

Table 4. Estimated cost of mammalian brains.

Number of neurons	Total glucose use per minute ($\mu\text{mol}/\text{min}$)	Total glucose use per day ($\mu\text{mol}/\text{day}$)	Total glucose use per day (g/day)	Total caloric cost per day (kCal/day)
1 million	0.00579	8.3	0.0015	0.006
10 million	0.0579	83	0.015	0.060
Smoky shrew, 36 million ¹	0.2084	300	0.05	0.2
Mouse, 71 million ²	0.4111	592	0.11	0.4
100 million	0.579	833	0.15	0.6
Rat, 200 million ²	1.158	1667	0.30	1.2
Marmoset, 636 million ³	3.68	5302	1.0	3.8
Agouti, 795 million ²	4.60	6628	1.2	4.8
1 billion	5.79	8337	1.5	6.0
Owl monkey ³ , capybara ² , 1.5 billion	8.68	12506	2.2	9.0
Macaque, 6.4 billion ³	37.0	53361	9.6	38
10 billion	57.9	83376	15	60
Baboon, 11 billion ⁴	63.7	91713	16	66
Orangutan, 30 billion ⁵	173.7	250128	45.02	180
Human, 86 billion ⁶	497.9	717033	129	516
100 billion	579.0	833760	150	600

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

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