Boy's energy requirements calculated by quadratic regression analysis of TEE on weight, plus allowance for energy deposition in tissues during growth (E_g)

Age years	Weight kg	TEE[a]		E_g[b]		BMR_{est}[c]		Daily energy requirement				PAL[d]
		MJ/d	*kcal/d*	MJ/d	*kcal/d*	MJ/d	*kcal/d*	MJ/d	*kcal/d*	kJ/kg/d	*kcal/kg/d*	TEE/BMR
1-2[e]	11.5	3.906	*934*	0.057	*14*	2.737	*654*	3.963	*948*	345	*82.4*	1.43
2-3	13.5	4.675	*1 117*	0.047	*11*	3.235	*773*	4.722	*1 129*	350	*83.6*	1.45
3-4	15.7	5.187	*1 240*	0.049	*12*	3.602	*861*	5.236	*1 252*	334	*79.7*	1.44
4-5	17.7	5.644	*1 349*	0.047	*11*	3.792	*906*	5.691	*1 360*	322	*76.8*	1.49
5-6	19.7	6.092	*1 456*	0.047	*11*	3.982	*952*	6.139	*1 467*	312	*74.5*	1.53
6-7	21.7	6.531	*1 561*	0.052	*12*	4.172	*997*	6.583	*1 573*	303	*72.5*	1.57
7-8	24.0	7.024	*1 679*	0.057	*14*	4.390	*1 049*	7.081	*1 692*	295	*70.5*	1.60
8-9	26.7	7.589	*1 814*	0.066	*16*	4.647	*1 111*	7.655	*1 830*	287	*68.5*	1.63
9-10	29.7	8.198	*1 959*	0.078	*19*	4.932	*1 179*	8.276	*1 978*	279	*66.6*	1.66
10-11	33.3	8.903	*2 128*	0.092	*22*	5.218	*1 247*	8.995	*2 150*	270	*64.6*	1.71
11-12	37.5	9.689	*2 316*	0.106	*25*	5.529	*1 321*	9.795	*2 341*	261	*62.4*	1.75
12-13	42.3	10.539	*2 519*	0.123	*29*	5.884	*1 406*	10.662	*2 548*	252	*60.2*	1.79
13-14	47.8	11.452	*2 737*	0.137	*33*	6.291	*1 504*	11.588	*2 770*	242	*57.9*	1.82
14-15	53.8	12.371	*2 957*	0.139	*33*	6.735	*1 610*	12.510	*2 990*	233	*55.6*	1.84
15-16	59.5	13.171	*3 148*	0.127	*30*	7.157	*1 711*	13.298	*3 178*	224	*53.4*	1.84
16-17	64.4	13.802	*3 299*	0.099	*24*	7.520	*1 797*	13.901	*3 322*	216	*51.6*	1.84
17-18	67.8	14.208	*3 396*	0.061	*15*	7.771	*1 857*	14.270	*3 410*	210	*50.3*	1.83

[a] TEE (MJ/d) = 1.298 + 0.265 kg - 0.0011 kg^2.
[b] 8.6 kJ or *2 kcal*/g weight gain.
[c] BMR_{est}: basal metabolic rate estimated with predictive equations on body weight (Schofield, 1985).
[d] PAL_{est}: physical activity level = TEE/BMR_{est}. To calculate requirements, add E_g or multiply by 1.01 (see text).
[e] Requirements for 1 to 2 years reduced by 7 percent to fit with energy requirements of infants (see text).
Source: Torun, 2001.