HydroWorx and Running Study

Metabolic-Cost Comparison of Submaximal Land and Aquatic Treadmill Exercise



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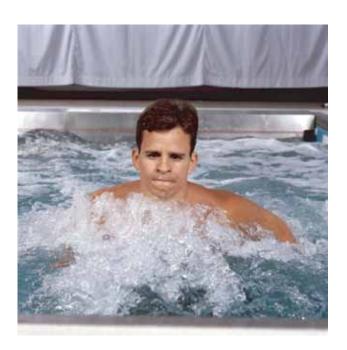
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Purpose:

This study was conducted in order to evaluate the metabolic cost of varying aquatic treadmill exercise speed and water-jet resistance and compare with land treadmill conditions at similar running speeds.

Method:

Fifteen male and female college aged track and field athletes participated in the study. Subjects completed nine, five minute submaximal underwater treadmill workouts with jets at varying resistance using a HydroWorx pool.



Results:

Limb loading was reduced significantly in the underwater treadmill sessions. The energy expenditure per stride ranged from 30%- 56% greater during underwater running than in land running.

Conclusion:

Underwater treadmill training offers viable exercise alternatives to land treadmill running as a way to maintain or improve fitness for injured and healthy individuals.

