

The Underappreciated Synergy of Strength Training

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In a study published in this issue of *Obesity*, Bennie et al. (1) utilized multiple years of the US Behavioral Risk Factor Surveillance System to create a massive data set of approximately 1.7 million adults in order to examine the associations of self-reported aerobic activity and resistance training with BMI. While cross-sectional designs do not allow for cause-and-effect determination, this manuscript is still a valuable contribution to the literature. The authors reported that participation in either strength training or aerobic training is associated with a lower prevalence of obesity and that the combination of these activities is associated with an even lower prevalence of obesity. This is by far the largest study to ever examine the combination of aerobic and strength training, and it provides further evidence for the value of combining the 2 exercise modalities. Of note, BMI does not differentiate fat mass from lean muscle mass, and strength training promotes muscle mass, which creates the opportunity for misclassification; yet the weight training was still found to be associated with a lower risk of obesity as defined by BMI.

The federal Physical Activity Guidelines for Americans recommends that adults obtain at least 150 minutes a week of moderate-intensity aerobic physical activity, 75 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. It also states that adults should engage in muscle strengthening activities on 2 or more days a week (2). While most individuals are familiar with the recommendation of 150 minutes per week of moderate-intensity aerobic exercise, and some appreciate that the goal can be met with 75 minutes per week of higher intensity activity, in my experience, few individuals are aware of the strength training recommendations. This is unfortunate, as the evidence is clear that while strength training has health benefits, aerobic training has more; however, doing both is optimal. For some clinical metrics, the combination of resistance and aerobic training appears to be synergistic, especially when examining measures of glucose metabolism

(3). For those individuals focused on preventive measures to promote healthy aging, the importance of combining aerobic and strength training exercise needs to be emphasized.

There is another role of resistance training in promoting physical activity that I believe is largely underappreciated. When promoting the importance of physical activity, we often start the conversation with aerobic activities such as walking or biking. But for many individuals, these are not attractive options, whereas weight lifting may be more appealing. We should start the conversation with, “which do you prefer, aerobic or strength training exercise?” If the response is strength training, then make strength training the foundation of the program and build the aerobic exercise component around it. Discuss the importance of aerobic exercise in warm-up and cooldown as well as staying loose on strength training rest days. So, while the core program is strength training, aerobic training goals can be achieved as adjunct activity.

This large cross-sectional study (1) provides further evidence of the need for emphasis on the importance of including strength training in one’s physical activity program. This may have application for those interested in optimizing their program as well as those who prefer resistance training over aerobic training. **O**

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References

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