Table 20.1. Kinetic parameters in the gastrointestinal tract during starvation and after refeeding

Reference	I_S (%)	I_M (%)	T_C (h)	t_S (h)	t_{G1} (h)	t_{G2} (h)	t_M (h)	I_P	Migration rate (cell positions per hour)	Crypt cell production rate (cells/crypt /h)	k_B (cells/1000/cells/h)	crypt population (cells)
Rat												
Hopper *et al.* (1968)												
Rose *et al.* (1971)												
Control			11.6	8.2	2.3	0.8						
7 days starved			10.8	8.5	1.2	0.8						
10 days starved			11.9	10.1	0.4	1.1						
Al-Dewachi *et al.* (1975*a*; unpublished)												
Control	36	6.2	11.3 (10.4[1])	6.5			0.4[1]	0.51[2] 0.64[3]	1.8	39	112	670
96 h starved	23.3	4.5	12.3 (14.2[1])	6.3			1.0	0.52[2] 0.45[3]	1.0	19	37	580
16 h refed	28.5	9.7	6.5[1]				0.6	0.48[2]	1.9	38	123	630
Mouse												
Weibecke *et al.* (1969)												
Jejunum												
Control	38	6.2	12.0	6.5	4	1.5		0.7[3]				
96 h starved	25	3.4	27.7	10	16	2		0.69[3]				
Colon												
Control	15	–	23.2	6.5	15	1.5		0.53[3]				
96 h starved	7	–	56	10	38	2		0.41[3]				
Hagemann and Stragand (1977)												
Ileum												
Control			12.6	5.9	5.3	1.4		0.51[2]				
Fasting			20.1	9.3	9.3	1.5		0.42[2]				
Refed			10.8	5.6	3.8	1.4		0.55[2]				
Colon												
Control			18.2	7.1	9.9	1.2		0.37[2]				
Fasting			35.3	7.6	26.1	1.6		0.36[2]				
Refed			14.8	7.0	5.8	2.0		0.56[2]				

[1] From metaphase arrest experiments. [2] From the labelling index distribution curve. [3] Calculated from $I_{S\text{expt}}/I_{S\text{theor}}$, with $I_{S\text{theor}}$ from t_S/T_C.