Table 3. Estimated cost of mammalian cerebral cortex and cerebellum.

Cerebral cortex				
Number of neurons	**Total glucose use per minute (μmol/min)**	**Total glucose use per day (μmol/day)**	**Total glucose use per day (g/day)**	**Total caloric cost per day (kCal/day)**
1 million	**0.015**	**21.6**	**0.0039**	**0.016**
10 million	**0.150**	**216**	**0.039**	**0.155**
Smoky shrew, 10 million[1]	0.150	216	0.039	0.155
Mouse, 13 million[2]	0.195	280.8	0.050	0.202
Rat, 31 million[2]	0.465	669.6	0.120	0.48
100 million	**1.500**	**2160**	**0.389**	**1.56**
Agouti, 112 million[2]	1.680	2419	0.435	1.74
Marmoset, 245 million[3]	3.675	5292	0.952	3.81
Capybara, 306 million[2]	4.590	6610	1.190	4.76
Owl monkey, 442 million[3]	6.630	9547	1.718	6.87
1 billion	**15.0**	**21600**	**3.89**	**15.55**
Macaque, 1.7 billion[3]	25.5	36720	6.61	26.44
Baboon, 2.9 billion[4]	43.5	62640	11.28	45.10
Orangutan, 5.5 billion[5]	82.5	118800	21.38	85.5
10 billion	**150**	**216000**	**38.88**	**155.5**
Human, 16 billion[6]	240	345600	62.21	248.8
100 billion	**1500**	**2160000**	**388.8**	**1555.2**
Cerebellum				
Number of neurons	**Total glucose use per minute (μmol/min)**	**Total glucose use per day (μmol/day)**	**Total glucose use per day (g/day)**	**Total caloric cost per day (kCal/day)**
1 million	**0.000873**	**1.257**	**0.00023**	**0.00009**
10 million	**0.00873**	**12.57**	**0.0023**	**0.0090**
Smoky shrew, 21 million[1]	0.018	26.40	0.0048	0.0190
Mouse, 42 million[2]	0.037	52.80	0.0095	0.0380
100 million	**0.0873**	**125.7**	**0.023**	**0.090**
Rat, 140 million[2]	0.122	176.0	0.032	0.127
Marmoset, 360 million[3]	0.314	452.6	0.081	0.326
Agouti, 680 million[2]	0.594	854.8	0.154	0.615
1 billion	**0.873**	**1257.1**	**0.226**	**0.905**
Owl monkey[3], capybara, 1.1 billion[2]	0.960	1382.8	0.249	0.996
Macaque, 4.6 billion[3]	4.02	5782.8	1.041	4.16
Baboon, 8.0 billion[4]	6.98	10057.0	1.810	7.24
10 billion	**8.73**	**12571.2**	**2.26**	**9.05**
Orangutan, 23 billion[5]	20.1	28913.8	5.21	20.8
Human, 69 billion[6]	60.2	86741.3	15.61	62.4
100 billion	**87.3**	**125712**	**22.63**	**90.5**

[1]From (39);
[2]From (23);
[3]From (24);
[4]From (25);
[5]Estimated as 1/3 the number of neurons in the human cerebral cortex;
[6]From (26).
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