

Weight Velocity in Children from Birth to 2 Years Old

Data from 2006 WHO Growth Chart

(Source: Danner E, Joeckel R, Michalak S, Phillips S and Goday P. Weight Velocity in Infants and Children. Nutr Clin Pract. 2009; 24: 76-79)

Weight Velocity for Males (grams/day)					
Age in Months	3rd-5th	15th-25th	50th	75th-85th	95th-97th
0-3	23-33	23-36	26-39	30-39	30-46
3-6	10-20	13-20	13-20	13-23	16-23
6-9	7-10	7-10	10-13	10-13	10-16
9-12	3-10	7-10	7-10	7-10	10
12-15	3-7	3-7	7-10	7-10	7-10
15-18	3-7	3-7	7	7-10	7-10
18-21	3-7	7	7	7-10	7-10
21-24	3-7	3-7	7-10	7-10	7-10

Weight Velocity for Females (grams/day)					
Age in Months	3rd-5th	15th-25th	50th	75th-85th	95th-97th
0-3	20-26	20-30	23-33	26-36	30-39
3-6	10-16	10-16	13-20	13-20	16-23
6-9	7-10	10	10	10-13	10-16
9-12	3-7	7	7-10	7-10	10
12-15	7	7	7-10	7-10	7-10
15-18	3-7	3-7	7	7-10	7-10
18-21	3-7	7	7-10	7-10	7-10
21-24	3-7	3-7	7	7-10	7-10

- Use weight velocity charts as supplement to standard growth charts. Note: 1 ounce = 30 grams.
- Can be used to assess adequacy of weight change in short time intervals as this can be difficult to visualize on growth chart.
- Can be used to set weight gain goals. Use velocity goal from lower percentile to slow gain or higher percentile for catch-up growth.

Weight Velocity in Males from 2 to 20 Years Old

Data from 2000 CDC Growth Chart

(Source: Danner E, Joeckel R, Michalak S, Phillips S and Goday P. Weight Velocity in Infants and Children. Nutr Clin Pract. 2009; 24: 76-79)

	Growth Velocity for Males (grams/month)				
Age in Years	3rd-5th	10th-25th	50th	75-90th	95-97th
2 - 3	115 - 117	120 - 127	138	153 - 172	185 - 195
3 - 4	122 - 125	131 - 142	158	181 - 208	229 - 245
4 - 5	130 - 135	143 - 158	180	209 - 242	268 - 286
5 - 6	137 - 142	150 - 167	191	223 - 262	293 - 316
6 - 7	146 - 150	158 - 174	199	234 - 282	321 - 353
7 - 8	155 - 160	168 - 186	215	256 - 314	364 - 405
8 - 9	163 - 170	182 - 206	243	294 - 362	420 - 468
9 - 10	176 - 185	202 - 235	282	344 - 421	481 - 527
10 - 11	199 - 212	233 - 274	330	400 - 478	531 - 569
11 - 12	238 - 252	276 - 322	381	451 - 520	562 - 587
12 - 13	289 - 304	328 - 372	427	486 - 539	567 - 581
13 - 14	340 - 353	373 - 408	451	495 - 532	550 - 558
14 - 15	370 - 378	391 - 413	440	469 - 496	514 - 525
15 - 16	358 - 360	365 - 373	387	406 - 434	458 - 478
16 - 17	295	295 - 297	304	320 - 349	379 - 406
17 - 18	204 - 205	207 - 211	219	233 - 255	276 - 294
18 - 19	130 - 133	139 - 149	160	169 - 173	166 - 171
19 - 20	70 - 76	86 - 104	123	139 - 147	138 - 144

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Weight Velocity in Females from 2 to 20 Years Old

Data from 2000 CDC Growth Chart

(Source: Danner E, Joeckel R, Michalak S, Phillips S and Goday P. Weight Velocity in Infants and Children. Nutr Clin Pract. 2009; 24: 76-79)

	Growth Velocity for Females (grams/month)				
Age in Years	3rd-5th	10th-25th	50th	75-90th	95-97th
2 - 3	112 - 116	122 - 134	151	174 - 202	223 - 239
3 - 4	115 - 119	126 - 140	161	189 - 224	251 - 272
4 - 5	130 - 134	142 - 156	178	208 - 247	279 - 304
5 - 6	139 - 144	152 - 168	192	225 - 268	302 - 330
6 - 7	143 - 149	160 - 180	210	250 - 299	338 - 369
7 - 8	151 - 159	173 - 201	239	289 - 349	394 - 428
8 - 9	169 - 180	198 - 232	280	341 - 412	463 - 501
9 - 10	199 - 211	231 - 271	325	393 - 471	527 - 568
10 - 11	234 - 246	266 - 306	360	428 - 507	564 - 607
11 - 12	266 - 275	292 - 324	370	430 - 502	557 - 600
12 - 13	282 - 288	298 - 318	348	391 - 450	501 - 543
13 - 14	275 - 277	279 - 284	295	317 - 360	404 - 447
14 - 15	240 - 243	229 - 236	224	227 - 252	291 - 335
15 - 16	185 - 189	166 - 178	153	146 - 158	189 - 230
16 - 17	126 - 128	113 - 121	104	98 - 104	124 - 153
17 - 18	78 - 79	80 - 83	87	92 - 98	103 - 107
18 - 19	47 - 52	60 - 75	93	111 - 117	83 - 106
19 - 20	22 - 28	38 - 56	76	94 - 98	55 - 82

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