Correction to: Reevaluation of Astrocyte-Neuron Energy Metabolism with Astrocyte Volume Fraction Correction: Impact on Cellular Glucose Oxidation Rates, Glutamate–Glutamine Cycle Energetics, Glycogen Levels and Utilization Rates vs. Exercising Muscle, and Na^+/K^+ Pumping Rates

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In the original version of this published article, in Table 5 Brain glycogen concentrations and utilization rate before and

after adjustment for astrocyte volume fraction, unfortunately, the value belongs to “Sensory stimulation” were placed in “Rest”. The correct, complete version of Table 5 is provided below.

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Table 5 Brain glycogen concentrations and utilization rate before and after adjustment for astrocyte volume fraction

Region	[Glucose] ^a (μmol/g)	[Glycogen] (μmol/g)	Mean volume-adjusted [Glycogen] _{Vol-corr} ^d (range) (μmol/g)	CMR _{glycogen} (μmol/g/min)	Mean volume-adjusted CMR _{glycogen-Vol-corr} ^d (range) (μmol/g/min)
Cerebral cortex	1.9	10.5 ^c	120 (68–210)		
Hippocampus	(1.9)	13.3 ^c	234 (158–333)		
Cerebellum	(2.6)	8.5 ^c	58 (48–66)		
Cerebral cortex	CMR _{glc} ^b (mmol/g/min)				
Rest	0.74	12.4 ^b	141 (81–248)		
Sensory stimulation	0.93	9.6 ^b	109 (62–192)	0.56	6.4 (3.6–11.2)

CMR cerebral metabolic rate, CMR_{glc} total glucose (glc) utilization rate by all brain cells measured at the hexokinase step, *Volume fraction adjusted concentration or rate* (denoted by the subscript *Vol-corr*) concentration or CMR multiplied by the mean regional astrocyte volume fraction adjustment factor, [Glycogen] glycogen concentration, CMR_{glycogen} rate of glycogen utilization calculated from the net amount consumed (12.4–9.6=2.8) during the 5 min stimulation interval

^aGlucose concentration in cerebral cortex of non-stimulated, awake rats is from [84]. Values in parentheses for hippocampus and cerebellum were estimated as follows: Based on the steady-state distribution of [¹⁴C]methylglucose throughout the brain that reflects local glucose concentration, the glucose level in hippocampus is the same as cerebral cortex [87]. Based on regional glucose concentrations in ground squirrel brain, the glucose concentration in cerebellum is about 37% higher than in cerebral cortex and hippocampus that have similar levels [82]

^bGlucose utilization rates determined by metabolism of [6-¹⁴C]glucose and glycogen concentrations were measured in rat cerebral cortex during rest and sensory stimulation; data are from Tables 2 and 3 of [84]; also see [83]

^cFrom Fig. 2 g of [11]

^dMultiplied by the mean astrocyte volume fraction adjustment factor to give the volume fraction adjusted concentration or rate (denoted by the subscript *Vol-corr*) for the respective region, i.e., 6.8, 17.6, and 11.4 for cerebellum, hippocampus, and cerebral cortex, respectively (Table 2). Ranges were calculated using the lowest and highest values for volume fraction (ranges are in Table 2)

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