

Comparison of Metabolic Variables during the 2-Minute Walk Test and 6-Minute Walk Test

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ABSTRACT

Assessing for functional mobility and fitness in deconditioned populations is common practice in many clinics. Comparison of the 2-minute walk test (2MWT) as a predictor for 6-minute walk test (6MWT) metabolic variables will save clinicians time and effort when performing baseline testing. **PURPOSE:** To determine if the 2MWT can be used as a viable means of accessing baseline fitness versus the 6MWT. **METHODS:** Ten subjects (48.3 ± 15.7 yrs, 168.5 ± 8.6 cm, 75.5 ± 13.6 kg) reported on two separate days to perform the tests. Once fitted with a heart rate (HR) monitor and portable O₂ analyzer, they performed either the 2MWT or 6MWT and on the second day performed the other. Repeated measures ANOVA were used to determine significant differences with pairwise comparisons utilizing the Bonferroni technique. Alpha was set at .05 for all tests. **RESULTS:** While there was no significant difference in VO₂ between the 2-min time point of the 2MWT (16.9 ± 4.6 ml/kg/min) and the 2-min time point of the 6-min walk test (17.1 ± 5.6 ml/kg/min), $p=1.0$, there was a significant difference between the 2-min time point of the 2MWT and the 6-min time point of the 6MWT (21.4 ± 4.6 ml/kg/min), $p=.007$. There was no significant difference in HR between any of the time points ($p>.05$). **CONCLUSION:** Caution should be taken if using the 2MWT as a measure of fitness since it seems participants are not yet in steady state at the 2-minute mark.