



University of  
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# Improving walking in rural Australian adults: Outcomes from the REACH project

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REACH  
Rural Environments And Community Health



# Background

Rural Australian adults

Less likely to be **physically active**

More likely to be classified as **sedentary**

Independent increased risk of **cardiovascular/  
metabolic diseases**





# Study overview

12 week pedometer based physical activity intervention

Control: pedometer and paper step diary

Intervention: pedometer and access to REACH website

n	100 ( $\geq 50$ yrs)
Age	59.5 ( $\pm 5.3$ ) years
BMI	30.93 ( $\pm 5.57$ ) kg·m <sup>2</sup>
Work status	31% retired/25% full-time

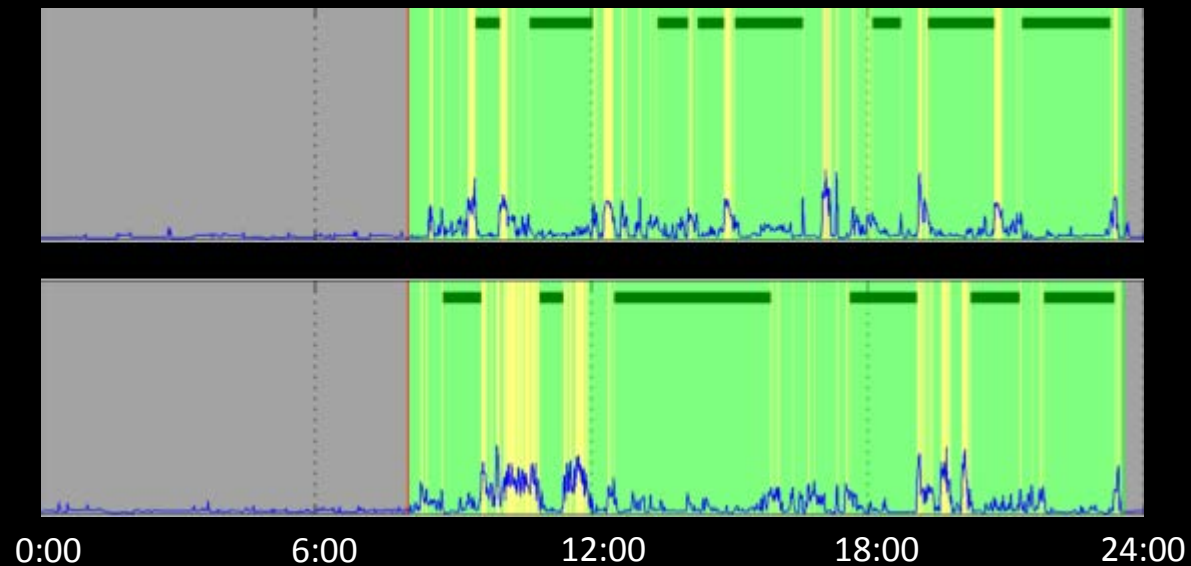




# Data processing

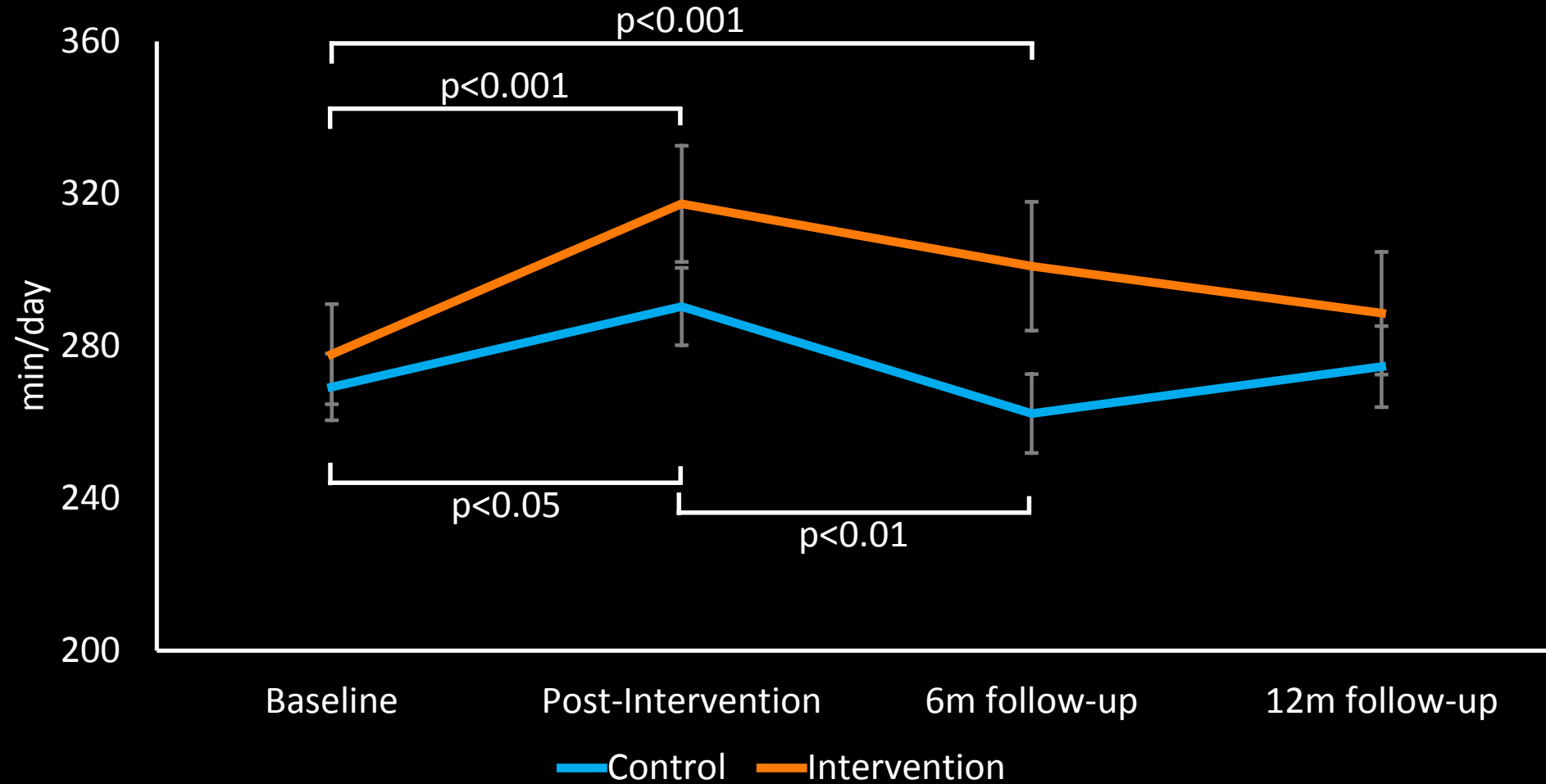
7 days physical activity monitoring  
Triaxial wrist-worn accelerometer

Collapsed into 1 minute 'summaries'  
Separated by intensity thresholds  
COBRA signal processing algorithm



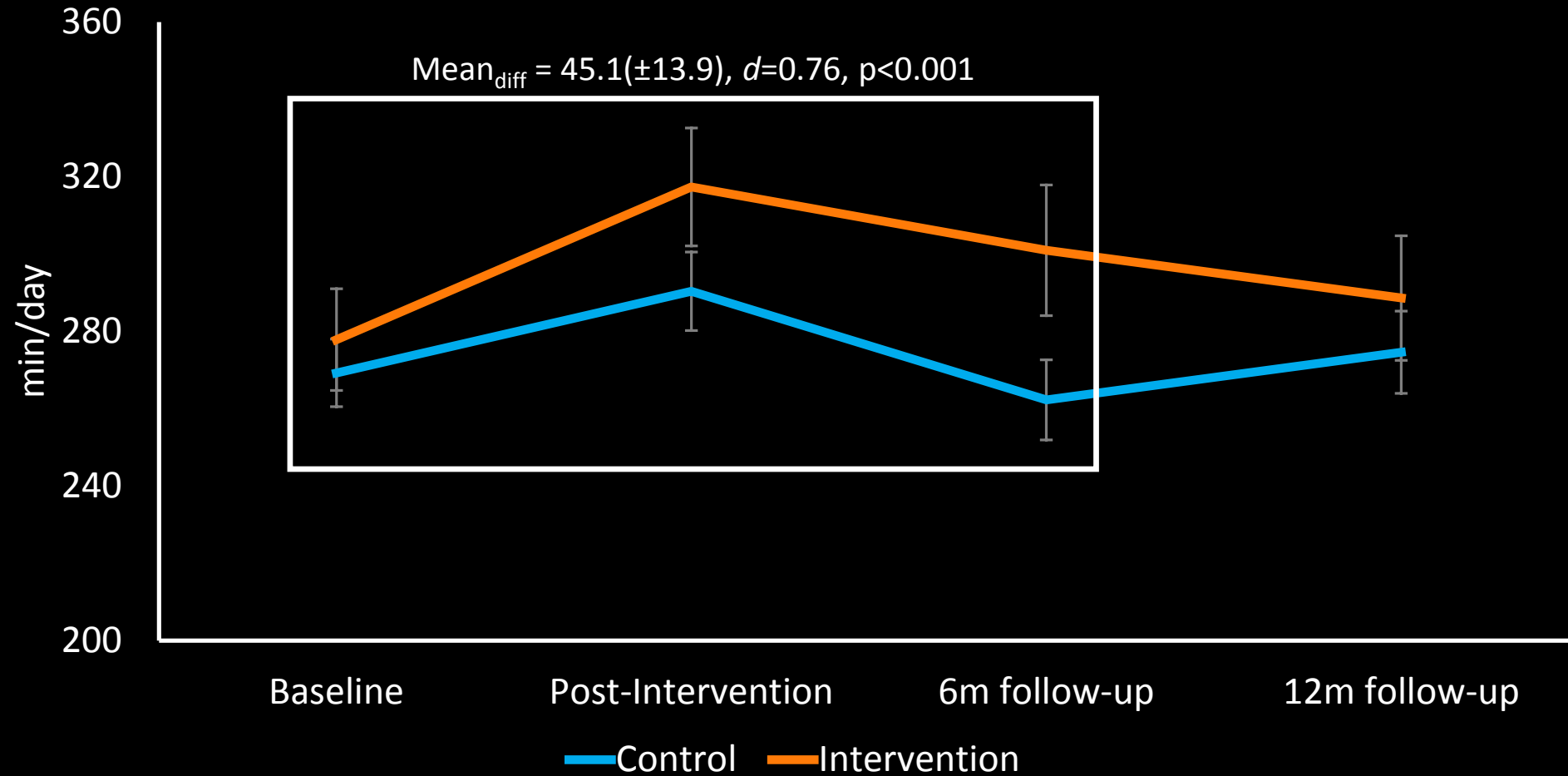


# Light intensity time



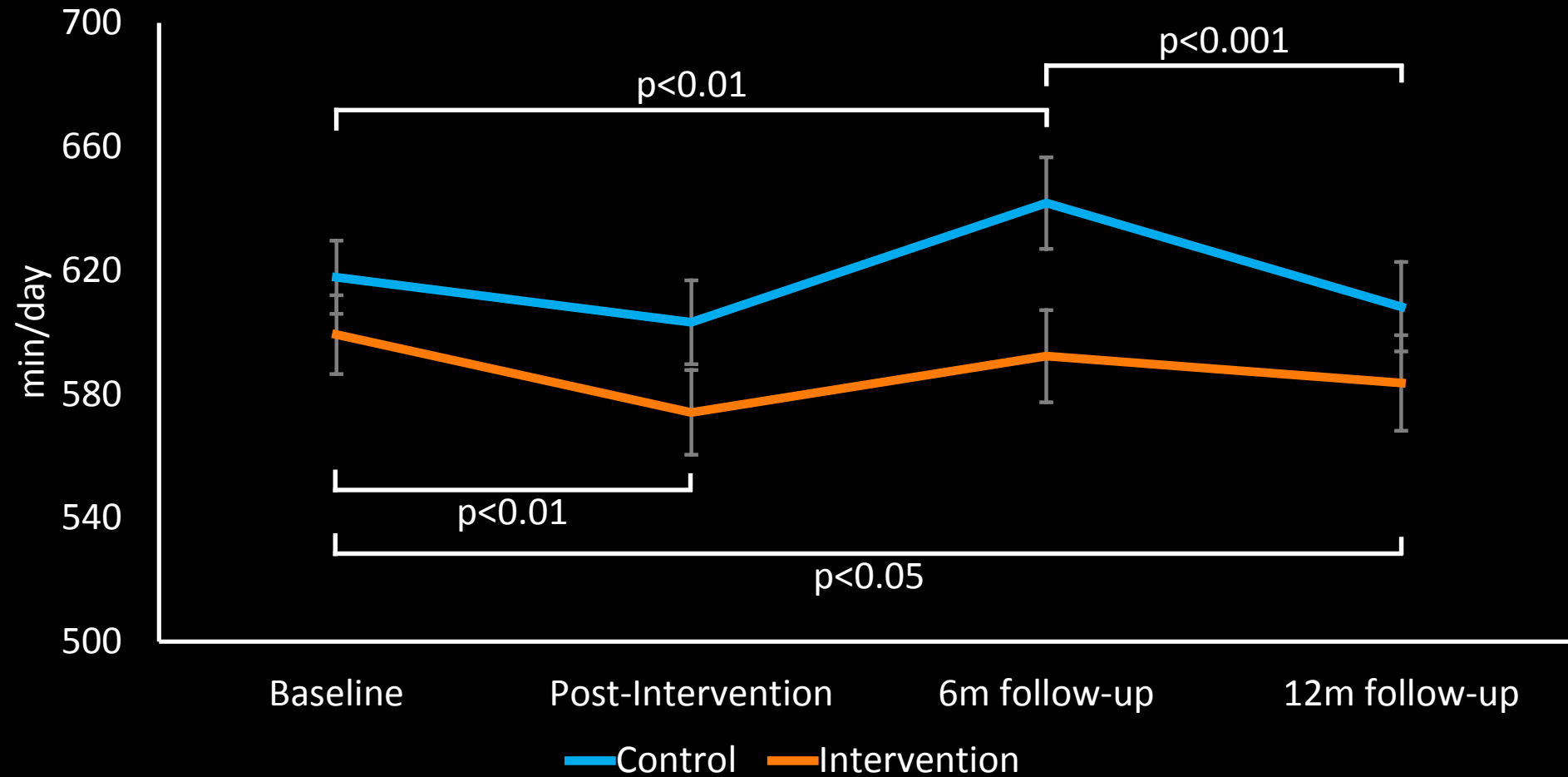


# Light intensity time



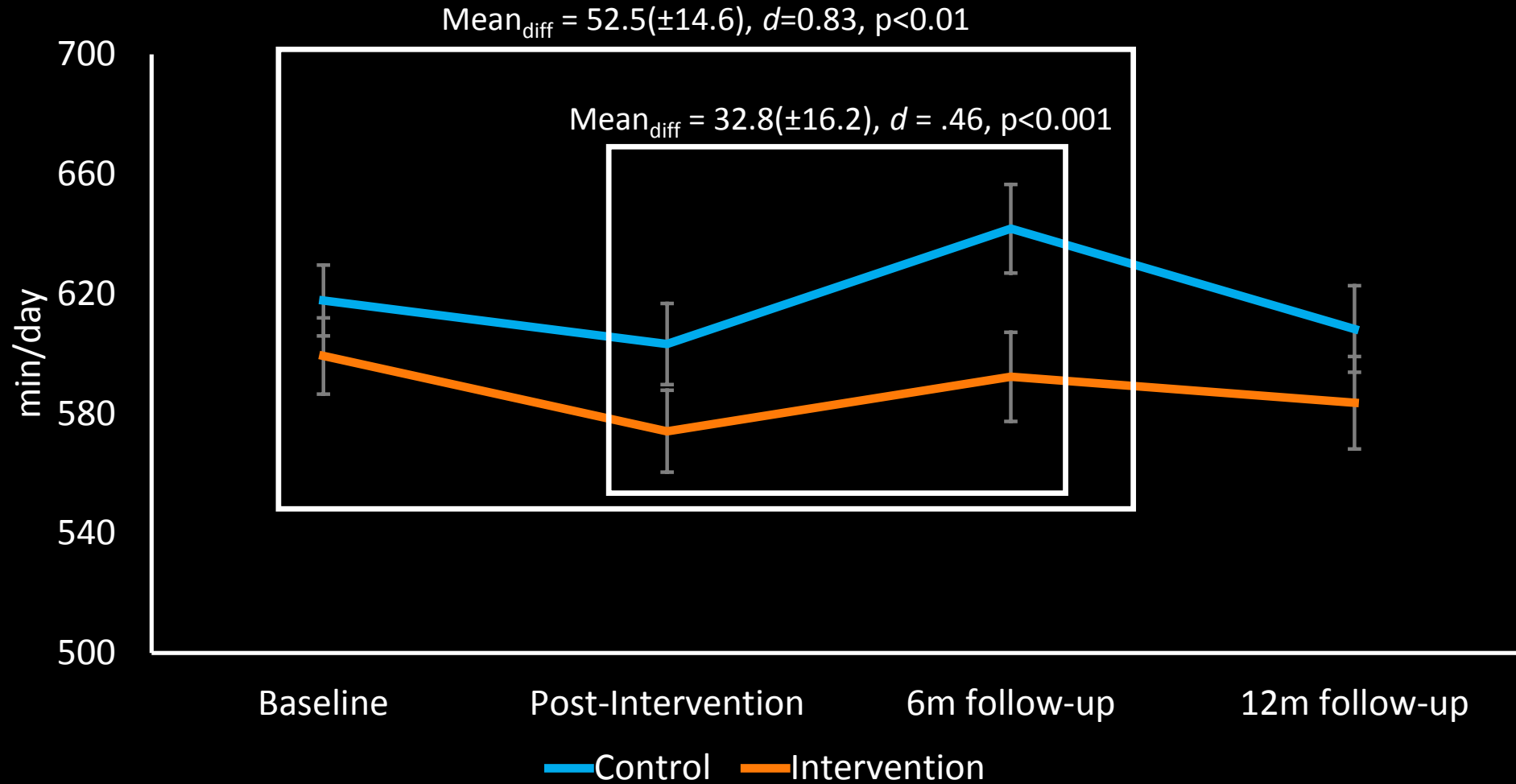


# Sedentary time





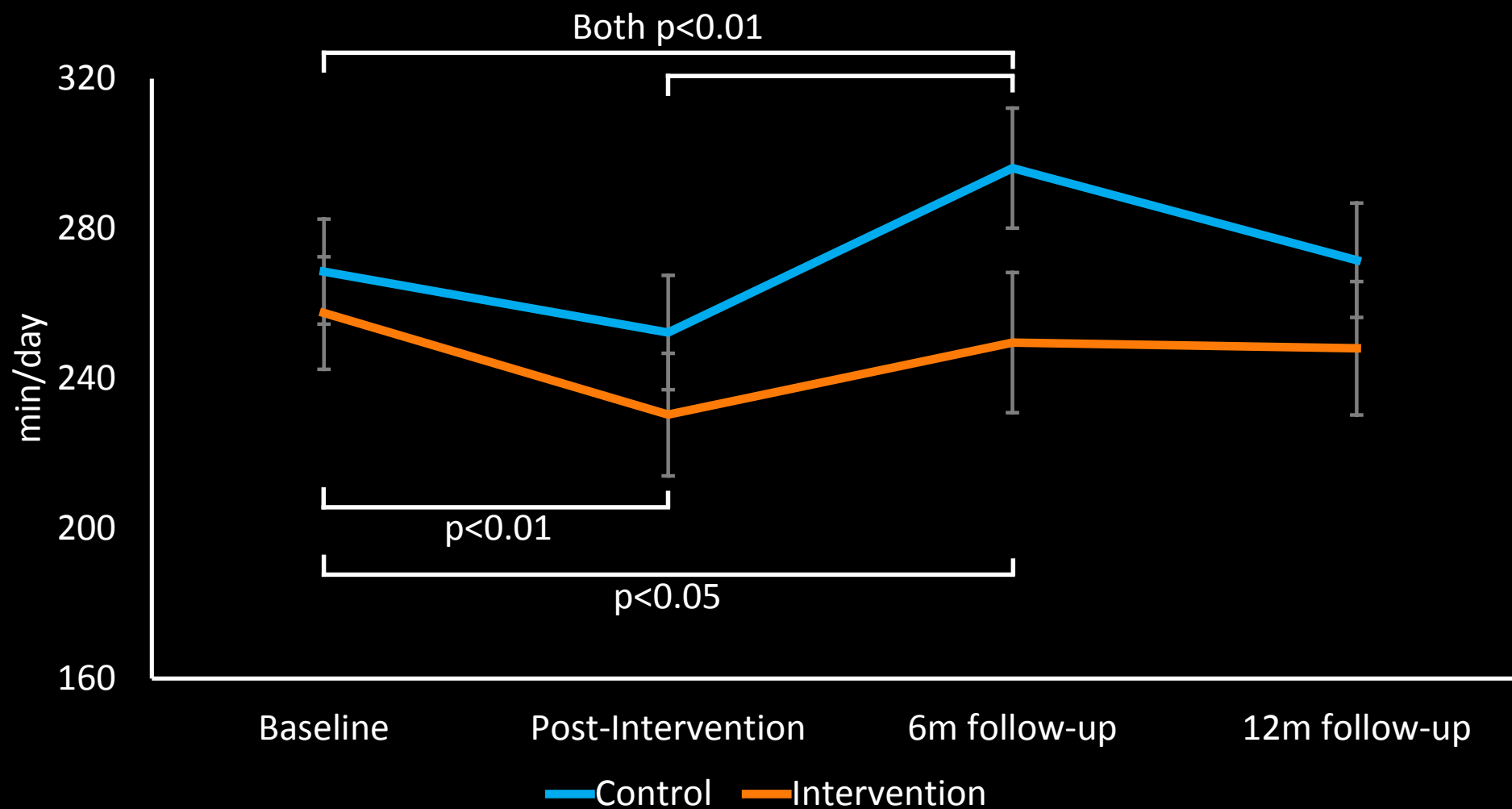
# Sedentary time



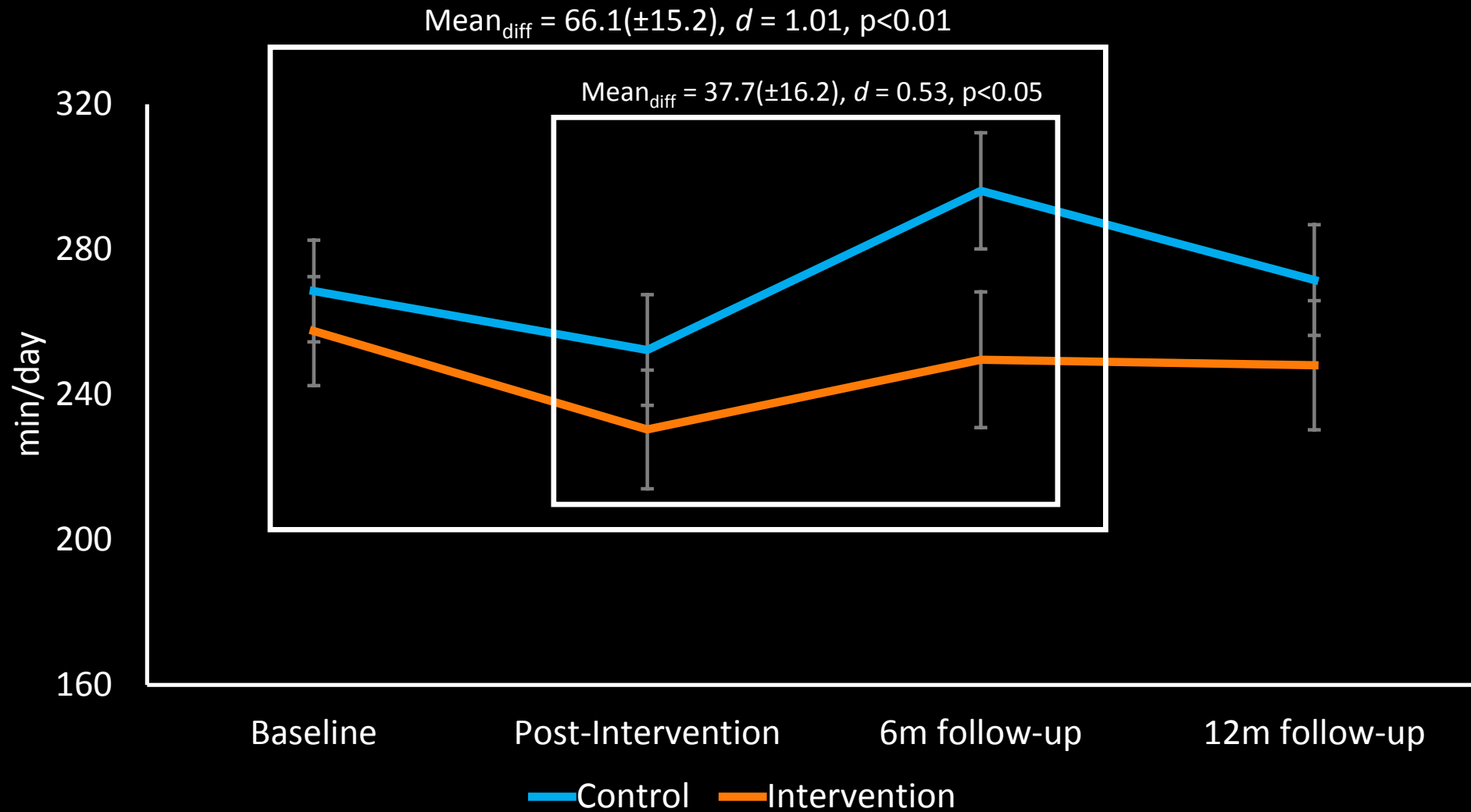




# Sedentary bout time



# Sedentary bout time





# Conclusion

Increased **light intensity activity** over 6 months

Reduced over all **sedentary time** over 6 months

Reduced **time spent in sedentary bouts** ( $\geq 30$ mins)  
over 6 months



# Acknowledgements

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