

### Supplemental Digital Content 3: Variance Inflation Factors (VIF)

#### VIF Corresponding to Models in Table 2

*Activity volume (counts) by tertile, Model B (full set of covariates)*

Variable	VIF
Tertile of Total Activity:	
2	1.662
3	2.029
Tertile of Light Activity:	
2	1.613
3	1.827
Tertile of MVPA:	
2	1.631
3	2.058

#### VIF Corresponding to Models in Table 3

*Isotemporal Substitution, Model B (full set of covariates)*

Variable	VIF
Replacing 10 Sedentary Minutes:	
MVPA minutes	1.339
Light minutes	1.311
Replacing 10 MVPA Minutes:	
Light Minutes	42.075
Sedentary Minutes	74.321

MVPA = Moderate-to-vigorous physical activity.  
Formula used was  $VIF = 1/(1-R^2)$ , where  $R^2$  is the  $R^2$  obtained from a linear regression of the given variable onto the rest of the covariates using the *svy: reg* command in Stata. Covariates used were those in Model B (the full set of covariates), as described in the text.