

HEIGHT FOR AGE 0-11

MODERATE DANGER

MODERATE DANGER

MODERATE DANGER

SEVERE DANGER

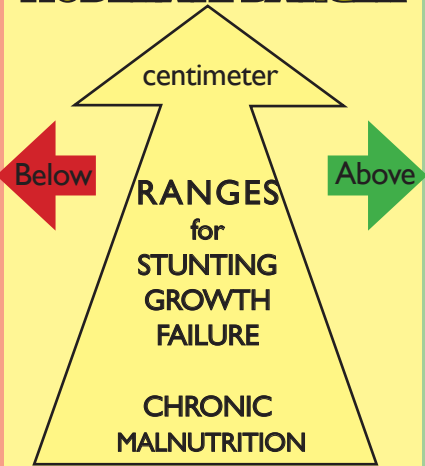
NORMAL

SEVERE DANGER

NORMAL

SEVERE DANGER

NORMAL



BOYS	Birth	GIRLS
44.2-46.1	0	43.6-45.4
48.9-50.8	1	47.8-49.8
52.4-54.4	2	51.0-53.0
55.3-57.3	3	53.5-55.6
57.6-59.7	4	55.6-57.8
59.6-61.7	5	57.4-59.6
61.2-63.3	6	58.9-61.2
62.7-64.8	7	60.3-62.7
64.0-66.2	8	61.7-64.0
65.2-67.5	9	62.9-65.3
66.4-68.7	10	64.1-66.5
67.6-69.9	11	65.2-67.7
1 year		
68.6-71.0	0	66.3-68.9
69.6-72.1	1	67.3-70.0
70.6-73.1	2	68.3-71.0
71.6-74.1	3	69.3-72.0
72.5-75.0	4	70.2-73.0
73.3-76.0	5	71.1-74.0
74.2-76.9	6	72.0-74.9
75.0-77.7	7	72.8-75.8
75.8-78.6	8	73.7-76.7
76.5-79.4	9	74.5-77.5
77.2-80.2	10	75.2-78.4
78.0-81.0	11	76.0-79.2
2 years		
78.0-81.0	0	76.0-79.3
78.6-81.7	1	76.8-80.0
79.3-82.5	2	77.5-80.8
79.9-83.1	3	78.1-81.5
80.5-83.8	4	78.8-82.2
81.1-84.5	5	79.5-82.9
81.7-85.1	6	80.1-83.6
82.3-85.7	7	80.7-84.3
82.8-86.4	8	81.3-84.9
83.4-86.9	9	81.9-85.6
83.9-87.5	10	82.5-86.2
84.4-88.1	11	83.1-86.8

BOYS	3 yrs	GIRLS
85.0-88.7	0	83.6-87.4
85.5-89.2	1	84.2-88.0
86.0-89.8	2	84.7-88.6
86.5-90.3	3	85.3-89.2
87.0-90.9	4	85.8-89.8
87.5-91.4	5	86.3-90.4
88.0-91.9	6	86.8-90.9
88.4-92.4	7	87.4-91.5
88.9-93.0	8	87.9-92.0
89.4-93.5	9	88.4-92.5
89.8-94.0	10	88.9-93.1
90.3-94.4	11	89.3-93.6
4 years		
90.7-94.9	0	89.8-94.1
91.2-95.4	1	90.3-94.6
91.6-95.9	2	90.7-95.1
92.1-96.4	3	91.2-95.6
92.5-96.9	4	91.7-96.1
93.0-97.4	5	92.1-96.6
93.4-97.8	6	92.6-97.1
93.9-98.3	7	93.0-97.6
94.3-98.8	8	93.4-98.1
94.7-99.3	9	93.9-98.5
95.2-99.7	10	94.3-99.0
95.6-100.2	11	94.7-99.5
5 years		
96.1-100.7	0	95.2-99.9
96.5-101.1	1	95.3-100.1
96.9-101.6	2	95.7-100.5
97.4-102.0	3	96.1-101.0
97.8-102.5	4	96.5-101.4
98.2-103.0	5	97.0-101.9
98.7-103.4	6	97.4-102.3
99.1-103.9	7	97.8-102.7
99.5-104.3	8	98.2-103.2
99.9-104.8	9	98.6-103.6
100.4-105.2	10	99.0-104.0
100.8-105.7	11	99.4-104.5
6 years		
101.2-106.1	0	99.8-104.9
101.6-106.5	1	100.2-105.3
102.0-107.0	2	100.5-105.7
102.4-107.4	3	100.9-106.1
102.8-107.8	4	101.3-106.6
103.2-108.2	5	101.7-107.0
103.6-108.7	6	102.1-107.4
103.9-109.1	7	102.5-107.8
104.3-109.5	8	102.9-108.2
104.7-109.9	9	103.2-108.6
105.1-110.3	10	103.6-109.0
105.5-110.8	11	104.0-109.5

BOYS	7 yrs	GIRLS
105.9-111.2	0	104.4-109.9
106.3-111.6	1	104.8-110.3
106.6-112.0	2	105.2-110.7
107.0-112.4	3	105.6-111.1
107.4-112.8	4	106.0-111.6
107.8-113.2	5	106.4-112.0
108.1-113.6	6	106.8-112.4
108.5-114.0	7	107.2-112.8
108.9-114.4	8	107.6-113.2
109.2-114.8	9	108.0-113.7
109.6-115.2	10	108.4-114.1
110.0-115.6	11	108.8-114.5
8 years		
110.3-116.0	0	109.2-115.0
110.7-116.4	1	109.6-115.4
111.0-116.7	2	110.0-115.8
111.4-117.1	3	110.4-116.3
111.7-117.5	4	110.8-116.7
112.1-117.9	5	111.2-117.1
112.4-118.3	6	111.6-117.6
112.8-118.7	7	112.0-118.0
113.1-119.0	8	112.5-118.5
113.5-119.4	9	112.9-118.9
113.8-119.8	10	113.3-119.4
114.2-120.2	11	113.7-119.8
9 years		
114.5-120.5	0	114.2-120.3
114.9-120.9	1	114.6-120.7
115.2-121.3	2	115.0-121.2
115.6-121.7	3	115.5-121.6
115.9-122.0	4	115.9-122.1
116.3-122.4	5	116.3-122.6
116.6-122.8	6	116.8-123.0
116.9-123.2	7	117.2-123.5
117.3-123.5	8	117.7-124.0
117.6-123.9	9	118.1-124.4
118.0-124.3	10	118.5-124.9
118.3-124.7	11	119.0-125.4
10 years		
118.7-125.0	0	119.4-125.8
119.0-125.4	1	119.9-126.3
119.3-125.8	2	120.4-126.8
119.7-126.2	3	120.8-127.3
120.0-126.5	4	121.3-127.8
120.4-126.9	5	121.7-128.2
120.7-127.3	6	122.2-128.7
121.1-127.7	7	122.7-129.2
121.4-128.1	8	123.2-129.7
121.8-128.5	9	123.6-130.2
122.2-128.8	10	124.1-130.7
122.5-129.2	11	124.6-131.2

HEIGHT FOR AGE 11-19

MODERATE DANGER

SEVERE DANGER

BOYS	11 yrs	GIRLS
122.9-129.7	0	125.1-131.7
123.3-130.1	1	125.5-132.2
123.7-130.5	2	126.0-132.7
124.1-130.9	3	126.5-133.2
124.5-131.3	4	127.0-133.7
124.9-131.7	5	127.4-134.2
125.3-132.2	6	127.9-134.7
125.7-132.6	7	128.4-135.2
126.1-133.1	8	128.9-135.7
126.5-133.5	9	129.3-136.1
126.9-134.0	10	129.8-136.6
127.4-134.4	11	130.3-137.1
12 years		
127.8-134.9	0	130.7-137.6
128.3-135.4	1	131.2-138.0
128.7-135.9	2	131.6-138.5
129.2-136.4	3	132.0-138.9
129.7-136.9	4	132.5-139.3
130.2-137.4	5	132.9-139.8
130.7-137.9	6	133.3-140.2
131.2-138.5	7	133.7-140.6
131.7-139.0	8	134.1-141.0
132.2-139.5	9	134.5-141.4
132.7-140.1	10	134.8-141.8
133.2-140.6	11	135.2-142.1
13 years		
133.8-141.2	0	135.6-142.5
134.3-141.7	1	135.9-142.8
134.8-142.3	2	136.2-143.2
135.4-142.9	3	136.5-143.5
135.9-143.4	4	136.9-143.8
136.4-144.0	5	137.2-144.1
137.0-144.5	6	137.4-144.4
137.5-145.1	7	137.7-144.7
138.0-145.7	8	138.0-144.9
138.6-146.2	9	138.2-145.2
139.1-146.7	10	138.5-145.4
139.6-147.3	11	138.7-145.7
14 years		
140.1-147.8	0	139.0-145.9
140.6-148.3	1	139.2-146.1
141.1-148.8	2	139.4-146.3
141.6-149.3	3	139.6-146.5
142.1-149.8	4	139.8-146.7
142.5-150.3	5	140.0-146.9
143.0-150.8	6	140.1-147.1
143.4-151.2	7	140.3-147.2
143.9-151.7	8	140.5-147.4
144.3-152.1	9	140.6-147.5
144.7-152.5	10	140.8-147.7
145.1-152.9	11	140.9-147.8

NORMAL

MODERATE DANGER

SEVERE DANGER

BOYS	15 yrs	GIRLS
145.5-153.4	0	141.0-147.9
145.9-153.7	1	141.2-148.0
146.3-154.1	2	141.3-148.1
146.7-154.5	3	141.4-148.2
147.1-154.9	4	141.5-148.3
147.4-155.2	5	141.6-148.4
147.7-155.5	6	141.7-148.5
148.1-155.9	7	141.8-148.6
148.4-156.2	8	141.9-148.7
148.7-156.5	9	141.9-148.7
149.0-156.8	10	142.0-148.8
149.3-157.1	11	142.1-148.9
16 years		
149.6-157.4	0	142.2-148.9
149.9-157.6	1	142.2-149.0
150.1-157.9	2	142.3-149.1
150.4-158.1	3	142.3-149.1
150.6-158.4	4	142.4-149.2
150.9-158.6	5	142.4-149.2
151.1-158.8	6	142.5-149.2
151.3-159.0	7	142.5-149.3
151.5-159.2	8	142.6-149.3
151.7-159.4	9	142.6-149.4
151.9-159.6	10	142.7-149.4
152.1-159.7	11	142.7-149.4
17 years		
152.2-159.9	0	142.8-149.5
152.4-160.0	1	142.8-149.5
152.5-160.2	2	142.9-149.5
152.7-160.3	3	142.9-149.6
152.8-160.4	4	142.9-149.6
153.0-160.5	5	143.0-149.6
153.1-160.6	6	143.0-149.7
153.2-160.8	7	143.1-149.7
153.3-160.9	8	143.1-149.7
153.4-160.9	9	143.1-149.8
153.5-161.0	10	143.2-149.8
153.6-161.1	11	143.2-149.8
18 years		
153.7-161.2	0	143.2-149.8
153.8-161.3	1	143.3-149.9
153.9-161.4	2	143.3-149.9
154.0-161.4	3	143.3-149.9
154.1-161.5	4	143.4-149.9
154.2-161.6	5	143.4-150.0
154.2-161.6	6	143.4-150.0
154.3-161.7	7	143.4-150.0
154.4-161.7	8	143.5-150.0
154.5-161.8	9	143.5-150.0
154.5-161.8	10	143.5-150.0
154.6-161.9	11	143.5-150.1

NORMAL

INSTRUCTIONS:

HEALTH FLAGPOLE

- Have child take off shoes, hats and hair ties
- Stand straight against pole with nose pointing straight ahead and heels together
- Bring flag down to touch head at exact right angle
- Read and record exact height to nearest .1 cm (Ex. 94.4 cm)
- Use exact age in years and months completed

LAP INFANTOMETER:

- Use for children up to 24 completed months (age 2)
- Have seated mother hold child
- Worker places infantometer on mother's lap
- Mother places child on infantometer
- Child's head should touch top
- Nose points up
- Worker straightens child and measures head to heel to .1 cm

NOTE: The length of a child lying is about .7cm more than that same child measured standing. The norms on this table assume that the child is lying up to age 2 and then measured standing after 2nd birthday. Therefore, if a child under 24 completed months is measured standing, be sure to add .7cm to the results that you use in assessing that child's nutritional status with this chart, but record your exact measurement. If using the WHO ANTHRO program that correction will be made for you when you report if child was measured recumbent or standing.

Yellow = Moderate Malnutrition
(-2 to -3 Z-scores)

Green = Normal Nutrition
(-2 to +2 Z-scores)

Red = Severe Malnutrition
(-3 and below Z-scores)

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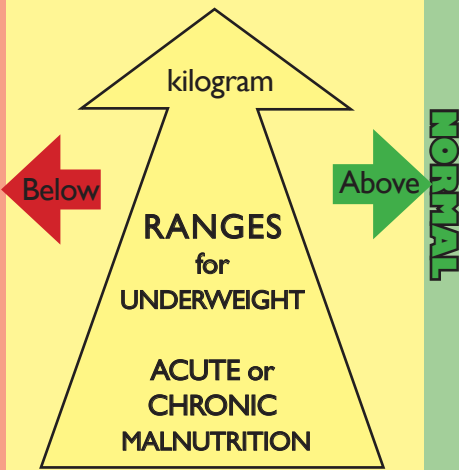
WEIGHT FOR AGE 0-10

MODERATE DANGER

MODERATE DANGER

MODERATE DANGER

SEVERE DANGER



SEVERE DANGER

NORMAL

SEVERE DANGER

NORMAL

BOYS	Birth	GIRLS
2.1-2.5	0	2.0-2.4
2.9-3.4	1	2.7-3.2
3.8-4.3	2	3.4-3.9
4.4-5.0	3	4.0-4.5
4.9-5.6	4	4.4-5.0
5.3-6.0	5	4.8-5.4
5.7-6.4	6	5.1-5.7
5.9-6.7	7	5.3-6.0
6.2-6.9	8	5.6-6.3
6.4-7.1	9	5.8-6.5
6.6-7.4	10	5.9-6.7
6.8-7.6	11	6.1-6.9
1 year		
6.9-7.7	0	6.3-7.0
7.1-7.9	1	6.4-7.2
7.2-8.1	2	6.6-7.4
7.4-8.3	3	6.7-7.6
7.5-8.4	4	6.9-7.7
7.7-8.6	5	7.0-7.9
7.8-8.8	6	7.2-8.1
8.0-8.9	7	7.3-8.2
8.1-9.1	8	7.5-8.4
8.2-9.2	9	7.6-8.6
8.4-9.4	10	7.8-8.7
8.5-9.5	11	7.9-8.9
2 years		
8.6-9.7	0	8.1-9.0
8.8-9.8	1	8.2-9.2
8.9-10.0	2	8.4-9.4
9.0-10.1	3	8.5-9.5
9.1-10.2	4	8.6-9.7
9.2-10.4	5	8.8-9.8
9.4-10.5	6	8.9-10.0
9.5-10.7	7	9.0-10.1
9.6-10.8	8	9.1-10.3
9.7-10.9	9	9.3-10.4
9.8-11.0	10	9.4-10.5
9.9-11.2	11	9.5-10.7

BOYS	3 yrs	GIRLS
10.0-11.3	0	9.6-10.8
10.1-11.4	1	9.7-10.9
10.2-11.5	2	9.8-11.1
10.3-11.6	3	9.9-11.2
10.4-11.8	4	10.1-11.3
10.5-11.9	5	10.2-11.5
10.6-12.0	6	10.3-11.6
10.7-12.1	7	10.4-11.7
10.8-12.2	8	10.5-11.8
10.9-12.4	9	10.6-12.0
11.0-12.5	10	10.7-12.1
11.1-12.6	11	10.8-12.2

	4 years	
11.2-12.7	0	10.9-12.3
11.3-12.8	1	11.0-12.4
11.4-12.9	2	11.1-12.6
11.5-13.1	3	11.2-12.7
11.6-13.2	4	11.3-12.8
11.7-13.3	5	11.4-12.9
11.8-13.4	6	11.5-13.0
11.9-13.5	7	11.6-13.2
12.0-13.6	8	11.7-13.3
12.1-13.7	9	11.8-13.4
12.2-13.8	10	11.9-13.5
12.3-14.0	11	12.0-13.6

	5 years	
12.4-14.1	0	12.1-13.7
12.7-14.4	1	12.4-14.0
12.8-14.5	2	12.5-14.1
13.0-14.6	3	12.6-14.2
13.1-14.8	4	12.7-14.3
13.2-14.9	5	12.8-14.4
13.3-15.0	6	12.9-14.6
13.4-15.2	7	13.0-14.7
13.6-15.3	8	13.1-14.8
13.7-15.4	9	13.2-14.9
13.8-15.6	10	13.3-15.0
13.9-15.7	11	13.4-15.2

	6 years	
14.1-15.9	0	13.5-15.3
14.2-16.0	1	13.6-15.4
14.3-16.2	2	13.7-15.5
14.5-16.3	3	13.8-15.6
14.6-16.5	4	13.9-15.8
14.7-16.6	5	14.0-15.9
14.9-16.8	6	14.1-16.0
15.0-16.9	7	14.2-16.1
15.1-17.1	8	14.3-16.3
15.3-17.2	9	14.4-16.4
15.4-17.4	10	14.5-16.5
15.5-17.5	11	14.6-16.6

BOYS	7 yrs	GIRLS
15.7-17.7	0	14.8-16.8
15.8-17.8	1	14.9-16.9
15.9-18.0	2	15.0-17.1
16.1-18.1	3	15.1-17.2
16.2-18.3	4	15.2-17.3
16.3-18.4	5	15.4-17.5
16.5-18.6	6	15.5-17.6
16.6-18.7	7	15.6-17.8
16.7-18.9	8	15.7-17.9
16.9-19.0	9	15.9-18.1
17.0-19.2	10	16.0-18.3
17.1-19.3	11	16.2-18.4

	8 years	
17.3-19.5	0	16.3-18.6
17.4-19.6	1	16.4-18.8
17.5-19.8	2	16.6-18.9
17.7-19.9	3	16.7-19.1
17.8-20.1	4	16.9-19.3
17.9-20.2	5	17.0-19.5
18.1-20.4	6	17.2-19.6
18.2-20.5	7	17.3-19.8
18.3-20.7	8	17.5-20.0
18.4-20.8	9	17.7-20.2
18.6-21.0	10	17.8-20.4
18.7-21.1	11	18.0-20.6

	9 years	
18.8-21.3	0	18.1-20.8
18.9-21.4	1	18.3-21.0
19.1-21.6	2	18.5-21.2
19.2-21.7	3	18.7-21.4
19.3-21.9	4	18.8-21.6
19.5-22.1	5	19.0-21.8
19.6-22.2	6	19.2-22.0
19.7-22.4	7	19.4-22.2
19.9-22.5	8	19.5-22.4
20.0-22.7	9	19.7-22.6
20.1-22.9	10	19.9-22.8
20.3-23.0	11	20.1-23.0

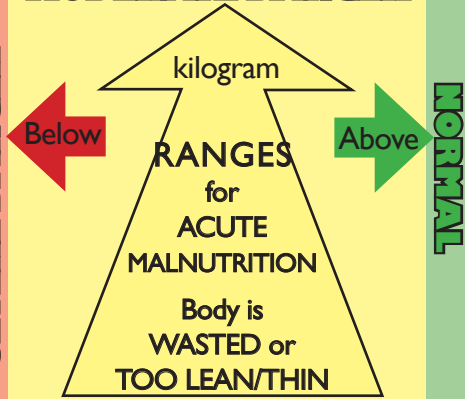
Underweight can be acute or chronic. The child may have failed to grow long-term or may be acutely wasted. This chart does not tell if problems is long standing or recent.

INSTRUCTIONS: Place scale on even ground, preferably on a cement floor or a tile. Weigh the child without shoes. For children under 24 months, weigh mothers&child, then mother alone& subtract mother's weight. Find the child's EXACT age (completed years and months) on the chart.

WEIGHT FOR HEIGHT 0-5

MODERATE DANGER

SEVERE DANGER



BOYS	cm	GIRLS
1.9-2.0	45	1.9-2.1
2.0-2.2	46	2.0-2.2
2.1-2.3	47	2.2-2.4
2.3-2.5	48	2.3-2.5
2.4-2.6	49	2.4-2.6
2.6-2.8	50	2.6-2.8
2.7-3.0	51	2.8-3.0
2.9-3.2	52	2.9-3.2
3.1-3.4	53	3.1-3.4
3.3-3.6	54	3.3-3.6
3.6-3.8	55	3.5-3.8
3.8-4.1	56	3.7-4.0
4.0-4.3	57	3.9-4.3
4.3-4.6	58	4.1-4.5
4.5-4.8	59	4.3-4.7
4.7-5.1	60	4.5-4.9
4.9-5.3	61	4.7-5.1
5.1-5.6	62	4.9-5.3
5.3-5.8	63	5.1-5.5
5.5-6.0	64	5.3-5.7
5.9-6.3	65	5.6-6.1
6.1-6.5	66	5.8-6.3
6.2-6.7	67	5.9-6.4
6.4-6.9	68	6.1-6.6
6.6-7.1	69	6.3-6.8
6.8-7.3	70	6.4-7.0
6.9-7.5	71	6.6-7.1
7.1-7.7	72	6.7-7.3
7.3-7.9	73	6.9-7.5
7.4-8.0	74	7.0-7.6
7.6-8.2	75	7.2-7.8
7.7-8.4	76	7.3-8.0
7.9-8.5	77	7.5-8.1
8.0-8.7	78	7.6-8.3
8.2-8.8	79	7.8-8.4
8.3-9.0	80	7.9-8.6
8.5-9.2	81	8.1-8.8
8.7-9.3	82	8.3-9.0
8.8-9.5	83	8.5-9.2
9.0-9.7	84	8.6-9.4

NORMAL

MODERATE DANGER

SEVERE DANGER

BOYS	cm	GIRLS
9.2-10.0	85	8.8-9.6
9.4-10.2	86	9.0-9.8
9.6-10.4	87	9.2-10.0
9.8-10.6	88	9.4-10.2
10.0-10.8	89	9.6-10.4
10.2-11.0	90	9.8-10.6
10.4-11.2	91	10.0-10.9
10.6-11.4	92	10.2-11.1
10.8-11.6	93	10.4-11.3
11.0-11.8	94	10.6-11.5
11.1-12.0	95	10.8-11.7
11.3-12.2	96	10.9-11.9
11.5-12.4	97	11.1-12.1
11.7-12.6	98	11.3-12.3
11.9-12.9	99	11.5-12.5
12.1-13.1	100	11.7-12.8
12.3-13.3	101	12.0-13.0
12.5-13.6	102	12.2-13.3
12.8-13.8	103	12.4-13.5
13.0-14.0	104	12.6-13.8
13.2-14.3	105	12.9-14.0
13.4-14.5	106	13.1-14.3
13.7-14.8	107	13.4-14.6
13.9-15.1	108	13.7-14.9
14.1-15.3	109	13.9-15.2
14.4-15.6	110	14.2-15.5
14.6-15.9	111	14.5-15.8
14.9-16.2	112	14.8-16.2
15.2-16.5	113	15.1-16.5
15.4-16.8	114	15.4-16.8
15.7-17.1	115	15.7-17.2
16.0-17.4	116	16.0-17.5
16.2-17.7	117	16.3-17.8
16.5-18.0	118	16.6-18.2
16.8-18.5	119	16.9-18.5
17.1-18.6	120	17.3-18.9

NORMAL

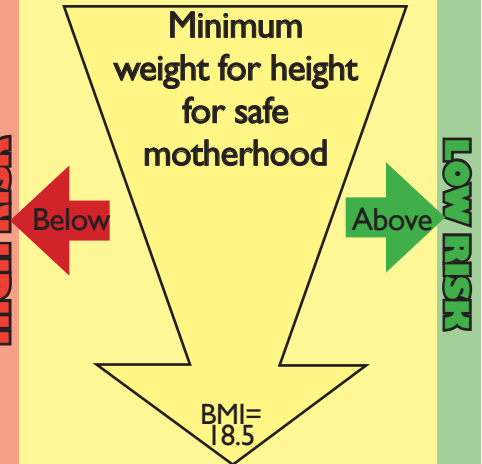
INSTRUCTIONS:

- Use this chart if exact birthdate is unknown. Usually a child is less than 5 years old if, when reaching with arm over head, cannot reach opposite ear.
- Weigh to .1 KG
- This is a field guide for estimation to aid rapid assessment based on weight for height to nearest centimeter.

Technical Note: Norms switched to weight-for-height at 65 cm-based on WHO Child Growth Standard chart for 2-5 yrs.

WOMEN 15-49

HIGH RISK

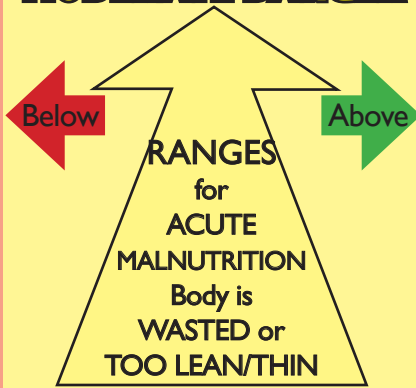


HEIGHT (CM)	WEIGHT (KG)
145	38.9
146	39.4
147	39.9
148	40.5
149	41.1
150	41.6
151	42.2
152	42.7
153	43.3
154	43.8
155	44.4
156	45.0
157	45.6
158	46.2
159	46.8
160	47.4
161	47.9
162	48.5
163	49.2
164	49.8
165	50.4
166	51.0
167	51.6
168	52.2
169	52.8
170	53.4
171	54.0
172	54.7
173	55.4
174	56.0
175	56.7
176	57.3

Girls & women preparing for motherhood have safer pregnancies & healthier babies if BMI is over 18.5.

BMI FOR AGE 5-19

MODERATE DANGER



BOYS	5 years	GIRLS
12.0-12.9	0	11.6-12.7
12.1-13.0	1	11.8-12.7
12.1-13.0	2	11.8-12.7
12.1-13.0	3	11.8-12.7
12.1-13.0	4	11.8-12.7
12.1-13.0	5	11.7-12.7
12.1-13.0	6	11.7-12.7
12.1-13.0	7	11.7-12.7
12.1-13.0	8	11.7-12.7
12.1-13.0	9	11.7-12.7
12.1-13.0	10	11.7-12.7
12.1-13.0	11	11.7-12.7
	6 years	
12.1-13.0	0	11.7-12.7
12.1-13.0	1	11.7-12.7
12.2-13.1	2	11.7-12.7
12.2-13.1	3	11.7-12.7
12.2-13.1	4	11.7-12.7
12.2-13.1	5	11.7-12.7
12.2-13.1	6	11.7-12.7
12.2-13.1	7	11.7-12.7
12.2-13.1	8	11.7-12.7
12.2-13.1	9	11.7-12.7
12.2-13.1	10	11.7-12.7
12.2-13.1	11	11.7-12.7
	7 years	
12.3-13.1	0	11.8-12.7
12.3-13.2	1	11.8-12.7
12.3-13.2	2	11.8-12.8
12.3-13.2	3	11.8-12.8
12.3-13.2	4	11.8-12.8
12.3-13.2	5	11.8-12.8
12.3-13.2	6	11.8-12.8
12.3-13.2	7	11.8-12.8
12.3-13.2	8	11.8-12.8
12.4-13.3	9	11.8-12.8
12.4-13.3	10	11.9-12.9
12.4-13.3	11	11.9-12.9
	8 years	
12.4-13.3	0	11.9-12.9
12.4-13.3	1	11.9-12.9
12.4-13.3	2	11.9-12.9
12.4-13.3	3	11.9-12.9
12.4-13.4	4	11.9-13.0
12.5-13.4	5	12.0-13.0
12.5-13.4	6	12.0-13.0
12.5-13.4	7	12.0-13.0
12.5-13.4	8	12.0-13.0
12.5-13.4	9	12.0-13.1
12.5-13.5	10	12.1-13.1
12.5-13.5	11	12.1-13.1

MODERATE DANGER

BOYS	9 years	GIRLS
12.6-13.5	0	12.1-13.1
12.6-13.5	1	12.1-13.2
12.6-13.5	2	12.1-13.2
12.6-13.5	3	12.2-13.2
12.6-13.6	4	12.2-13.2
12.6-13.6	5	12.2-13.3
12.7-13.6	6	12.2-13.3
12.7-13.6	7	12.3-13.3
12.7-13.6	8	12.3-13.4
12.7-13.7	9	12.3-13.4
12.7-13.7	10	12.3-13.4
12.8-13.7	11	12.4-13.4
	10 years	
12.8-13.7	0	12.4-13.5
12.8-13.8	1	12.4-13.5
12.8-13.8	2	12.4-13.5
12.8-13.8	3	12.5-13.6
12.9-13.8	4	12.5-13.6
12.9-13.9	5	12.5-13.6
12.9-13.9	6	12.5-13.7
12.9-13.9	7	12.6-13.7
13.0-13.9	8	12.6-13.7
13.0-14.0	9	12.6-13.8
13.0-14.0	10	12.7-13.8
13.0-14.0	11	12.7-13.8
	11 years	
13.1-14.1	0	12.7-13.9
13.1-14.1	1	12.8-13.9
13.1-14.1	2	12.8-14.0
13.1-14.1	3	12.8-14.0
13.2-14.2	4	12.9-14.0
13.2-14.2	5	12.9-14.1
13.2-14.2	6	12.9-14.1
13.2-14.3	7	13.0-14.2
13.3-14.3	8	13.0-14.2
13.3-14.3	9	13.0-14.3
13.3-14.4	10	13.1-14.3
13.4-14.4	11	13.1-14.3
	12 years	
13.4-14.5	0	13.2-14.4
13.4-14.5	1	13.2-14.4
13.5-14.5	2	13.2-14.5
13.5-14.6	3	13.3-14.5
13.5-14.6	4	13.3-14.6
13.6-14.6	5	13.3-14.6
13.6-14.7	6	13.4-14.7
13.6-14.7	7	13.4-14.7
13.7-14.8	8	13.5-14.8
13.7-14.8	9	13.5-14.8
13.7-14.8	10	13.5-14.8
13.8-14.9	11	13.6-14.9
	13 years	
13.8-14.9	0	13.6-14.9
13.8-15.0	1	13.6-15.0
13.9-15.0	2	13.7-15.0
13.9-15.1	3	13.7-15.1
14.0-15.1	4	13.8-15.1
14.0-15.2	5	13.8-15.2
14.0-15.2	6	13.8-15.2
14.1-15.2	7	13.9-15.2
14.1-15.3	8	13.9-15.3
14.1-15.3	9	13.9-15.3
14.2-15.4	10	14.0-15.4
14.2-15.4	11	14.0-15.4

MODERATE DANGER

BOYS	14 years	GIRLS
14.3-15.5	0	14.0-15.4
14.3-15.5	1	14.1-15.5
14.3-15.6	2	14.1-15.5
14.4-15.6	3	14.1-15.6
14.4-15.7	4	14.1-15.6
14.5-15.7	5	14.2-15.6
14.5-15.7	6	14.2-15.7
14.5-15.8	7	14.2-15.7
14.6-15.8	8	14.3-15.7
14.6-15.9	9	14.3-15.8
14.6-15.9	10	14.3-15.8
14.7-16.0	11	14.3-15.8
	15 years	
14.7-16.0	0	14.4-15.9
14.7-16.1	1	14.4-15.9
14.8-16.1	2	14.4-15.9
14.8-16.1	3	14.4-16.0
14.8-16.2	4	14.5-16.0
14.9-16.2	5	14.5-16.0
14.9-16.3	6	14.5-16.0
15.0-16.3	7	14.5-16.1
15.0-16.3	8	14.5-16.1
15.0-16.4	9	14.5-16.1
15.0-16.4	10	14.6-16.1
15.1-16.5	11	14.6-16.2
	16 years	
15.1-16.5	0	14.6-16.2
15.1-16.5	1	14.6-16.2
15.2-16.6	2	14.6-16.2
15.2-16.6	3	14.6-16.2
15.2-16.7	4	14.6-16.2
15.3-16.7	5	14.6-16.3
15.3-16.7	6	14.7-16.3
15.3-16.8	7	14.7-16.3
15.3-16.8	8	14.7-16.3
15.4-16.8	9	14.7-16.3
15.4-16.9	10	14.7-16.3
15.4-16.9	11	14.7-16.3
	17 years	
15.4-16.9	0	14.7-16.4
15.5-17.0	1	14.7-16.4
15.5-17.0	2	14.7-16.4
15.5-17.0	3	14.7-16.4
15.5-17.1	4	14.7-16.4
15.6-17.1	5	14.7-16.4
15.6-17.1	6	14.7-16.4
15.6-17.1	7	14.7-16.4
15.6-17.2	8	14.7-16.4
15.6-17.2	9	14.7-16.4
15.7-17.2	10	14.7-16.4
15.7-17.3	11	14.7-16.4
	18 years	
15.7-17.3	0	14.7-16.4
15.7-17.3	1	14.7-16.5
15.7-17.3	2	14.7-16.5
15.7-17.4	3	14.7-16.5
15.8-17.4	4	14.7-16.5
15.8-17.4	5	14.7-16.5
15.8-17.4	6	14.7-16.5
15.8-17.5	7	14.7-16.5
15.8-17.5	8	14.7-16.5
15.8-17.5	9	14.7-16.5
15.8-17.5	10	14.7-16.5
15.8-17.5	11	14.7-16.5

Body Mass Index (BMI) Table

Instructions: To use this table, find the appropriate height (rounding up or down to the nearest cm) in the side columns labeled Height (cm). Move across to the weight (kg) that is nearest to the child's weight. The number at the top and bottom of the column is the BMI for that height & weight. This is a field guide for the estimation of BMI, for use in assessing severity of acute undernutrition in children and adults. To interpret BMI, use [BMI FOR AGE](#) chart to determine if acutely, severely or moderately malnourished or normal. **BMI=WEIGHT(kg) / HEIGHT(m) x HEIGHT(m) or BMI=kg/m²**

Height (cm)	BMI=WEIGHT(kg) / HEIGHT(m) x HEIGHT(m) or BMI=kg/m ²																			Height (cm)		
	9	9.5	10	10.5	11	11.5	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5	18		18.5	19
51	2.3	2.5	2.6	2.7	2.9	3.0	3.1	3.3	3.4	3.5	3.6	3.8	3.9	4.0	4.2	4.3	4.4	4.6	4.7	4.8	4.9	51
52	2.4	2.6	2.7	2.8	3.0	3.1	3.2	3.4	3.5	3.7	3.8	3.9	4.1	4.2	4.3	4.5	4.6	4.7	4.9	5.0	5.1	52
53	2.5	2.7	2.8	2.9	3.1	3.2	3.4	3.5	3.7	3.8	3.9	4.1	4.2	4.4	4.5	4.6	4.8	4.9	5.1	5.2	5.3	53
54	2.6	2.8	2.9	3.1	3.2	3.4	3.5	3.6	3.8	3.9	4.1	4.2	4.4	4.5	4.7	4.8	5.0	5.1	5.2	5.4	5.5	54
55	2.7	2.9	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	55
56	2.8	3.0	3.1	3.3	3.4	3.6	3.8	3.9	4.1	4.2	4.4	4.5	4.7	4.9	5.0	5.2	5.3	5.5	5.6	5.8	6.0	56
57	2.9	3.1	3.2	3.4	3.6	3.7	3.9	4.1	4.2	4.4	4.5	4.7	4.9	5.0	5.2	5.4	5.5	5.7	5.8	6.0	6.2	57
58	3.0	3.2	3.4	3.5	3.7	3.9	4.0	4.2	4.4	4.5	4.7	4.9	5.0	5.2	5.4	5.6	5.7	5.9	6.1	6.2	6.4	58
59	3.1	3.3	3.5	3.7	3.8	4.0	4.2	4.4	4.5	4.7	4.9	5.0	5.2	5.4	5.6	5.7	5.9	6.1	6.3	6.4	6.6	59
60	3.2	3.4	3.6	3.8	4.0	4.1	4.3	4.5	4.7	4.9	5.0	5.2	5.4	5.6	5.8	5.9	6.1	6.3	6.5	6.7	6.8	60
61	3.3	3.5	3.7	3.9	4.1	4.3	4.5	4.7	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.1	6.3	6.5	6.7	6.9	7.1	61
62	3.5	3.7	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.3	6.5	6.7	6.9	7.1	7.3	62
63	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.5	6.7	6.9	7.1	7.3	7.5	63
64	3.7	3.9	4.1	4.3	4.5	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.6	6.8	7.0	7.2	7.4	7.6	7.8	64
65	3.8	4.0	4.2	4.4	4.6	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.5	6.8	7.0	7.2	7.4	7.6	7.8	8.0	65
66	3.9	4.1	4.4	4.6	4.8	5.0	5.2	5.4	5.7	5.9	6.1	6.3	6.5	6.8	7.0	7.2	7.4	7.6	7.8	8.1	8.3	66
67	4.0	4.3	4.5	4.7	4.9	5.2	5.4	5.6	5.8	6.1	6.3	6.5	6.7	7.0	7.2	7.4	7.6	7.9	8.1	8.3	8.5	67
68	4.2	4.4	4.6	4.9	5.1	5.3	5.5	5.8	6.0	6.2	6.5	6.7	6.9	7.2	7.4	7.6	7.9	8.1	8.3	8.6	8.8	68
69	4.3	4.5	4.8	5.0	5.2	5.5	5.7	6.0	6.2	6.4	6.7	6.9	7.1	7.4	7.6	7.9	8.1	8.3	8.6	8.8	9.0	69
70	4.4	4.7	4.9	5.1	5.4	5.6	5.9	6.1	6.4	6.6	6.9	7.1	7.4	7.6	7.8	8.1	8.3	8.6	8.8	9.1	9.3	70
71	4.5	4.8	5.0	5.3	5.5	5.8	6.0	6.3	6.6	6.8	7.1	7.3	7.6	7.8	8.1	8.3	8.6	8.8	9.1	9.3	9.6	71
72	4.7	4.9	5.2	5.4	5.7	6.0	6.2	6.5	6.7	7.0	7.3	7.5	7.8	8.0	8.3	8.6	8.8	9.1	9.3	9.6	9.8	72
73	4.8	5.1	5.3	5.6	5.9	6.1	6.4	6.7	6.9	7.2	7.5	7.7	8.0	8.3	8.5	8.8	9.1	9.3	9.6	9.9	10.1	73
74	4.9	5.2	5.5	5.7	6.0	6.3	6.6	6.8	7.1	7.4	7.7	7.9	8.2	8.5	8.8	9.0	9.3	9.6	9.9	10.1	10.4	74
75	5.1	5.3	5.6	5.9	6.2	6.5	6.8	7.0	7.3	7.6	7.9	8.2	8.4	8.7	9.0	9.3	9.6	9.8	10.1	10.4	10.7	75
76	5.2	5.5	5.8	6.1	6.4	6.6	6.9	7.2	7.5	7.8	8.1	8.4	8.7	9.0	9.2	9.5	9.8	10.1	10.4	10.7	11.0	76
77	5.3	5.6	5.9	6.2	6.5	6.8	7.1	7.4	7.7	8.0	8.3	8.6	8.9	9.2	9.5	9.8	10.1	10.4	10.7	11.0	11.3	77
78	5.5	5.8	6.1	6.4	6.7	7.0	7.3	7.6	7.9	8.2	8.5	8.8	9.1	9.4	9.7	10.0	10.3	10.6	11.0	11.3	11.6	78
79	5.6	5.9	6.2	6.6	6.9	7.2	7.5	7.8	8.1	8.4	8.7	9.0	9.4	9.7	10.0	10.3	10.6	10.9	11.2	11.5	11.9	79
80	5.8	6.1	6.4	6.7	7.0	7.4	7.7	8.0	8.3	8.6	9.0	9.3	9.6	9.9	10.2	10.6	10.9	11.2	11.5	11.8	12.2	80
81	5.9	6.2	6.6	6.9	7.2	7.5	7.9	8.2	8.5	8.9	9.2	9.5	9.8	10.2	10.5	10.8	11.2	11.5	11.8	12.1	12.5	81
82	6.1	6.4	6.7	7.1	7.4	7.7	8.1	8.4	8.7	9.1	9.4	9.7	10.1	10.4	10.8	11.1	11.4	11.8	12.1	12.4	12.8	82
83	6.2	6.5	6.9	7.2	7.6	7.9	8.3	8.6	9.0	9.3	9.6	10.0	10.3	10.7	11.0	11.4	11.7	12.1	12.4	12.7	13.1	83
84	6.4	6.7	7.1	7.4	7.8	8.1	8.5	8.8	9.2	9.5	9.9	10.2	10.6	10.9	11.3	11.6	12.0	12.3	12.7	13.1	13.4	84
85	6.5	6.9	7.2	7.6	7.9	8.3	8.7	9.0	9.4	9.8	10.1	10.5	10.8	11.2	11.6	11.9	12.3	12.6	13.0	13.4	13.7	85
86	6.7	7.0	7.4	7.8	8.1	8.5	8.9	9.2	9.6	10.0	10.4	10.7	11.1	11.5	11.8	12.2	12.6	12.9	13.3	13.7	14.1	86
87	6.8	7.2	7.6	7.9	8.3	8.7	9.1	9.5	9.8	10.2	10.6	11.0	11.4	11.7	12.1	12.5	12.9	13.2	13.6	14.0	14.4	87
88	7.0	7.4	7.7	8.1	8.5	8.9	9.3	9.7	10.1	10.5	10.8	11.2	11.6	12.0	12.4	12.8	13.2	13.6	13.9	14.3	14.7	88
89	7.1	7.5	7.9	8.3	8.7	9.1	9.5	9.9	10.3	10.7	11.1	11.5	11.9	12.3	12.7	13.1	13.5	13.9	14.3	14.7	15.0	89
90	7.3	7.7	8.1	8.5	8.9	9.3	9.7	10.1	10.5	10.9	11.3	11.7	12.2	12.6	13.0	13.4	13.8	14.2	14.6	15.0	15.4	90
91	7.5	7.9	8.3	8.7	9.1	9.5	9.9	10.4	10.8	11.2	11.6	12.0	12.4	12.8	13.2	13.7	14.1	14.5	14.9	15.3	15.7	91
92	7.6	8.0	8.5	8.9	9.3	9.7	10.2	10.6	11.0	11.4	11.8	12.3	12.7	13.1	13.5	14.0	14.4	14.8	15.2	15.7	16.1	92
93	7.8	8.2	8.6	9.1	9.5	9.9	10.4	10.8	11.2	11.7	12.1	12.5	13.0	13.4	13.8	14.3	14.7	15.1	15.6	16.0	16.4	93
94	8.0	8.4	8.8	9.3	9.7	10.2	10.6	11.0	11.5	11.9	12.4	12.8	13.3	13.7	14.1	14.6	15.0	15.5	15.9	16.3	16.8	94
95	8.1	8.6	9.0	9.5	9.9	10.4	10.8	11.3	11.7	12.2	12.6	13.1	13.5	14.0	14.4	14.9	15.3	15.8	16.2	16.7	17.1	95
96	8.3	8.8	9.2	9.7	10.1	10.6	11.1	11.5	12.0	12.4	12.9	13.4	13.8	14.3	14.7	15.2	15.7	16.1	16.6	17.0	17.5	96
97	8.5	8.9	9.4	9.9	10.3	10.8	11.3	11.8	12.2	12.7	13.2	13.6	14.1	14.6	15.1	15.5	16.0	16.5	16.9	17.4	17.9	97
98	8.6	9.1	9.6	10.1	10.6	11.0	11.5	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.4	15.8	16.3	16.8	17.3	17.8	18.2	98
99	8.8	9.3	9.8	10.3	10.8	11.3	11.8	12.3	12.7	13.2	13.7	14.2	14.7	15.2	15.7	16.2	16.7	17.2	17.6	18.1	18.6	99
100	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	100
101	9.2	9.7	10.2	10.7	11.2	11.7	12.2	12.8	13.3	13.8	14.3	14.8	15.3	15.8	16.3	16.8	17.3	17.9	18.4	18.9	19.4	101
102	9.4	9.9	10.4	10.9	11.4	12.0	12.5	13.0	13.5	14.0	14.6	15.1	15.6	16.1	16.6	17.2	17.7	18.2	18.7	19.2	19.8	102
103	9.5	10.1	10.6	11.1	11.7	12.2	12.7	13.3	13.8	14.3	14.9	15.4	15.9	16.4	17.0	17.5	18.0	18.6	19.1	19.6	20.2	103
104	9.7	10.3	10.8	11.4	11.9	12.4	13.0	13.5	14.1	14.6	15.1	15.7	16.2	16.8	17.3	17.8	18.4	18.9	19.5	20.0	20.6	104
105	9.9	10.5	11.0	11.6	12.1	12.7	13.2	13.8	14.3	14.9	15.4	16.0	16.5	17.1	17.6	18.2	18.7	19.3	19.8	20.4	20.9	105
106	10.1	10.7	11.2	11.8	12.4	12.9	13.5	14.0	14.6	15.2	15.7	16.3	16.9	17.4	18.0	18.5	19.1	19.7	20.2	20.8	21.3	106
107	10.3	10.9	11.4	12.0	12.6	13.2	13.7	14.3	14.9	15.5	16.0	16.6	17.2	17.7	18.3	18.9	19.5	20.0	20.6	21.2	21.8	107
108	10.5	11.1	11.7	12.2	12.8	13.4	14.0	14.6	15.2	15.7	16.3	16.9	17.5	18.1	18.7	19.2	19.8	20.4	21.0	21.6	22.2	108
109	10.7	11.3	11.9	12.5	13.1	13.7	14.3	14.9	15.4	16.0	16.6	17.2	17.8	18.4	19.0	19.6	20.2	20.8	21.4	22.0	22.6	109
110	10.9	11.5	12.1	12.7	13.3	13.9	14.5	15.1	15.7	16.3	16.9	17.5	18.2	18.8	19.4	20.0	20.6	21.2	21.8	22.4	23.0	110
111	11.1	11.7	12.3	12.9	13.6	14.2	14.8	15.4	16.0	16.6</												

Body Mass Index (BMI) Table

Instructions: To use this table, find the appropriate height (rounding up or down to the nearest cm) in the side columns labeled Height (cm). Move across to the weight (kg) that is nearest to the child's weight. The number at the top and bottom of the column is the BMI for that height & weight. This is a field guide for the estimation of BMI, for use in assessing severity of acute undernutrition in children and adults. To interpret BMI, use BMI FOR AGE chart to determine if acutely, severely or moderately malnourished or normal. **BMI=WEIGHT(kg) / HEIGHT(m) x HEIGHT(m) or BMI=kg/m²**

Height (cm)	12	12.5	13	13.5	14	14.5	15	15.5	16	16.5	17	17.5	18	18.5	19	19.5	20	20.5	21	21.5	22	Height (cm)
126	19.1	19.8	20.6	21.4	22.2	23.0	23.8	24.6	25.4	26.2	27.0	27.8	28.6	29.4	30.2	31.0	31.8	32.5	33.3	34.1	34.9	126
127	19.4	20.2	21.0	21.8	22.6	23.4	24.2	25.0	25.8	26.6	27.4	28.2	29.0	29.8	30.6	31.5	32.3	33.1	33.9	34.7	35.5	127
128	19.7	20.5	21.3	22.1	22.9	23.8	24.6	25.4	26.2	27.0	27.9	28.7	29.5	30.3	31.1	31.9	32.8	33.6	34.4	35.2	36.0	128
129	20.0	20.8	21.6	22.5	23.3	24.1	25.0	25.8	26.6	27.5	28.3	29.1	30.0	30.8	31.6	32.4	33.3	34.1	34.9	35.8	36.6	129
130	20.3	21.1	22.0	22.8	23.7	24.5	25.4	26.2	27.0	27.9	28.7	29.6	30.4	31.3	32.1	33.0	33.8	34.6	35.5	36.3	37.2	130
131	20.6	21.5	22.3	23.2	24.0	24.9	25.7	26.6	27.5	28.3	29.2	30.0	31.7	31.7	32.6	33.5	34.3	35.2	36.0	36.9	37.8	131
132	20.9	21.8	22.7	23.5	24.4	25.3	26.1	27.0	27.9	28.7	29.6	30.5	31.4	32.2	33.1	34.0	34.8	35.7	36.6	37.5	38.3	132
133	21.2	22.1	23.0	23.9	24.8	25.6	26.5	27.4	28.3	29.2	30.1	31.0	31.8	32.7	33.6	34.5	35.4	36.3	37.1	38.0	38.9	133
134	21.5	22.4	23.3	24.2	25.1	26.0	26.9	27.8	28.7	29.6	30.5	31.4	32.3	33.2	34.1	35.0	35.9	36.8	37.7	38.6	39.5	134
135	21.9	22.8	23.7	24.6	25.5	26.4	27.3	28.2	29.2	30.1	31.0	31.9	32.8	33.7	34.6	35.5	36.5	37.4	38.3	39.2	40.1	135
136	22.2	23.1	24.0	25.0	25.9	26.8	27.7	28.7	29.6	30.5	31.4	32.4	33.3	34.2	35.1	36.1	37.0	37.9	38.8	39.8	40.7	136
137	22.5	23.5	24.4	25.3	26.3	27.2	28.2	29.1	30.0	31.0	31.9	32.8	33.8	34.7	35.7	36.6	37.5	38.5	39.4	40.4	41.3	137
138	22.9	23.8	24.8	23.7	26.7	27.6	28.6	29.5	30.5	31.4	32.4	33.3	34.3	35.2	36.2	37.1	38.1	39.0	40.0	40.9	41.9	138
139	23.2	24.2	25.1	26.1	27.0	28.0	29.0	29.9	30.9	31.9	32.8	33.8	34.8	35.7	36.7	37.7	38.6	39.6	40.6	41.5	42.5	139
140	23.5	24.5	25.5	26.5	27.4	28.4	29.4	30.4	31.3	32.3	33.3	34.3	35.3	36.3	37.2	38.2	39.2	40.2	41.2	42.1	43.1	140
141	23.9	24.9	25.8	26.8	27.8	28.8	29.8	30.8	31.8	32.8	33.8	34.8	35.8	36.8	37.8	38.8	39.8	40.8	41.8	42.7	43.7	141
142	24.2	25.2	26.2	27.2	28.2	29.2	30.2	31.3	32.3	33.3	34.3	35.3	36.3	37.3	38.3	39.3	40.3	41.3	42.3	43.4	44.4	142
143	24.5	25.6	26.6	27.6	28.6	29.7	30.7	31.7	32.7	33.7	34.8	35.8	36.8	37.8	38.9	39.9	40.9	41.9	42.9	44.0	45.0	143
144	24.9	25.9	27.0	28.0	29.0	30.1	31.1	32.1	33.2	34.2	35.3	36.3	37.3	38.4	39.4	40.4	41.5	42.5	43.5	44.6	45.6	144
145	25.2	26.3	27.3	28.4	29.4	30.5	31.5	32.6	33.6	34.7	35.7	36.8	37.8	38.9	39.9	41.0	42.1	43.1	44.2	45.2	46.3	145
146	25.6	26.6	27.7	28.8	29.8	30.9	32.0	33.0	34.1	35.2	36.2	37.3	38.4	39.4	40.5	41.6	42.6	43.7	44.8	45.8	46.9	146
147	25.9	27.0	28.1	29.2	30.3	31.3	32.4	33.5	34.6	35.7	36.7	37.8	38.9	40.0	41.1	42.1	43.2	44.3	45.4	46.5	47.5	147
148	26.3	27.4	28.5	29.6	30.7	31.8	32.9	34.0	35.0	36.1	37.2	38.3	39.4	40.5	41.6	42.7	43.8	44.9	46.0	47.1	48.2	148
149	26.6	27.8	28.9	30.0	31.1	32.2	33.3	34.4	35.5	36.6	37.7	38.9	40.0	41.1	42.2	43.3	44.4	45.5	46.6	47.7	48.8	149
150	27.0	28.1	29.3	30.4	31.5	32.6	33.8	34.9	36.0	37.1	38.3	39.4	40.5	41.6	42.8	43.9	45.0	46.1	47.3	48.4	49.5	150
151	27.4	28.5	29.6	30.8	31.9	33.1	34.2	35.3	36.5	37.6	38.8	39.9	41.0	42.2	43.3	44.5	45.6	46.7	47.9	49.0	50.2	151
152	27.7	28.9	30.0	31.2	32.3	33.5	34.7	35.8	37.0	38.1	39.3	40.4	41.6	42.7	43.9	45.1	46.2	47.4	48.5	49.7	50.8	152
153	28.1	29.3	30.4	31.6	32.8	33.9	35.1	36.3	37.4	38.6	39.8	41.0	42.1	43.3	44.5	45.6	47.8	48.0	49.2	50.3	51.5	153
154	28.5	29.6	30.8	32.0	33.2	34.4	35.6	36.8	37.9	39.1	40.3	41.5	42.7	43.9	45.1	46.2	47.4	48.6	49.8	51.0	52.2	154
155	28.8	30.0	31.2	32.4	33.6	34.8	36.0	37.2	38.4	39.6	40.8	42.0	43.2	44.4	45.6	46.8	48.1	49.3	50.5	51.7	52.9	155
156	29.2	30.4	31.6	32.9	34.1	35.3	36.5	37.7	38.9	40.2	41.4	42.6	43.8	45.0	46.2	47.5	48.7	49.9	51.1	52.3	53.5	156
157	29.6	30.8	32.0	33.3	34.5	35.7	37.0	38.2	39.4	40.7	41.9	43.1	44.4	45.6	46.8	48.1	49.3	50.5	51.8	53.0	54.2	157
158	30.0	31.2	32.5	33.7	34.9	36.2	37.4	38.7	39.9	41.2	42.4	43.7	44.9	46.2	47.4	48.7	49.9	51.2	52.4	53.7	54.9	158
159	30.3	31.6	32.9	34.1	35.4	36.7	37.9	39.2	40.4	41.7	43.0	44.2	45.5	46.8	48.0	49.3	50.6	51.8	53.1	54.4	55.6	159
160	30.7	32.0	33.3	34.6	35.8	37.1	38.4	39.7	41.0	42.2	43.5	44.8	46.1	47.3	48.6	49.9	51.2	52.5	53.8	55.0	56.3	160
161	31.1	32.4	33.7	35.0	36.3	37.6	38.9	40.2	41.5	42.8	44.1	45.4	46.7	48.0	49.2	50.5	51.8	53.1	54.4	55.7	57.0	161
162	31.5	32.8	34.1	35.4	36.7	38.1	39.4	40.7	42.0	43.3	44.6	45.9	47.2	48.6	49.9	51.2	52.5	53.8	55.1	56.4	57.7	162
163	31.9	33.2	34.5	35.9	37.2	38.5	39.9	41.2	42.5	43.8	45.2	46.5	47.8	49.2	50.5	51.8	53.1	54.5	55.8	57.1	58.5	163
164	32.3	33.6	35.0	36.3	37.7	39.0	40.3	41.7	43.0	44.4	45.7	47.1	48.4	49.8	51.1	52.4	53.8	55.1	56.5	57.8	59.2	164
165	32.7	34.0	35.4	36.8	38.1	39.5	40.8	42.2	43.6	44.9	46.3	47.6	49.0	50.4	51.7	53.1	54.5	55.8	57.2	58.5	59.9	165
166	33.1	34.4	35.8	37.2	38.6	40.0	41.3	42.7	44.1	45.5	46.8	48.2	49.6	51.0	52.4	53.7	55.1	56.5	57.9	59.2	60.6	166
167	33.5	34.9	36.3	37.7	39.0	40.4	41.8	43.2	44.6	46.0	47.4	48.8	50.2	51.6	53.0	54.4	55.8	57.2	58.6	60.0	61.4	167
168	33.9	35.3	36.7	38.1	39.5	40.9	42.3	43.7	45.2	46.6	48.0	49.4	50.8	52.2	53.6	55.0	56.4	57.9	59.3	60.7	62.1	168
169	34.3	35.7	37.1	38.6	40.0	41.4	42.8	44.3	45.7	47.1	48.6	50.0	51.4	52.8	54.3	55.7	57.1	58.6	60.0	61.4	62.8	169
170	34.7	36.1	37.6	39.0	40.5	41.9	43.4	44.8	46.2	47.7	49.1	50.6	52.0	53.5	54.9	56.4	57.8	59.2	60.7	62.1	63.6	170
171	35.1	36.6	38.0	39.5	40.9	42.4	43.9	45.3	46.8	48.2	49.7	51.2	52.6	54.1	55.6	57.0	58.5	59.9	61.4	62.9	64.3	171
172	35.5	37.0	38.5	39.9	41.4	42.9	44.4	45.9	47.3	48.8	50.3	51.8	53.3	54.7	56.2	57.7	59.2	60.6	62.1	63.6	65.1	172
173	35.9	37.4	38.9	40.4	41.9	43.4	44.9	46.4	47.9	49.4	50.9	52.4	53.9	55.4	56.9	58.4	59.9	61.4	62.9	64.3	65.8	173
174	36.3	37.8	39.4	40.9	42.4	43.9	45.4	46.9	48.4	50.0	51.5	53.0	54.5	56.0	57.5	59.0	60.6	62.1	63.6	65.1	66.6	174
175	36.8	38.3	39.8	41.3	42.9	44.4	45.9	47.5	49.0	50.5	52.1	53.6	55.1	56.7	58.2	59.7	61.3	62.8	64.3	65.8	67.4	175
176	37.2	38.7	40.3	41.8	43.4	44.9	46.5	48.0	49.6	51.1	52.7	54.2	55.8	57.3	58.9	60.4	62.0	63.5	65.0	66.6	68.1	176
177	37.6	39.2	40.7	42.3	43.9	45.4	47.0	48.6	50.1	51.7	53.3	54.8	56.4	58.0	59.5	61.1	62.7	64.2	65.8	67.4	68.9	177
178	38.0	39.6	41.2	42.8	44.4	45.9	47.5	49.1	50.7	52.3	53.9	55.4	57.0	58.6	60.2	61.8	63.4	65.0	66.5	68.1	69.7	178
179	38.4	40.1	41.7	43.3	44.9	46.5	48.1	49.7	51.3	52.9	54.5	56.1	57.7	59.3	60.9	62.5	64.1	65.7	67.3	68.9	70.5	179
180	38.9	40.5	42.1	43.7	45.4	47.0	48.6	50.2	51.8	53.5	55.1	56.7	58.3	59.9	61.6	63.2	64.8	66.4	68.0	69.7	71.3	180
181	39.3	41.0	42.6	44.2	45.9	47.5	49.1	50.8	52.4	54.1	55.7	57.3	59.0	60.6	62.2	63.9	65.5	67.2	68.8	70.4	72.1	181
182	39.7	41.4	43.1	44.7	46.4	48.0	49.7	51.3	53.0	54.7	56.3	58.0	59.6	61.3	62.9</							