

Table 1. Metabolic rates in prokaryotes and unicellular eukaryotes, *n* is the number of species studied.

taxonomic group	<i>n</i>	metabolic rate <i>q</i> , W kg ⁻¹			cell mass, 10 ⁻¹² g			temperature, °C
		mean	min	max	mean ^a	min	max	
<i>prokaryote endogenous</i>								
Proteobacteria	27	11	0.3	37	1.8	0.2	20 000	27 (10...37)
Cyanobacteria	12	3	0.08	19	28	0.7	5600	26 (19...39)
Firmicutes	11	8	0.18	22	0.35	0.014	3.7	32 (21...37)
Actinobacteria	4	3	0.1	11	0.8	0.2	2.5	34 (30...37)
Archaea	2	14	10	17	0.3	0.11	1	60
all species	56	8	0.08	37	2.1	0.014	20 000	30 (10...60)
<i>prokaryote growth</i>								
Proteobacteria	28	320	15	3000	2.6	0.2	20 000	27 (10...37)
Firmicutes	21	64	7.1	218	0.4	0.014	3.8	35 (30...50)
Actinobacteria	4	74	31	107	0.3	0.2	0.5	35 (30...37)
Spirochaetes	1	89	89	89	0.07	0.07	0.07	30
Archaea	1	49	49	49	1	1	1	60
all species	55	190	7.1	3000	1	0.014	20 000	32 (10...60)
<i>protozoa endogenous</i>								
data from Vladimirova & Zotin (1985) ^b	50	12	0.2	94	3300	7	224 000 000	20
data from Fenchel & Finlay (1983) ^c	10	10	0.6	37	30 400	25	27 600 000	20
<i>protozoa growth</i>								
data from Fenchel & Finlay (1983) ^d	9	57	0.3	623	40 100	50	71 000 000	20

^a Geometric mean.

^b Statistics for 205 measurements.

^c Statistics for 31 measurements.

^d Statistics for 58 measurements.

Vladimirova, I. G. & Zotin, A. I. 1985 Dependence of metabolic rate in Protozoa on body temperature and weight. *Zh. Obshch. Biol.* 46, 165–173.

Fenchel T.B, Finlay J. Respiration rates in heterotrophic, free-living protozoa. *Microbiol. Ecol.* 1983;9:99–122. doi:10.1007/BF02015125