

Table1 LMS parameters and reference centiles of TBLH BMD /g·cm⁻² by age/years in boys

Age/ yrs	L	S	Mean-2SD ^a	Mean-1SD ^b	Mean ^c	Mean+1SD ^d	Mean+2SD ^e	Percentiles					
								P3	P10	P25	P75	P90	P97
3	-0.251	0.073	0.342	0.367	0.395	0.425	0.458	0.345	0.360	0.376	0.415	0.434	0.454
4	-0.251	0.074	0.364	0.391	0.421	0.454	0.490	0.367	0.383	0.400	0.443	0.463	0.485
5	-0.251	0.076	0.399	0.429	0.463	0.500	0.541	0.402	0.420	0.440	0.487	0.511	0.536
6	-0.251	0.078	0.433	0.468	0.505	0.547	0.592	0.437	0.458	0.479	0.533	0.559	0.587
7	-0.251	0.080	0.476	0.515	0.557	0.604	0.655	0.480	0.503	0.528	0.588	0.618	0.649
8	-0.251	0.082	0.508	0.550	0.596	0.648	0.705	0.513	0.538	0.565	0.630	0.663	0.698
9	-0.251	0.084	0.532	0.577	0.627	0.682	0.743	0.537	0.564	0.593	0.663	0.699	0.736
10	-0.251	0.085	0.555	0.603	0.656	0.715	0.781	0.560	0.589	0.620	0.695	0.733	0.773
11	-0.251	0.087	0.579	0.630	0.687	0.751	0.821	0.585	0.615	0.648	0.729	0.770	0.813
12	-0.251	0.089	0.609	0.664	0.725	0.793	0.870	0.615	0.648	0.683	0.770	0.814	0.860
13	-0.251	0.091	0.645	0.704	0.771	0.845	0.928	0.652	0.687	0.725	0.820	0.867	0.918
14	-0.251	0.093	0.683	0.747	0.818	0.899	0.989	0.690	0.728	0.769	0.872	0.923	0.978
15	-0.251	0.095	0.713	0.782	0.858	0.944	1.042	0.721	0.762	0.806	0.915	0.971	1.030
16	-0.251	0.096	0.738	0.810	0.891	0.983	1.086	0.747	0.789	0.836	0.952	1.011	1.073
17	-0.251	0.098	0.765	0.841	0.927	1.024	1.134	0.774	0.819	0.868	0.991	1.054	1.120
18	-0.251	0.100	0.781	0.860	0.949	1.050	1.165	0.790	0.836	0.888	1.016	1.081	1.151

^a Approximately 2.28th^b Approximately 15.87th^c Approximately 50th percent^d Approximately 84.13th^e Approximately 97.72th

TBLH BMD, Total body less head bone mineral density.

Table2 LMS parameters and reference centiles of-TBLH BMD /g.cm⁻² by age in girls

Age/years	L	S	Mean-2SD ^a	Mean-1SD ^b	Mean ^c	Mean+1SD ^d	Mean+2SD ^e	Percentiles					
								P3	P10	P25	P75	P90	P97
3	-0.480	0.061	0.342	0.363	0.385	0.409	0.436	0.345	0.357	0.370	0.401	0.417	0.433
4	-0.417	0.064	0.358	0.381	0.406	0.433	0.463	0.361	0.374	0.389	0.424	0.441	0.459
5	-0.293	0.070	0.391	0.419	0.449	0.482	0.518	0.395	0.411	0.428	0.471	0.492	0.513
6	-0.166	0.076	0.423	0.456	0.491	0.531	0.573	0.427	0.446	0.467	0.517	0.542	0.568
7	-0.035	0.082	0.455	0.493	0.535	0.581	0.630	0.459	0.482	0.506	0.565	0.594	0.624
8	0.092	0.087	0.482	0.527	0.575	0.626	0.682	0.487	0.514	0.542	0.609	0.642	0.676
9	0.205	0.091	0.508	0.558	0.612	0.670	0.733	0.514	0.544	0.576	0.651	0.687	0.725
10	0.294	0.094	0.537	0.592	0.652	0.715	0.783	0.543	0.576	0.611	0.694	0.734	0.775
11	0.358	0.095	0.573	0.633	0.696	0.764	0.836	0.580	0.615	0.653	0.742	0.784	0.827
12	0.388	0.092	0.613	0.676	0.743	0.813	0.887	0.620	0.658	0.697	0.790	0.834	0.878
13	0.375	0.088	0.651	0.714	0.781	0.852	0.927	0.658	0.696	0.736	0.829	0.873	0.918
14	0.314	0.084	0.680	0.742	0.807	0.877	0.950	0.687	0.724	0.763	0.854	0.897	0.941
15	0.208	0.080	0.699	0.759	0.823	0.891	0.963	0.706	0.741	0.779	0.868	0.911	0.954
16	0.071	0.078	0.714	0.772	0.835	0.902	0.975	0.720	0.755	0.792	0.880	0.922	0.966
17	-0.087	0.077	0.725	0.783	0.845	0.913	0.987	0.732	0.766	0.802	0.890	0.933	0.978
18	-0.257	0.076	0.732	0.788	0.850	0.918	0.993	0.738	0.771	0.807	0.895	0.938	0.984

^a Approximately 2.28th percent

^b Approximately 15.87th percent

^c Approximately 50th percent

^d Approximately 84.13th percent

^e Approximately 97.72th percent

TBLH BMD, Total body less head bone mineral density.

Table3 LMS parameters and reference centiles of-TBLH BMD /g·cm⁻² by height/cm in boys

Height/cm	L	S	Mean-2SD ^a	Mean-1SD ^b	Mean ^c	Mean+1SD ^d	Mean+2SD ^e	Percentiles					
								P3	P10	P25	P75	P90	P97
95	-1.272	0.045	0.343	0.358	0.374	0.392	0.412	0.345	0.354	0.363	0.386	0.397	0.409
100	-1.272	0.050	0.360	0.377	0.395	0.416	0.439	0.362	0.372	0.382	0.409	0.422	0.436
105	-1.272	0.054	0.380	0.399	0.420	0.444	0.472	0.382	0.393	0.405	0.436	0.452	0.468
110	-1.272	0.059	0.403	0.424	0.449	0.477	0.510	0.405	0.418	0.432	0.468	0.486	0.506
115	-1.272	0.064	0.429	0.454	0.483	0.516	0.554	0.432	0.447	0.463	0.504	0.526	0.549
120	-1.272	0.068	0.458	0.486	0.519	0.558	0.603	0.461	0.478	0.496	0.544	0.570	0.597
125	-1.272	0.072	0.486	0.518	0.555	0.599	0.651	0.490	0.509	0.530	0.584	0.613	0.645
130	-1.272	0.076	0.512	0.547	0.588	0.637	0.696	0.516	0.537	0.560	0.620	0.652	0.688
135	-1.272	0.079	0.537	0.575	0.620	0.674	0.739	0.541	0.564	0.589	0.655	0.691	0.731
140	-1.272	0.082	0.560	0.601	0.649	0.708	0.780	0.564	0.588	0.615	0.687	0.726	0.770
145	-1.272	0.085	0.581	0.624	0.677	0.740	0.819	0.585	0.611	0.640	0.718	0.761	0.809
150	-1.272	0.087	0.604	0.651	0.708	0.776	0.862	0.609	0.637	0.668	0.752	0.798	0.851
155	-1.272	0.090	0.634	0.684	0.745	0.820	0.915	0.639	0.669	0.703	0.794	0.845	0.902
160	-1.272	0.093	0.667	0.722	0.788	0.870	0.974	0.673	0.706	0.742	0.841	0.897	0.960
165	-1.272	0.095	0.701	0.760	0.831	0.919	1.032	0.707	0.742	0.781	0.888	0.948	1.017
170	-1.272	0.097	0.733	0.795	0.871	0.965	1.087	0.739	0.776	0.818	0.932	0.997	1.071
175	-1.272	0.098	0.762	0.827	0.908	1.008	1.138	0.769	0.808	0.852	0.973	1.041	1.121
180	-1.272	0.100	0.790	0.859	0.943	1.049	1.187	0.797	0.838	0.884	1.012	1.084	1.169
185	-1.272	0.101	0.818	0.890	0.979	1.091	1.236	0.826	0.868	0.917	1.051	1.128	1.217
190	-1.272	0.102	0.847	0.922	1.015	1.133	1.286	0.855	0.899	0.950	1.091	1.171	1.265
195	-1.272	0.103	0.876	0.955	1.052	1.175	1.337	0.884	0.931	0.984	1.132	1.216	1.315

^a Approximately 2.28th percent^b Approximately 15.87th percent^c Approximately 50th percent^d Approximately 84.13th percent^e Approximately 97.72th percent

TBLH BMD, Total body less head bone mineral density.

Table4 LMS parameters and reference centiles of-TBLH BMD /g·cm⁻² by height/cm in girls

Height/cm	L	S	Mean-2SD ^a	Mean-1SD ^b	Mean ^c	Mean+1SD ^d	Mean+2SD ^e	Percentiles					
								P3	P10	P25	P75	P90	P97
95	-0.926	0.047	0.339	0.354	0.371	0.389	0.409	0.340	0.350	0.359	0.383	0.395	0.407
100	-1.168	0.050	0.355	0.371	0.390	0.411	0.434	0.356	0.366	0.377	0.404	0.417	0.431
105	-1.413	0.054	0.376	0.395	0.416	0.439	0.467	0.378	0.389	0.401	0.431	0.447	0.463
110	-1.665	0.058	0.398	0.419	0.443	0.471	0.504	0.401	0.413	0.427	0.461	0.480	0.500
115	-1.871	0.064	0.423	0.446	0.474	0.508	0.550	0.425	0.439	0.455	0.496	0.519	0.544
120	-1.980	0.072	0.449	0.476	0.509	0.550	0.603	0.452	0.468	0.486	0.536	0.563	0.596
125	-2.008	0.078	0.477	0.508	0.546	0.595	0.659	0.480	0.499	0.520	0.578	0.611	0.650
130	-1.950	0.083	0.501	0.536	0.579	0.634	0.708	0.505	0.526	0.549	0.614	0.653	0.698
135	-1.776	0.088	0.521	0.560	0.607	0.668	0.750	0.525	0.548	0.574	0.647	0.689	0.739
140	-1.499	0.093	0.545	0.589	0.642	0.710	0.798	0.550	0.576	0.605	0.686	0.732	0.786
145	-1.146	0.096	0.580	0.630	0.690	0.763	0.856	0.585	0.615	0.648	0.737	0.787	0.844
150	-0.764	0.095	0.626	0.682	0.747	0.824	0.916	0.632	0.665	0.702	0.798	0.848	0.905
155	-0.417	0.089	0.668	0.727	0.793	0.869	0.954	0.674	0.709	0.747	0.843	0.892	0.944
160	-0.159	0.083	0.698	0.756	0.821	0.892	0.970	0.704	0.739	0.777	0.868	0.913	0.961
165	-0.004	0.078	0.721	0.779	0.843	0.912	0.986	0.727	0.762	0.800	0.889	0.932	0.977
170	0.096	0.077	0.741	0.800	0.864	0.933	1.007	0.747	0.783	0.821	0.910	0.953	0.998
175	0.187	0.076	0.760	0.822	0.887	0.956	1.030	0.767	0.804	0.842	0.933	0.976	1.021
180	0.281	0.075	0.781	0.844	0.910	0.980	1.054	0.788	0.826	0.865	0.957	1.000	1.045

^a Approximately 2.28th percent^b Approximately 15.87th percent^c Approximately 50th percent^d Approximately 84.13th percent^e Approximately 97.72th percent

TBLH BMD, Total body less head bone mineral density.