

**Table 1.** Glucose consumption averaged per neuron.

Whole brain							
Species	Brain mass*	Glucose use per gram <sup>‡</sup> ( $\mu\text{mol/g}\cdot\text{min}$ )	Total glucose use ( $\mu\text{mol}/\text{min}$ )	$N_{\text{brain}}$	Glucose use per neuron ( $\mu\text{mol}/\text{min}$ )	O/N	N/mg
mouse	0.416	0.89	0.370	$70.89 \times 10^6$	$5.20 \times 10^{-9}$	0.533	170,408
rat	1.802	0.68	1.225	$200.13 \times 10^6$	$6.10 \times 10^{-9}$	0.657	111,060
squirrel	5.548	0.60	3.329	$472.44 \times 10^6$	$7.05 \times 10^{-9}$	1.083	85,155
monkey	87.346	0.36	31.444	$6.38 \times 10^9$	$4.93 \times 10^{-9}$	1.122	73,043
baboon	148.80	0.44	65.472	$10.91 \times 10^9$	$6.00 \times 10^{-9}$	0.828	73,320
human	1508.91	0.31	467.762	$86.06 \times 10^9$	$5.44 \times 10^{-9}$	0.983	57,034
variation	$3627 \times$	$2.9 \times$	$1264 \times$	$1213 \times$	$1.4 \times$	$2.1 \times$	$3.0 \times$
Cerebral cortex							
Species	Cortical mass*	Glucose use per gram <sup>‡</sup> ( $\mu\text{mol/g}\cdot\text{min}$ )	Total glucose use ( $\mu\text{mol}/\text{min}$ )	$N_{\text{cortex}}$	Glucose use per neuron ( $\mu\text{mol}/\text{min}$ )	O/N	N/mg
mouse	0.173	1.10	0.190	$13.69 \times 10^6$	$1.39 \times 10^{-8}$	0.881	79133
rat	0.769	0.95	0.730	$31.02 \times 10^6$	$2.35 \times 10^{-8}$	1.473	40338
monkey	42.860	0.46	19.716	$1.59 \times 10^9$	$1.24 \times 10^{-8}$	2.330	32110
baboon	72.668	0.46	33.427	$2.84 \times 10^9$	$1.18 \times 10^{-8}$	1.558	33730
human	632.520	0.34	215.057	$16.34 \times 10^9$	$1.32 \times 10^{-8}$	1.363	19540
variation	$3656 \times$	$3.2 \times$	$1132 \times$	$1194 \times$	$2.0 \times$	$2.6 \times$	$4.0 \times$
Cerebellum							
Species	Cerebellar mass*	Glucose use per gram <sup>‡</sup> ( $\mu\text{mol/g}\cdot\text{min}$ )	Total glucose use ( $\mu\text{mol}/\text{min}$ )	$N_{\text{cerebellum}}$	Glucose use per neuron ( $\mu\text{mol}/\text{min}$ )	O/N	N/mg
mouse	0.056	0.98	0.055	$42.22 \times 10^6$	$1.30 \times 10^{-9}$	0.165	753928
rat	0.272	0.62	0.169	$137.17 \times 10^6$	$1.23 \times 10^{-9}$	0.211	504301
monkey	7.694	0.37	2.847	$4.55 \times 10^9$	$0.62 \times 10^{-9}$	0.204	591390
baboon	13.745	0.32	4.398	$7.79 \times 10^9$	$0.56 \times 10^{-9}$	0.067	566752
human	154.02	0.29	44.666	$69.03 \times 10^9$	$0.65 \times 10^{-9}$	0.232	448188
variation	$2750 \times$	$3.4 \times$	$812 \times$	$1635 \times$	$2.3 \times$	$1.4 \times$	$1.7 \times$

\*Our data: references 23–27. Cortical mass refers to both hemispheres, including the hippocampal formation, and excludes subcortical white matter in primates.

<sup>‡</sup>From [20] (references therein).

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