

Girls' 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	
1-2 ^e	10.8	3.561	851	0.057	14	2.505	599	3.618	865	335	80.1	1.42
2-3	13.0	4.330	1 035	0.052	12	3.042	727	4.382	1 047	337	80.6	1.42
3-4	15.1	4.791	1 145	0.045	11	3.317	793	4.836	1 156	320	76.5	1.44
4-5	16.8	5.152	1 231	0.040	10	3.461	827	5.192	1 241	309	73.9	1.49
5-6	18.6	5.522	1 320	0.042	10	3.614	864	5.564	1 330	299	71.5	1.53
6-7	20.6	5.920	1 415	0.054	13	3.784	904	5.974	1 428	290	69.3	1.56
7-8	23.3	6.431	1 537	0.071	17	4.014	959	6.502	1 554	279	66.7	1.60
8-9	26.6	7.019	1 678	0.087	21	4.294	1 026	7.106	1 698	267	63.8	1.63
9-10	30.5	7.661	1 831	0.094	23	4.626	1 105	7.755	1 854	254	60.8	1.66
10-11	34.7	8.287	1 981	0.106	25	4.841	1 157	8.393	2 006	242	57.8	1.71
11-12	39.2	8.884	2 123	0.106	25	5.093	1 217	8.990	2 149	229	54.8	1.74
12-13	43.8	9.414	2 250	0.108	26	5.351	1 279	9.523	2 276	217	52.0	1.76
13-14	48.3	9.855	2 355	0.099	24	5.603	1 339	9.954	2 379	206	49.3	1.76
14-15	52.1	10.168	2 430	0.080	19	5.816	1 390	10.248	2 449	197	47.0	1.75
15-16	55.0	10.370	2 478	0.052	12	5.978	1 429	10.421	2 491	189	45.3	1.73
16-17	56.4	10.455	2 499	0.019	5	6.056	1 447	10.474	2 503	186	44.4	1.73
17-18	56.7	10.473	2 503	0.000	0	6.073	1 451	10.473	2 503	185	44.1	1.72

^a TEE (MJ/d) = 1.102 + 0.273 kg - 0.0019 kg².

^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.