

TABLE II
Estimates of Three-Dimensional Cellular and Mitochondrial Parameters*

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Time after mitosis	Cell vol‡	Cyt. vol‡ Cell vol	Cyt. vol ¶	μm^2 Outer membr.** surface area μm^2 Cyt. vol	Tot. mit. vol‡‡	no. Mit §§ μm^3 Cyt. vol	Mit. vol ¶¶	no. Mit.*** Cell
<i>h</i>	μm^3	%	μm^3	μm^{-1}	%		μm^3	
0	2,751 ± 211§	71.7	1,973 ± 151	1.19 ± 0.04	11.0 ± 0.4	0.43 ± 0.02	0.27 ± 0.01	882 ± 110
3	1,227 ± 77	72.6	891 ± 56	1.13 ± 0.06	10.6 ± 0.6	0.40 ± 0.03	0.29 ± 0.02	383 ± 48
7	1,403 ± 137	68.0	954 ± 93	0.99 ± 0.08	9.4 ± 0.7	0.35 ± 0.03	0.28 ± 0.01	389 ± 73
11	1,430 ± 121	72.1	1,032 ± 87	1.14 ± 0.08	10.8 ± 0.7	0.41 ± 0.03	0.28 ± 0.01	479 ± 76
16	1,694 ± 123	71.1	1,204 ± 87	1.16 ± 0.10	10.9 ± 1.0	0.40 ± 0.03	0.28 ± 0.01	537 ± 72
19	2,093 ± 96	74.9	1,567 ± 72	1.12 ± 0.06	10.6 ± 0.5	0.37 ± 0.03	0.31 ± 0.02	601 ± 62

* Values shown are means ± standard errors, computed from the values for individual cell profiles.

‡ Computed according to the method described in the Appendix.

§ Computed using the mean value from the other time-points of the cyt. area/cell area ratio (see Table I) and of the parameter *q* (Eq. 4, Appendix).

|| Computed using the mean value from the other time-points of the parameter *q* (Eq. 4, Appendix).

¶ Computed for each time-point by multiplying the cell vol (column 2) by the cyt. vol/cell vol ratio (column 3).

** Computed by multiplying the values in column 6 of Table I by $4/\pi$ (47).

‡‡ Taken from column 5 of Table I.

§§ Computed using the estimator described in the Appendix (Eq. 11). A value of 3.349 was used for the shape constant (*J*). This is the average of the upper and lower limits for the constant, given respectively by Equations 15 and 16 (Appendix), assuming as a model shape a general ellipsoid of axis ratios 5:1.38:1 (see Results). The means and standard errors were both computed by weighting the value of the parameter for a given cell profile according to its cytoplasmic area.

||| Computed using the mean value from the other time-points of the cyt. area/cell area ratio (see Table I).

¶¶ Computed for each cell by dividing the mit. vol/cyt. vol ratio by the no. mit./cyt. vol.

*** Computed for each cell by multiplying the no. mit./cyt. vol by the cyt. vol.

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