HydroWorx Used to Decrease Obesity Study

Comparative Efficacy of Water and Land Treadmill Training for Overweight of Obese Adults

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Purpose:
This study was conducted in order to explore the efficacy of underwater treadmill exercise training programs by comparing changes in physical fitness, body weight, and body composition in physically inactive, overweight, and obese men and women.

Method:
Fifty-seven overweight men and women participated in this study. Subjects maintained dietary logs during the twelve week test period, making no alterations to diet or physical activity outside of the exercise training protocol. Participants exercised three times a week during the twelve week testing period in a HydroWorx pool.

Results:
Underwater treadmill exercise training programs performed by overweight and obese men and women is an effective training modality, producing beneficial changes in body composition and improvements in physical fitness. Health benefits were comparable to those of land-based treadmill training programs. More lean body mass was gained in the underwater treadmill training program compared to a land treadmill training program. Body mass index, percent body fat, and waist-to-hip ratio were significantly reduced in participants. Additional advantages of underwater treadmill training programs are the lower risk of pain and injury.

Conclusion:
This study shows that underwater treadmill training is a viable alternative to traditional land treadmill training for overweight users. Underwater treadmill training produces modest reductions in body weight, improvement in body composition, and aerobic capacity in a twelve week period without dietary intervention. The non-weight-bearing exercise reduces pain and risk of injury in overweight and obese people.

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