

Table 3.6. A comparison of estimates of cell birth rates (k_B) in various tissues, found from metaphase arrest and fraction labelled mitoses experiments: k_B is expressed in cells/1000 cells/hour

Tissue	Kinetic state	Metaphase arrest k_B	FLM k_B
Mouse jejunum	Normal	52	49
Mouse jejunum	15 hours after ara-C	73	83
Rat jejunum	Normal	72	55
Rat jejunum	After 96 hours starvation	38	38
Rat jejunum	15 hours after hydroxyurea	63	62
Mouse descending colon	Normal	26	19
Mouse transverse colon	Normal	13	14
Mouse ascending colon	Normal	16	16
Mouse caecum	Normal	18	20
Mouse sarcoma	7 days after implantation	37	30
Mouse sarcoma	14 days after implantation	36	29
Mouse sarcoma	21 days after implantation	33	32

Note: (i) a rectangular age distribution was assumed for each tissue except the sarcoma for which an exponential age distribution was used; (ii) the growth fraction was estimated in every case from the ratio of observed to theoretical labelling indices, the latter being calculated from phase durations derived from the FLM curve which was analysed by the method of Gilbert (1972).