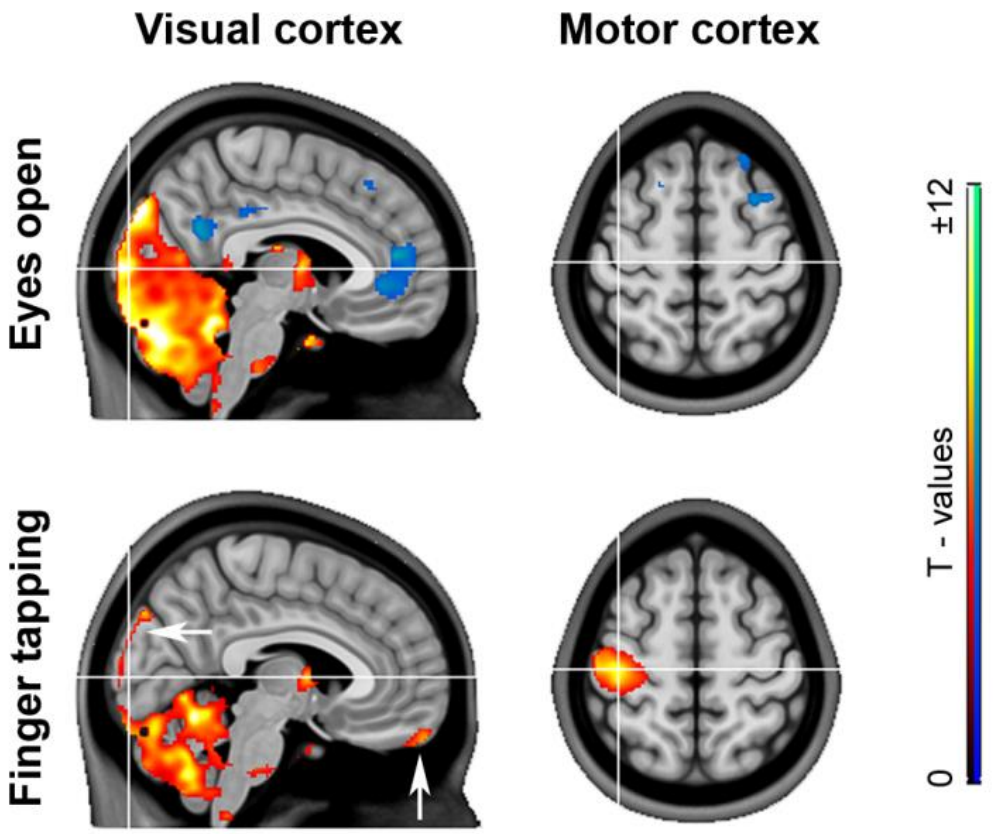
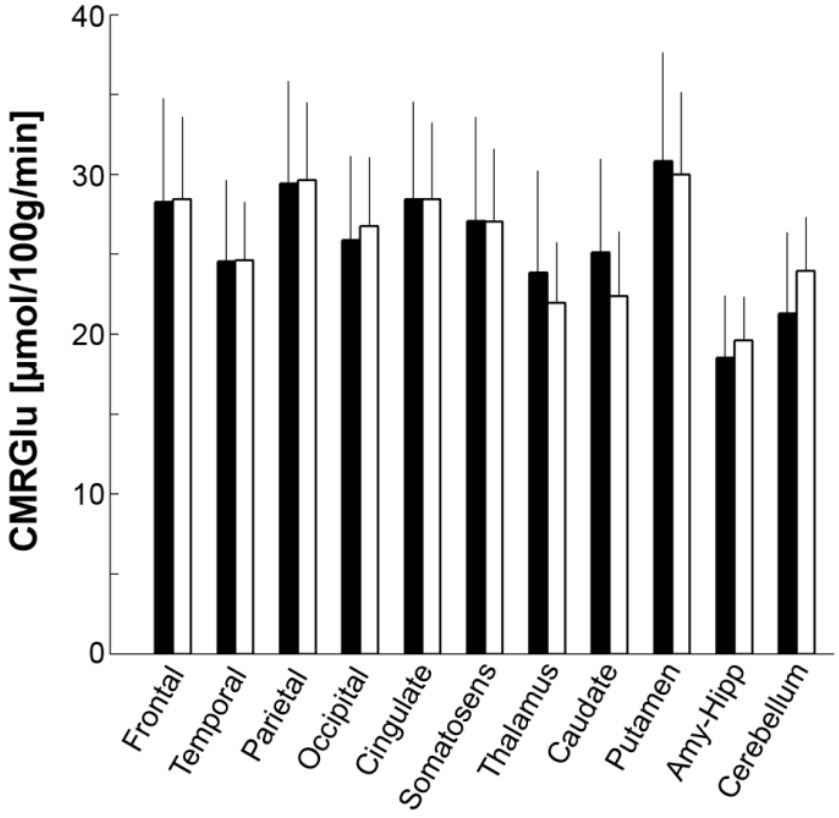


SUPPLEMENTAL FIGURE 1: Task-specific changes in glucose metabolism without including a movement regressor in the model ($P < 0.05$, familywise error–corrected cluster level). Increased metabolism was still detected in the primary visual and motor cortices during the eyes-open condition and finger-tapping task. However, without the movement regressor, unspecific increases were also observed near the edges of the brain (e.g., visual and orbitofrontal cortices) during finger tapping, as indicated by arrows. These effects are also commonly observed in functional MRI experiments (*1*).



SUPPLEMENTAL FIGURE 2: Baseline CMRGlu from bolus application (black) and constant infusion (white) for each brain region. Absolute test–retest values between bolus application and constant infusion were calculated as the magnitude of Equation 9 and were K_i = 13.2% ± 9.3% and CMRGlu = 21.1% ± 12.8%. Again, absolute test–retest was significantly higher when using the previous method (*2*) for K_i (39.1 ± 16.7%, $F_{1,333}$ = 329.0) and CMRGlu (40.4% ± 24.4%, $F_{1,333}$ = 85.0, both $P < 0.001$). Test–retest was particularly good for cortical regions, whereas more variability was observed for subcortical areas. Bars denote mean ± SD.

SUPPLEMENTAL REFERENCES

1. Poldrack RA, Mumford JA, Nichols TE. *Handbook of Functional MRI Data Analysis*. New York, NY: Cambridge University Press; 2011.

2. Villien M, Wey HY, Mandeville JB, et al. Dynamic functional imaging of brain glucose utilization using fPET-FDG. *Neuroimage.* 2014;100:192–199.