

**Appendix 1.** L, M, and S parameters and z scores for weight for age: boys 0 to 60 months.

Age (M)	L	M	S	-3	-2	-1	0	1	2	3
0	-1.09093	3.15546	0.141163	2.254274	2.46826	2.769087	3.15546	3.674826	4.417946	5.397499
1	-0.99975	4.058456	0.142658	2.877089	3.159147	3.554219	4.058456	4.729391	5.673368	6.885382
2	-0.90965	4.918971	0.144109	3.459706	3.810123	4.299035	4.918971	5.735362	6.865099	8.279882
3	-0.82161	5.705798	0.145487	3.981296	4.397883	4.976743	5.705798	6.655948	7.949677	9.532265
4	-0.73615	6.408007	0.146771	4.435901	4.915244	5.578457	6.408007	7.477946	8.912091	10.62833
5	-0.65355	7.02606	0.147948	4.825652	5.363878	6.105247	7.02606	8.201496	9.753344	11.57272
6	-0.57373	7.56454	0.149006	5.15543	5.748542	6.56173	7.56454	8.831564	10.48	12.37584
7	-0.49708	8.030624	0.149937	5.431933	6.07596	6.954738	8.030624	9.376283	11.10259	13.05276
8	-0.42457	8.435232	0.150737	5.664466	6.355683	7.294293	8.435232	9.84833	11.63726	13.62525
9	-0.35686	8.789712	0.151402	5.862376	6.597405	7.590703	8.789712	10.26091	12.10052	14.11455
10	-0.2939	9.103397	0.151925	6.033235	6.809033	7.852428	9.103397	10.62477	12.50543	14.5367
11	-0.23487	9.383076	0.152296	6.182369	6.996242	8.085623	9.383076	10.94758	12.86085	14.90181
12	-0.17895	9.63423	0.152509	6.313954	7.163531	8.295222	9.63423	11.23555	13.17391	15.21784
13	-0.12549	9.861126	0.152565	6.431231	7.314399	8.485065	9.861126	11.49351	13.4502	15.49114
14	-7.55E-02	10.06911	0.152476	6.538693	7.453364	8.659899	10.06911	11.728	13.69832	15.73304
15	-0.0303	10.26294	0.152266	6.640428	7.584436	8.823895	10.26294	11.94497	13.92628	15.95421
16	9.24E-03	10.44608	0.151955	6.739524	7.710561	8.980074	10.44608	12.14885	14.14008	16.16257
17	4.25E-02	10.62114	0.151562	6.838275	7.833909	9.130675	10.62114	12.34299	14.34423	16.3639
18	6.90E-02	10.78963	0.151106	6.938037	7.9557	9.276942	10.78963	12.52943	14.54152	16.56177
19	8.88E-02	10.95275	0.150603	7.039696	8.076787	9.419827	10.95275	12.70978	14.73408	16.75868
20	0.101967	11.11209	0.150071	7.144234	8.198218	9.560575	11.11209	12.8861	14.92449	16.9577
21	0.108643	11.26888	0.149521	7.252258	8.320716	9.700115	11.26888	13.05993	15.11465	17.16091
22	0.109259	11.42404	0.148964	7.36405	8.444742	9.83915	11.42404	13.23245	15.30588	17.36965
23	0.104383	11.57844	0.148409	7.479639	8.570594	9.97827	11.57844	13.40471	15.49929	17.58492
24	9.46E-02	11.73279	0.147864	7.598905	8.69844	10.11795	11.73279	13.57756	15.69575	17.80745

Source: El Mouzan MI, Shaffi A, Al Salloum A, Alqurashi MM, Al Herbish A, Al Omer A. Z-score growth reference data for Saudi preschool children. Ann Saudi Med 2017; 37(1): 10-15.

25	8.07E-02	11.88726	0.147332	7.721405	8.828088	10.25821	11.88726	13.75116	15.89522	18.03686
26	6.35E-02	12.04148	0.146814	7.846224	8.958902	10.39865	12.04148	13.92498	16.09674	18.2715
27	4.40E-02	12.19514	0.146313	7.97235	9.090194	10.53885	12.19514	14.09861	16.29946	18.50981
28	2.25E-02	12.34842	0.145837	8.09938	9.221774	10.67881	12.34842	14.27231	16.50365	18.752
29	-5.17E-04	12.50171	0.145394	8.227187	9.353677	10.81877	12.50171	14.44659	16.70995	18.99883
30	-2.49E-02	12.65535	0.144988	8.355629	9.485934	10.95893	12.65535	14.62195	16.91895	19.25097
31	-0.05021	12.80958	0.144624	8.48442	9.618439	11.09936	12.80958	14.79868	17.13095	19.50863
32	-7.60E-02	12.96442	0.144306	8.613172	9.750967	11.24	12.96442	14.97682	17.34586	19.77153
33	-0.10181	13.11946	0.144034	8.741249	9.883008	11.38043	13.11946	15.15586	17.56292	20.03845
34	-0.12709	13.27419	0.143804	8.86799	10.014	11.52016	13.27419	15.33511	17.78102	20.30766
35	-0.15154	13.4285	0.143615	8.993131	10.14376	11.65906	13.4285	15.51437	17.99972	20.57837
36	-0.175	13.58262	0.143467	9.11669	10.27237	11.7973	13.58262	15.69393	18.21933	20.85078
37	-0.19718	13.73682	0.143363	9.238561	10.39985	11.93504	13.73682	15.87412	18.44014	21.12501
38	-0.21777	13.89111	0.143304	9.358454	10.52602	12.07221	13.89111	16.05496	18.66199	21.40055
39	-0.23636	14.04535	0.143291	9.475982	10.65061	12.20861	14.04535	16.2362	18.88435	21.67626
40	-0.25256	14.19928	0.143322	9.590667	10.77322	12.34399	14.19928	16.4175	19.10652	21.95081
41	-0.26613	14.3529	0.143403	9.702159	10.89363	12.4782	14.3529	16.59891	19.32847	22.22388
42	-0.2768	14.50574	0.14354	9.809748	11.01121	12.61073	14.50574	16.77995	19.54958	22.49443
43	-0.2843	14.65705	0.143736	9.91253	11.12511	12.7408	14.65705	16.95981	19.76874	22.7608
44	-0.28835	14.8058	0.143997	10.00942	11.23432	12.86741	14.8058	17.13731	19.98442	23.0208
45	-0.2888	14.95113	0.144322	10.09955	11.33797	12.98973	14.95113	17.31145	20.19528	23.27256
46	-0.28562	15.0925	0.144711	10.18244	11.43562	13.10728	15.0925	17.4816	20.40051	23.51491
47	-0.27908	15.23008	0.145163	10.2583	11.52742	13.22021	15.23008	17.64794	20.60035	23.74824
48	-0.26951	15.36432	0.145671	10.32767	11.61389	13.32899	15.36432	17.81099	20.79549	23.97356
49	-0.25719	15.49547	0.146231	10.39087	11.69532	13.43388	15.49547	17.97097	20.98621	24.19134
50	-0.24227	15.6234	0.146843	10.44785	11.77163	13.5348	15.6234	18.12778	21.17244	24.40158
51	-0.22503	15.74815	0.147508	10.49866	11.84286	13.63176	15.74815	18.28148	21.35443	24.60492
52	-0.20584	15.86997	0.148222	10.54364	11.90931	13.72501	15.86997	18.43243	21.53277	24.80243

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53	-0.1849	15.98917	0.148985	10.58311	11.97128	13.81486	15.98917	18.58097	21.70794	24.99486
54	-0.16235	16.10551	0.149794	10.61693	12.02863	13.90114	16.10551	18.72681	21.8796	25.18188
55	-0.13836	16.21873	0.150645	10.64505	12.08125	13.98365	16.21873	18.86958	22.04735	25.36316
56	-0.1132	16.32892	0.151533	10.66775	12.12937	14.06255	16.32892	19.00935	22.21131	25.53905
57	-8.72E-02	16.4365	0.152453	10.68571	12.17356	14.13834	16.4365	19.14656	22.3721	25.7106
58	-0.06084	16.54207	0.153395	10.69993	12.21468	14.2117	16.54207	19.28183	22.53061	25.8792
59	-0.03453	16.64629	0.154351	10.71144	12.25363	14.28338	16.64629	19.41588	22.68781	26.04635
60	-8.51E-03	16.74977	0.155315	10.72106	12.29112	14.35404	16.74977	19.54932	22.84447	26.21312

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