

TABLE 2. Total mass and elemental composition of *E. coli*<sup>a</sup>

Specimen	Cell no. <sup>b</sup>	Vol <sup>c</sup>	Carbon content (fg/cell) <sup>d</sup>	Dry wt (fg/cell) <sup>e</sup>	Mass (fg)	Chemical content (fg/cell) via X-ray microanalysis (n = 10)						
						Na	Mg	P	S	Cl	K	Ca
Late exponential phase <i>E. coli</i>	1.1 (0.26)	1.25 (0.19)	112 (4.8)	285 (6.6)	278 (64)	6.52 (5.34)	1.81 (0.93)	11.70 (3.60)	2.91 (1.25)	6.51 (1.41)	11.78 (4.40)	0.60 (0.85)
Early exponential phase <i>E. coli</i>	2.0 (0.34)	1.20 (0.35)	ND <sup>f</sup>	151 (6.1)	154 (36)	7.97 (4.81)	1.32 (0.91)	8.35 (2.11)	1.89 (0.61)	3.78 (0.84)	3.31 (1.30)	0.07 (0.7)

<sup>a</sup> The standard deviation is given in parentheses below each value.

<sup>b</sup> Number of cells per milliliter  $\times 10^9$  in culture at time of sampling.

<sup>c</sup> Measurements of air-dried bacteria in scanning transmission electron microscopy in cubic micrometers.

<sup>d</sup> Calculated from carbon analysis (Carlo Erba).

<sup>e</sup> See Materials and Methods.

<sup>f</sup> ND, Not determined.