

ECE R44

Limits the use of Booster cushion as defined in ECE R129 to children taller than 125 cm

Stature based approach

	Stature	#	Average	Min	Max	5%	50%	95%
Age (Y)	125 cm	188	7,7	5,3	12,2	6,3	7,6	9,5
Mass (kg)	125 cm	188	24,6	19,7	38,5	21,0	23,9	29,9
Seating height (cm)	125 cm	188	66,0	54,0	82,5	63,0	66,0	69,5



ECE R44 based on Mass Groups

~~2.1.1.1. Group 0 for children of a mass less than 10 kg;~~

~~2.1.1.2. Group 0+ for children of a mass less than 13 kg;~~

~~2.1.1.3. Group I for children of mass from 9 kg to 18 kg;~~

~~2.1.1.4. Group II for children of mass from 15 kg to 25 kg;~~

~~2.1.1.5. Group III for children of mass from 22 kg to 36 kg;~~

Group III lower limit => 120 cm

Stature	#		Average	Min	Max	5%	50%	95%
110 cm	210	Mass (kg)	18,7	13,7	24,5	16,4	18,5	21,6
115 cm	260	Mass (kg)	20,8	16,6	27,2	18,3	20,4	24,8
120 cm	217	Mass (kg)	22,5	16,9	33,3	19,1	22,6	26,9
125 cm	188	Mass (kg)	24,6	19,7	38,5	21,0	23,9	29,9
130 cm	171	Mass (kg)	28,1	21,4	42,6	23,3	27,8	34,8

Data from Child Anthropometry database CANDAT

(CANDAT is built with child data collected from different regions, US, Europe and Japan, by TNO - The Netherlands)

Masses [kg] per age from CANDAT database

age (years)	5th perc	50th perc	95th perc
0,00	2,09	3,72	5,30
0,50	6,04	7,60	9,54
1,00	7,70	9,66	11,66
1,50	8,69	11,04	12,76
2,00	9,81	12,22	14,25
2,50	10,94	13,32	15,89
3,00	11,82	14,37	17,10
3,50	12,67	15,42	18,29
4,00	13,53	16,50	19,71
4,50	14,36	17,64	21,34
5,00	15,17	18,81	23,01
5,50	16,01	20,01	24,88
6,00	16,89	21,26	26,40
6,50	17,77	22,56	28,25
7,00	18,64	23,92	30,27
7,50	19,50	25,35	32,39
8,00	20,39	26,86	34,59
8,50	21,33	28,44	36,88
9,00	22,32	30,10	39,33
9,50	23,36	31,84	41,95
10,00	24,54	33,66	44,71
10,50	25,79	35,54	47,52
11,00	27,14	37,47	50,31
11,50	28,59	39,45	53,09
12,00	30,17	41,47	55,90
12,50	31,89	43,52	58,79
13,00	33,72	45,58	61,73

standing height [cm] per age from CANDAT database

age (years)	5th perc	50th perc	95th perc
0,00	46,23	53,18	59,41
0,50	60,89	66,85	71,98
1,00	68,89	75,11	80,12
1,50	74,16	80,89	86,28
2,00	79,25	85,94	91,86
2,50	84,03	90,65	97,17
3,00	88,38	95,02	101,95
3,50	92,36	99,13	106,31
4,00	96,07	103,05	110,46
4,50	99,58	106,82	114,46
5,00	102,91	110,44	118,32
5,50	106,12	113,94	122,04
6,00	109,20	117,31	125,64
6,50	112,19	120,58	129,14
7,00	115,08	123,76	132,56
7,50	117,90	126,87	135,93
8,00	120,64	129,92	139,27
8,50	123,30	132,91	142,59
9,00	125,90	135,85	145,89
9,50	128,42	138,72	149,16
10,00	130,88	141,52	152,39
10,50	133,26	144,25	155,54
11,00	135,57	146,89	158,60
11,50	137,81	149,43	161,55
12,00	139,97	151,88	164,35
12,50	142,07	154,21	166,99
13,00	144,09	156,44	169,47

sitting height [cm] per age from CANDAT database

age (years)	5th perc	50th perc	95th perc
0,00	32,28	37,44	41,33
0,50	40,26	44,25	47,94
1,00	44,27	48,09	51,53
1,50	46,26	50,25	53,67
2,00	47,69	51,86	55,43
2,50	49,03	53,35	57,12
3,00	50,42	54,83	58,80
3,50	51,88	56,33	60,45
4,00	53,40	57,84	62,07
4,50	54,91	59,34	63,66
5,00	56,39	60,82	65,20
5,50	57,82	62,25	66,70
6,00	59,18	63,64	68,17
6,50	60,48	64,99	69,61
7,00	61,72	66,30	71,02
7,50	62,90	67,58	72,43
8,00	64,04	68,83	73,81
8,50	65,14	70,05	75,19
9,00	66,20	71,25	76,56
9,50	67,24	72,44	77,91
10,00	68,25	73,61	79,26
10,50	69,25	74,76	80,58
11,00	70,24	75,90	81,89
11,50	71,21	77,02	83,18
12,00	72,17	78,13	84,44
12,50	73,12	79,22	85,67
13,00	74,07	80,29	86,88

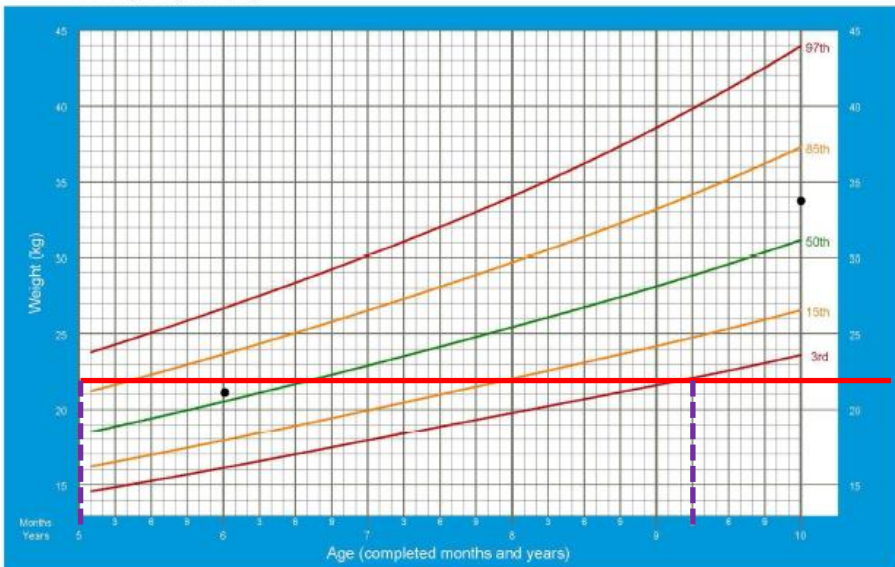
Q dummy data

Dummy	Mass [kg]	Stature [cm]	Sitting height [cm]
Q0	3,4		35,4
Q1	9,6	74	47,9
Q1 1/2	11	80	49,9
Q3	14,5	98,5	54,4
Q6	23	114,5	60,1



Weight-for-age BOYS

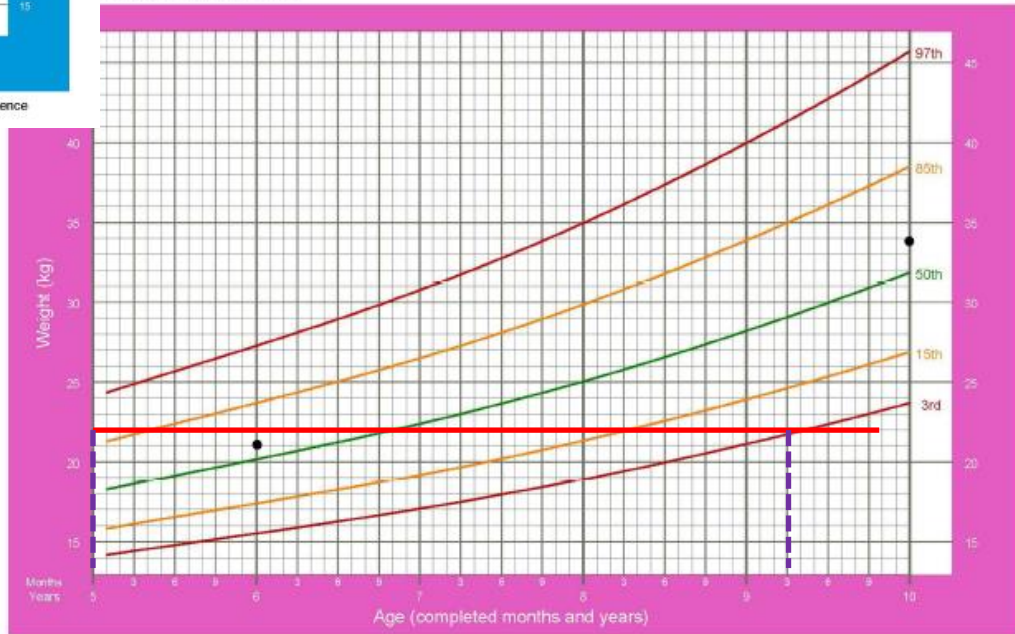
5 to 10 years (percentiles)



2007 WHO Reference

Weight-for-age GIRLS

5 to 10 years (percentiles)

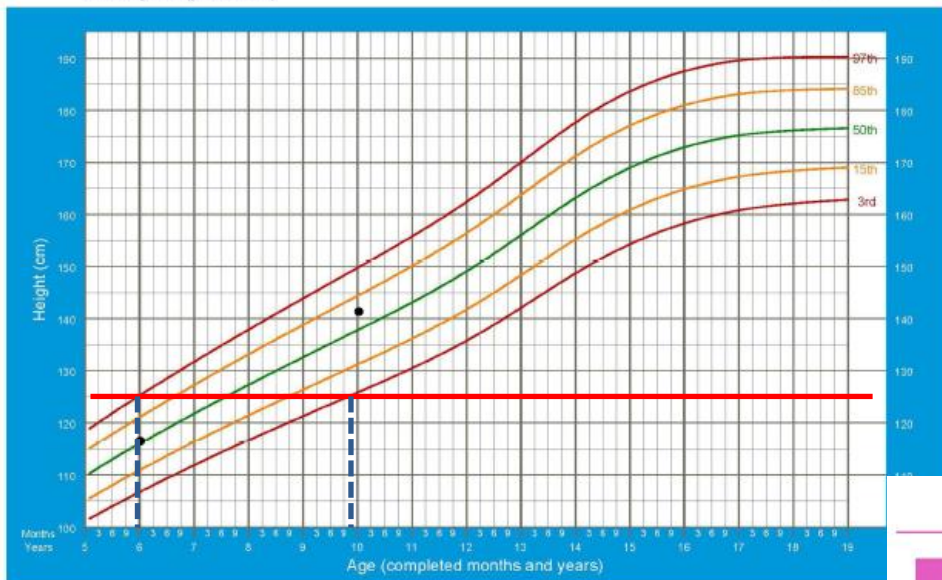


2007 WHO Reference



Height-for-age BOYS

5 to 19 years (percentiles)



2007 WHO Reference

Height-for-age GIRLS

5 to 19 years (percentiles)



2007 WHO Reference

Proposal

Add a new paragraph 4.9.:

4.9. In the case of Booster cushion without backrest include the words:

"IMPORTANT - DO NOT USE THIS PRODUCT BEFORE THE CHILD'S SIZE EXCEEDS 125 cm (Refer to instructions)"

Add a new paragraph 6.1.13.:

6.1.13. Booster Cushion without backrest shall only be type approved as Child restraint systems of Group III as defined in paragraph 2.1.1.5. of this Regulation.
(Mass range from 22 kg to 36 kg)