On Exercise Intensity with Individuals with Elevated Cholesterol and Mobility Issues

An interesting review by Mann, Beedie, and Jimenez (2014) looked at how different exercise modalities affected cholesterol and the lipid profile.

With regards to aerobic exercise (e.g. jogging, walking, running, etc.), Mann et al. (2014) noted that a moderate-intensity program seemed to be effective in increasing high-density lipoprotein (HDL) levels. However to reduce low-density lipoprotein (LDL) and triglycerides, the aerobic exercise intensity needed to be increased (towards more "vigorous" or high-intensity bouts) (Mann et al., 2014).

Mann et al. (2014) noted that low to moderate-intensity resistance training seemed to be more effective on regulating the lipid profile as compared to high-intensity resistance training, but further studies were needed. However, volume of training (sets and repetitions) had a greater impact/relevancy on the lipid profile than exercise intensity (Mann et al., 2014).

For the generally healthy individual with the goals of maintaining low LDL and triglycerides and increasing HDL, Mann et al. (2014) recommended: 30+ min/day, 5 days/week of moderate-intensity aerobic exercise, with low-intensity resistance training.

For individuals with elevated cholesterol, Mann et al. (2014) recommended: 30+ min/day, 5 days/week of moderate to moderate-vigorous aerobic exercise, with moderate to high-intensity resistsance training.

For individuals with elevated cholesterol and mobility issues (e.g. older adult population, orthopedic issues), Mann et al. (2014) recommended: incorporating as much physical activity as possible supplemented by low to moderate intensity resistance training targeting major muscle groups, and consider circuit training sessions.

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References

Mann, S., Beedie, C., & Jimenez, A. (2014). Differential effects of aerobic exercise, resistance training and combined exercise modalities on cholesterol and the lipid profile: Review, synthesis and recommendations. *Sports Medicine*, *44*(2), 211-221.