

S1 Table. Sperm length, sperm velocity, sperm ATP content, body size, testes size and basal metabolic rate in eutherian mammals.

Species	Family	Order	VSL	TSL	BMASS	TMASS	BMASS2	BMR	ATP	Ref. VSL	Ref. TSL	Ref. RTS	Ref. BMR	Ref. ATP
<i>Aepyceros melampus</i>	Bovidae	Artiodactyla	58.20	46.15	62500.00	120.000				1	42	52		
<i>Antidorcas marsupialis</i>	Bovidae	Artiodactyla	67.40	57.84	40500.00	71.000				1	43,44	53		
<i>Bison bison</i>	Bovidae	Artiodactyla	68.58	69.80	731400.00	523.600				2	2	54		
<i>Bos taurus</i>	Bovidae	Artiodactyla	81.10	53.53	680385.00	681.000	270000.00	44152.73	177.00	3,4	42	55	69,70	85,86
<i>Bubalus bubalis</i>	Bovidae	Artiodactyla	69.44	69.35	680000.00	652.000			246.10	5,6	45	56		87
<i>Capra hircus</i>	Bovidae	Artiodactyla	74.48	59.39	25420.00	156.800	32500.00	6698.80	107.23	7,8	42	57	70	8
<i>Connochaetes taurinus</i>	Bovidae	Artiodactyla	40.20	46.77	227000.00	306.000	168250.00	35511.15		9	42	52	70,71	
<i>Damaliscus dorcas</i>	Bovidae	Artiodactyla	49.80	50.82	72500.00	160.000				1	42	58		
<i>Ovis aries</i>	Bovidae	Artiodactyla	93.90	64.70	57172.73	222.991	30000.00	10200.00	285.50	10	42,46	53	72	85,88
<i>Cervus elaphus</i>	Cervidae	Artiodactyla	68.95	63.08	121800.00	217.000	67000.00	20012.54		11	47	55	73	
<i>Sus scrofa</i>	Suidae	Artiodactyla	48.85	54.60	39700.00	128.200	91250.00	17581.85	74.20	12,13	42,46	59	69,70	85,89
<i>Canis familiaris</i>	Canidae	Carnivora	93.90	61.40	21620.00	27.660	20800.00	7467.20	195.00	10,14	48,43	60	74	90
<i>Felis catus</i>	Felidae	Carnivora	53.58	59.35	3100.00	2.340	2617.00	1845.60		15,16	48,42	61	75	
<i>Panthera tigris</i>	Felidae	Carnivora	52.00	43.63	340500.00	24.400	137900.00	23994.60		17	42	53	76	
<i>Mustela eversmanni</i>	Mustelidae	Carnivora	58.10	73.73	1047.00	3.280	612.00	382.50		18	48,43	55	70	
<i>Ursus arctos</i>	Ursidae	Carnivora	40.51	70.35	180900.00	68.600	162428.57	20790.60		19	46,43	62	77	
<i>Lepus europaeus</i>	Leporidae	Lagomorpha	61.36	57.58	2950.00	14.552	3463.50	1948.15		20	49	63	75	
<i>Oryctolagus cuniculus</i>	Leporidae	Lagomorpha	43.65	58.02	2888.00	6.060	2204.93	1374.15	127.00	21,22,23	42	55	71,69,70	91
<i>Equus asinus</i>	Equidae	Perissodactyla	47.20	64.15	290000.00	202.340	177500.00	29287.50		24,25	42	53	78	
<i>Equus caballus</i>	Equidae	Perissodactyla	75.60	60.60	468000.00	416.000	387500.00	62473.00	143.00	26	42	55	74,79	85,92
<i>Callithrix jacchus</i>	Callithricidae	Primates	86.10	52.10	320.00	1.300	190.00	152.00		27	42	55	71	
<i>Macaca fascicularis</i>	Cercopitecidae	Primates	128.00	73.63	4787.00	35.700	4209.10	2118.79		28	42	55	75	
<i>Macaca mulatta</i>	Cercopitecidae	Primates	120.09	74.10	10430.00	76.000	6142.50	2256.10	177.33	29,30	42,43	55	77,70	93,94,95
<i>Homo sapiens</i>	Hominidae	Primates	63.05	56.90	63540.00	50.200	68825.00	14107.61	126.00	31,32	43	55	69,70	96,97
<i>Pan troglodytes</i>	Pongidae	Primates	38.60	57.36	44340.00	118.800	34150.00	9000.00		33	42	55	77	
<i>Chionomys nivalis</i>	Arvicolidae	Rodentia	151.35	105.23	46.99	0.940	32.80	81.02	426.76	34	34	38,64	78	38
<i>Microtus arvalis</i>	Arvicolidae	Rodentia	141.18	91.66	39.89	0.349	21.95	61.26	416.24	34	34	38,64	73,76	38
<i>Microtus cabreriae</i>	Arvicolidae	Rodentia	83.86	85.12	44.27	0.142	43.00	48.60		34	34	64	70	
<i>Myodes glareolus</i>	Arvicolidae	Rodentia	134.63	83.91	27.46	0.514	22.53	56.16	287.97	34	34	38,64	73,80,81,69	38
<i>Fukomys damarensis</i>	Bathyergidae	Rodentia	47.26	42.90	194.50	0.177	128.00	76.87		35	50	65	77	
<i>Cavia porcellus</i>	Caviidae	Rodentia	82.00	114.07	813.30	4.100	673.20	377.44	271.60	36	42,51	55	71,69,70	36,98
<i>Mesocricetus auratus</i>	Cricetidae	Rodentia	182.00	186.70	108.00	3.170	104.20	186.30	715.00	37	42	55	82,71,70	99
<i>Phodopus sungorus</i>	Cricetidae	Rodentia	72.75	127.99	46.39	1.004	30.47	47.03	459.39	38	38	38	71,69,70	38
<i>Apodemus sylvaticus</i>	Muridae	Rodentia	152.45	126.15	30.45	1.024	23.13	49.84	679.13	34	34	38,64	80,81,71,70	38
<i>Mus minutoides</i>	Muridae	Rodentia	79.32	65.22	4.91	0.097	8.08	23.93	267.99	38	38	38	70,83	38
<i>Mus musculus</i>	Muridae	Rodentia	82.21	124.64	23.30	0.139	23.26	45.74	346.53	34	34	38,64	78,69,77,70	38,100,101
<i>Mus pahari</i>	Muridae	Rodentia	45.63	137.60	32.23	0.127			215.49	38	38	38		38
<i>Mus spicilegus</i>	Muridae	Rodentia	102.74	103.54	14.49	0.409	14.71	47.07		34	34	64	84	
<i>Mus spretus</i>	Muridae	Rodentia	92.24	111.49	16.60	0.292	21.80	61.66	250.36	34	34	38,64	81,83	38
<i>Rattus norvegicus</i>	Muridae	Rodentia	106.47	189.40	379.63	3.058	226.81	271.62	1107.50	39,40,41	42	55,66,40,67,68	69,70	102,103

Abbreviations: VSL: straight-line velocity ($\mu\text{m s}^{-1}$). TSL: total sperm length (μm). BMASS: body mass (g). TMASS: testes mass (g). BMASS2: body mass (g) (this value is used to calculate mass-specific metabolic rate). BMR: basal metabolic rate ($\text{mlO}_2 \text{h}^{-1}$). ATP: amount of ATP per sperm (amol cell^{-1}). RTS: references to the data for BMASS and TMASS (used to estimate relative testes size). MMR: references to the data for BMASS2 and BMR (used to estimate mass-specific metabolic rate).

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