

Table 4. Total number of prokaryotes in some representative animals

Animal	Organ	Cells/ml or cells/g	Organ contents*	No. of animals†	No. of cells, $\times 10^{23}$	Refs.
Human	Colon	3.2×10^{11}	220 g	5.6×10^9	3.9	45, 46
Cattle	Rumen	2.1×10^{10}	106 liter	1.3×10^9	29.0	47, 48
Sheep and goats	Rumen	4.4×10^{10}	12 liter	1.7×10^9	9.0	47, 48
Pigs	Colon	$5.4 \times 10^{10}\ddagger$	9 liter	8.8×10^8	4.3	49, 50
	Cecum	$2.8 \times 10^{10}\ddagger$	1 liter	8.8×10^8	0.3	49, 50
Domestic birds§	Cecum	9.5×10^{10}	2 g	1.3×10^{10}	0.024	51, 52
Termites	Hindgut	$2.7 \times 10^6\¶$		2.4×10^{17}	6.5	53

*Organ contents in volume or grams of wet weight. For comparison, the volume of the human colon is 0.5 liter. For domestic birds, weight wet was calculated from a volume of 2 ml assuming that 1 ml = 1 g wet weight.

†Values from the *FAO Production Yearbook* (54), except for the termites value which was from ref. 55.

‡The direct count was assumed to be $2.7 \times$ viable count (56).

§Includes chickens, ducks, and turkeys.

¶Per termite.