



## A METHOD TO GENERATE GROWTH-AND-OBESITY PROFILES OF CHILDREN OF STILL-GROWING PARENTS: EXTREME CASES



### SELECTED PROFILES

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Additional File 2

**Table 1. Complete listing of extreme cases**

Case No.	$P(\mu)$	$P(h)$	$P(h_{MP})$	Page No.
01	< 3	< 3	< 3	02
02	< 3	< 3	$3 \leq P(h_{MP}) \leq 97$	03
03	< 3	< 3	> 97	
04	< 3	$3 \leq P(h) \leq 97$	< 3	
05	< 3	$3 \leq P(h) \leq 97$	$3 \leq P(h_{MP}) \leq 97$	04
06	< 3	$3 \leq P(h) \leq 97$	> 97	
07	< 3	> 97	< 3	
08	< 3	> 97	$3 \leq P(h_{MP}) \leq 97$	
09	< 3	> 97	> 97	
10	$3 \leq P(\mu) \leq 97$	< 3	< 3	
11	$3 \leq P(\mu) \leq 97$	< 3	$3 \leq P(h_{MP}) \leq 97$	
12	$3 \leq P(\mu) \leq 97$	< 3	> 97	
13	$3 \leq P(\mu) \leq 97$	$3 \leq P(h) \leq 97$	< 3	05
14	$3 \leq P(\mu) \leq 97$	$3 \leq P(h) \leq 97$	$3 \leq P(h_{MP}) \leq 97$	06
15	$3 \leq P(\mu) \leq 97$	$3 \leq P(h) \leq 97$	> 97	
16	$3 \leq P(\mu) \leq 97$	> 97	< 3	
17	$3 \leq P(\mu) \leq 97$	> 97	$3 \leq P(h_{MP}) \leq 97$	
18	$3 \leq P(\mu) \leq 97$	> 97	> 97	
19	> 97	< 3	< 3	
20	> 97	< 3	$3 \leq P(h_{MP}) \leq 97$	
21	> 97	< 3	> 97	
22	> 97	$3 \leq P(h) \leq 97$	< 3	
23	> 97	$3 \leq P(h) \leq 97$	$3 \leq P(h_{MP}) \leq 97$	
24	> 97	$3 \leq P(h) \leq 97$	> 97	
25	> 97	> 97	< 3	
26	> 97	> 97	$3 \leq P(h_{MP}) \leq 97$	
27	> 97	> 97	> 97	

COLOR CODES FOR STATUSES		<1%	Hue 085, Sat 255, Lum 064	Red 000, Green 128, Blue 000
		1-10%	Hue 042, Sat 255, Lum 128	Red 255, Green 255, Blue 000
		>10%	Hue 000, Sat 255, Lum 092	Red 184, Green 000, Blue 000
		ND	Hue 170, Sat 255, Lum 064	Red 000, Green 000, Blue 128

Profiles of selected cases are shown on page numbers given in the last column  
All dates are entered in the format: YYYY-MM-DD (year-month-day)  
MP: mid-parental • NC: non-computable • ND: non-determinable

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**Case Number 1:  $P(\mu) < 3 \cdot P(h) < 3 \cdot P(h_{MP}) < 3$**

**SGPP-KHI-20100421-01/02**

**Table 2. Adult-mid-parental (Target) heights**

Father's Height: 162.20 cm • Mother's Height: 149.30 cm

$BOY/GIRL=(FATHER+MOTHER \pm 13)/2$	Boy	Girl
Adult-MP (Target) Height (cm)	162.15	149.15
Adult-MP Height (ft-in)	5 ft 3.84 in	4 ft 10.72 in
Percentile-of-MP Height	< 3	< 3

**Table 3. Growth-and-Obesity Profile of M. Z.**

Gender: Male • Date of Birth: 1997-01-07

Check up	1 <sup>st</sup>
Date of Checkup	2011-05-22
Age (years)	14.37
Dress Code	1.5/2
Undressing	0/0.5
Height (cm)	145.50
Height (ft-in)	4 ft 9.28 in
Percentile-of-Height	< 3
Estimated-Adult Height (cm)	< 163.00
Estimated-Adult Height (ft-in)	< 5 ft 4.17 in
Mid-Parental-Height Percentile	< 3
Current-Age-MP Height (cm)	< 151.22
$\Delta$ Height-for-Age (cm)	NC
$\Delta$ Height-for-Age (in)	NC
STATUS(h)	<b>ND</b>
Gross Mass (kg)	31.50
Clothing Correction (kg)	0
Net Mass (kg)	31.50
Net Weight (lb-oz)	69 lb 7.32 oz
Percentile-of-Net-Mass	< 3
Estimated-Adult Mass (kg)	< 54.50
Estimated-Adult Weight (lb-oz)	< 120 lb 2.76 oz
BMI: Body-Mass Index ( $kg/m^2$ )	14.88
Estimated-Adult BMI ( $kg/m^2$ )	ND
Optimal Mass (kg)	< 37.74
Optimal Weight (lb-oz)	< 83 lb 3.46 oz
$\Delta$ Mass-for-Height (kg)	NC
$\Delta$ Weight-for-Height (lb-oz)	NC
STATUS( $\mu$ )	<b>ND</b>

**Case Number 2:  $P(\mu) < 3 \cdot P(h) < 3 \cdot 3 \leq P(h_{MP}) \leq 97$**

**SGPP-KHI-20100421-03/02**

**Table 4. Adult-mid-parental (Target) heights**

Father's Height: 166.80 cm • Mother's Height: 171.00 cm

$BOY/GIRL=(FATHER+MOTHER \pm 13)/2$	Boy	Girl
Adult-MP (Target) Height (cm)	175.40	162.40
Adult-MP Height (ft-in)	5 ft 9.06 in	5 ft 3.94 in
Percentile-of-MP Height	43.89	43.89

**Table 5. Growth-and-Obesity Profile of A. E.**

Gender: Male • Date of Birth: 2005-02-19

Check up	1 <sup>st</sup>
Date of Checkup	2011-05-22
Age (years)	6.25
Dress Code	1.5/1.5
Undressing	0/0.5
Height (cm)	106.20
Height (ft-in)	3 ft 5.81 in
Percentile-of-Height	< 3
Estimated-Adult Height (cm)	< 163.00
Estimated-Adult Height (ft-in)	< 5 ft 4.17 in
Mid-Parental-Height Percentile	43.89
Current-Age-MP Height (cm)	116.53
$\Delta$ Height-for-Age (cm)	-10.33
$\Delta$ Height-for-Age (in)	-4.07
STATUS(h)	<b>8.87% STUNTED</b>
Gross Mass (kg)	16.30
Clothing Correction (kg)	0
Net Mass (kg)	16.30
Net Weight (lb-oz)	35 lb 15.06 oz
Percentile-of-Net-Mass	< 3
Estimated-Adult Mass (kg)	< 54.5
Estimated-Adult Weight (lb-oz)	< 120 lb 2.76 oz
BMI: Body-Mass Index ( $kg/m^2$ )	14.45
Estimated-Adult BMI ( $kg/m^2$ )	ND
Optimal Mass (kg)	< 16.75
Optimal Weight (lb-oz)	< 36 lb 15.01 oz
$\Delta$ Mass-for-Height (kg)	NC
$\Delta$ Weight-for-Height (lb-oz)	NC
STATUS( $\mu$ )	<b>ND</b>

**Case Number 5:  $P(\mu) < 3 \cdot 3 \leq P(h) \leq 97 \cdot 3 \leq P(h_{MP}) \leq 97$**

**SGPP-KHI-20080104-02/01**

**Table 6. Adult-mid-parental (Target) heights**

Father's Height: 169.30 cm • Mother's Height: 154.90 cm

$BOY/GIRL=(FATHER+MOTHER \pm 13)/2$	Boy	Girl
Adult-MP (Target) Height (cm)	168.60	155.60
Adult-MP Height (ft-in)	5 ft 6.38 in	4 ft 1.26 in
Percentile-of-MP Height	13.67	13.00

**Table 7. Growth-and-Obesity Profile of E. M.**

Gender: Female • Date of Birth: 1999-12-05

Check up	1 <sup>st</sup>
Date of Checkup	2009-02-05
Age (years)	9.17
Dress Code	1.5/2
Undressing	0/0.5
Height (cm)	128.15
Height (ft-in)	4 ft 2.43 in
Percentile-of-Height	18.45
Estimated-Adult Height (cm)	157.14
Estimated-Adult Height (ft-in)	5 ft 1.87 in
Mid-Parental-Height Percentile	<3
Current-Age-MP Height (cm)	126.88
$\Delta$ Height-for-Age (cm)	+1.27
$\Delta$ Height-for-Age (in)	+0.50
STATUS(h)	<b>1.00% TALL</b>
Gross Mass (kg)	18.90
Clothing Correction (kg)	0
Net Mass (kg)	18.90
Net Weight (lb-oz)	41 lb 10.79 oz
Percentile-of-Net-Mass	<3
Estimated-Adult Mass (kg)	<45.25
Estimated-Adult Weight (lb-oz)	<99 lb 12.42 oz
BMI: Body-Mass Index ( $kg/m^2$ )	11.51
Estimated-Adult BMI ( $kg/m^2$ )	<18.33
Optimal Mass (kg)	25.11
Optimal Weight (lb-oz)	55 lb 5.88 oz
$\Delta$ Mass-for-Height (kg)	-6.21
$\Delta$ Weight-for-Height (lb-oz)	-13 lb 11.06 oz
STATUS( $\mu$ )	<b>24.73% WASTED</b>

Case Number 13:  $3 \leq P(\mu) \leq 97 \bullet 3 \leq P(h) \leq 97 \bullet P(h_{MP}) < 3$

SGPP-KHI-20100421-01/03

**Table 8. Adult-mid-parental (Target) heights**

Father's Height: 162.20 cm • Mother's Height: 149.30 cm

$BOY/GIRL=(FATHER+MOTHER \pm 13)/2$	Boy	Girl
Adult-MP (Target) Height (cm)	162.15	149.15
Adult-MP Height (ft-in)	5 ft 3.84 in	4 ft 10.72 in
Percentile-of-MP Height	< 3	< 3

**Table 9. Growth-and-Obesity Profile of Z. Z.**

Gender: Male • Date of Birth: 2006-11-25

Check up	1 <sup>st</sup>
Date of Checkup	2011-05-22
Age (years)	4.49
Dress Code	1.5/1.5
Undressing	0/0.5
Height (cm)	101.40
Height (ft-in)	3 ft 3.92 in
Percentile-of-Height	17.43
Estimated-Adult Height (cm)	169.73
Estimated-Adult Height (ft-in)	5 ft 6.82 in
Mid-Parental-Height Percentile	< 3
Current-Age-MP Height (cm)	< 96.43
$\Delta$ Height-for-Age (cm)	> +4.97
$\Delta$ Height-for-Age (in)	> +1.96
STATUS(h)	<b>&gt; 5.16% TALL</b>
Gross Mass (kg)	14.70
Clothing Correction (kg)	0
Net Mass (kg)	14.70
Net Weight (lb-oz)	32 lb 6.62 oz
Percentile-of-Net-Mass	12.12
Estimated-Adult Mass (kg)	58.96
Estimated-Adult Weight (lb-oz)	130 lb 0.03 oz
BMI: Body-Mass Index (kg/m <sup>2</sup> )	14.30
Estimated-Adult BMI (kg/m <sup>2</sup> )	20.47
Optimal Mass (kg)	15.24
Optimal Weight (lb-oz)	33 lb 9.56 oz
$\Delta$ Mass-for-Height (kg)	-1.24
$\Delta$ Weight-for-Height (lb-oz)	-2 lb 11.64 oz
STATUS( $\mu$ )	<b>8.12% WASTED</b>

**Case Number 14:  $3 \leq P(\mu) \leq 97 \bullet 3 \leq P(h) \leq 97 \bullet 3 \leq P(h_{MP}) \leq 97$**

**SGPP-KHI-20100421-03/03**

**Table 10. Adult-mid-parental (Target) heights**

Father's Height: 166.80 cm • Mother's Height: 171.00 cm

$BOY/GIRL=(FATHER+MOTHER \pm 13)/2$	Boy	Girl
Adult-MP (Target) Height (cm)	175.40	162.40
Adult-MP Height (ft-in)	5 ft 9.06 in	4 ft 3.94 in
Percentile-of-MP Height	43.89	43.89

**Table 11. Growth-and-Obesity Profile of Z. E.**

Gender: Male • Date of Birth: 2007-11-21

Check up	1 <sup>st</sup>
Date of Checkup	2011-05-22
Age (years)	3.50
Dress Code	1.5/1.5
Undressing	0/0.5
Height (cm)	95.40
Height (ft-in)	3 ft 1.56 in
Percentile-of-Height	24.31
Estimated-Adult Height (cm)	171.79
Estimated-Adult Height (ft-in)	5 ft 7.64 in
Mid-Parental-Height Percentile	43.89
Current-Age-MP Height (cm)	97.76
$\Delta$ Height-for-Age (cm)	-2.36
$\Delta$ Height-for-Age (in)	-0.93
STATUS(h)	<b>2.41% STUNTED</b>
Gross Mass (kg)	14.00
Clothing Correction (kg)	0
Net Mass (kg)	14.00
Net Weight (lb-oz)	30 lb 13.92 oz
Percentile-of-Net-Mass	20.02
Estimated-Adult Mass (kg)	61.59
Estimated-Adult Weight (lb-oz)	135 lb 12.93 oz
BMI: Body-Mass Index (kg/m <sup>2</sup> )	15.38
Estimated-Adult BMI (kg/m <sup>2</sup> )	<b>20.87</b>
Optimal Mass (kg)	14.43
Optimal Weight (lb-oz)	31 lb 13.04 oz
$\Delta$ Mass-for-Height (kg)	-0.42
$\Delta$ Weight-for-Height (lb-oz)	-15.12 oz
STATUS( $\mu$ )	<b>2.97% WASTED</b>

Web address of the main document: **A METHOD TO GENERATE GROWTH-AND-OBESITY PROFILES OF CHILDREN OF STILL-GROWING PARENTS**

<http://www.ngds-ku.org/Papers/J30.pdf>

Web address of this document: **Additional File 2: EXTREME CASES**

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