 815-877-4401
\$15 (one day admission- with a member)
or SINGLE Membership \$149 down and \$49.95 per month
 COUPLE Membership \$199 down and \$89.95 per month
 FAMILY Membership \$249 down and \$109.95 per month

Rock Swim & Fitness

3800 East State Street, Rockford, IL 61108 815-708-7224
\$5 (one day admission)
or Individual Month to Month \$29.99 per month + \$59 enrollment fee
or Couple Month to Month \$49.99 per month + \$99 enrollment fee
or Family Month to Month \$69.99 per month + \$99 enrollment fee

Swim N More

220 S Madison St, Rockford, IL 61104 815-969-7408
\$50 punch card for 10 visits

YMCA of Rock River

ID Pennock Family YMVA 200 Y Blvd, Rockford, IL 61107
Northeast Family YMCA 8451 Orth Rd, Loves Park, IL 61111
\$15 (one day admission)
or SINGLE \$50 Joiner Fee \$51 Monthly Fee
or SINGLE PARENT FAMILY \$50 Joiner Fee \$63 Monthly Fee
or FAMILY \$75 Joiner Fee \$74.50 Monthly Fee

Seasonal Facilities:

Alpine Pool

4310 Newburg Rd, Rockford, IL 61108 815-987-8804

Daily Admission

Senior \$3.75 (resident) \$4.75 (non resident)

Adult \$4.75 (resident) \$5.75 (non resident)

Youth \$4 (resident) \$5 (non resident)

or Season Passes Senior \$45 (resident) \$65 (non resident)

Adult \$55 (resident) \$75 (non resident)

Youth \$50 (resident) \$70 (non resident)

Dolphin Swim & Tennis Club

6588 Springbrook Rd, Rockford, IL 61114 815-877-1662

\$6 (one day)

or Club Plus Membership

\$1,060 Family; \$665 Single; \$655 Senior Couple; \$455 Senior Single

or Gold Plus Membership \$2,100 Family

or Outdoor Only Membership

\$1,000 Family; \$590 Single; \$655 Senior Couple; \$455 Senior Single

Sand Park Pool

1041 E Riverside Blvd, Loves Park, IL 61111 815-987-8806

Daily Admission

Senior \$4 (resident) \$5 (non resident)

Adult \$5 (resident) \$6 (non resident)

Youth \$4.25 (resident) \$5.25 (non resident)

or Season Passes Senior \$45 (resident) \$65 (non resident)

Adult \$55 (resident) \$75 (non resident)

Youth \$50 (resident) \$70 (non resident)