

APPENDIX: FIGURES AND TABLES

Tables 4 - 47

(For table 1 - 3 and
48 - 52 see text)

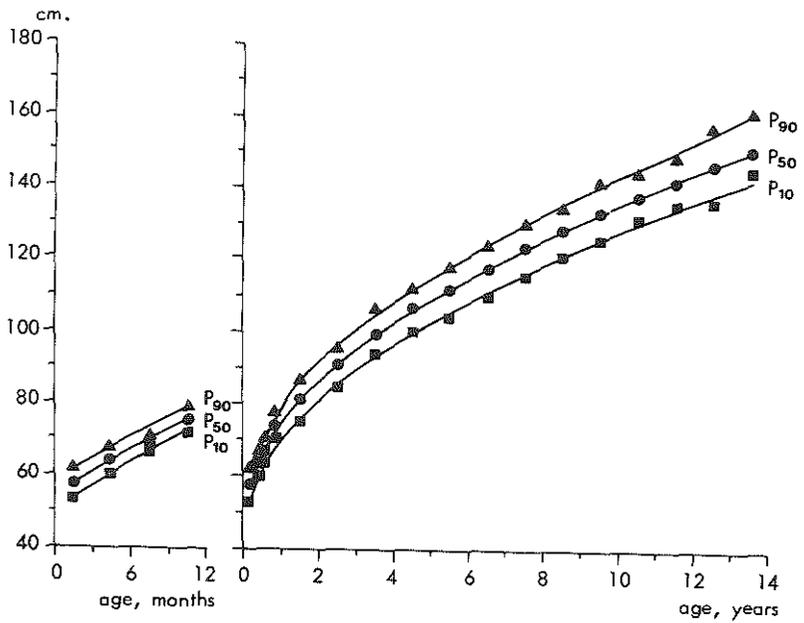


Fig. 1 Standards for height, boys <14 years of age. Aruba, 1974

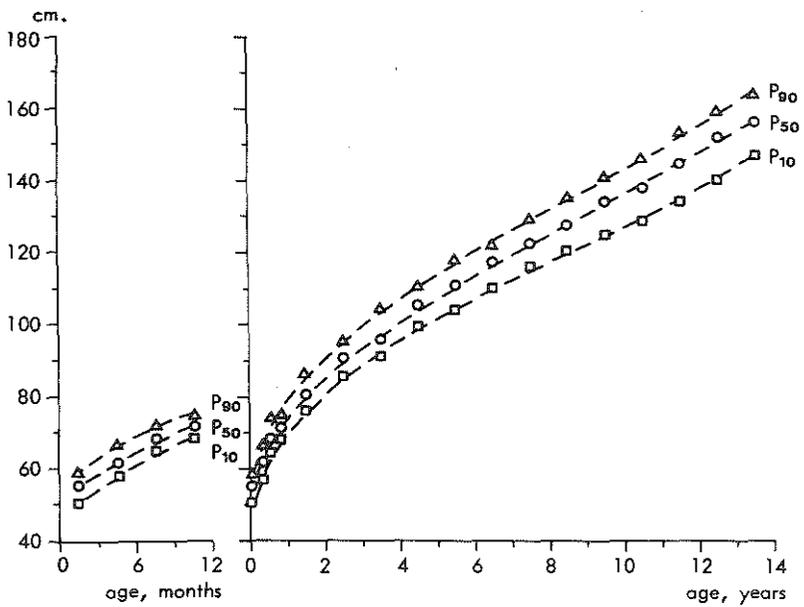


Fig. 2 Standards for height, girls <14 years of age. Aruba, 1974

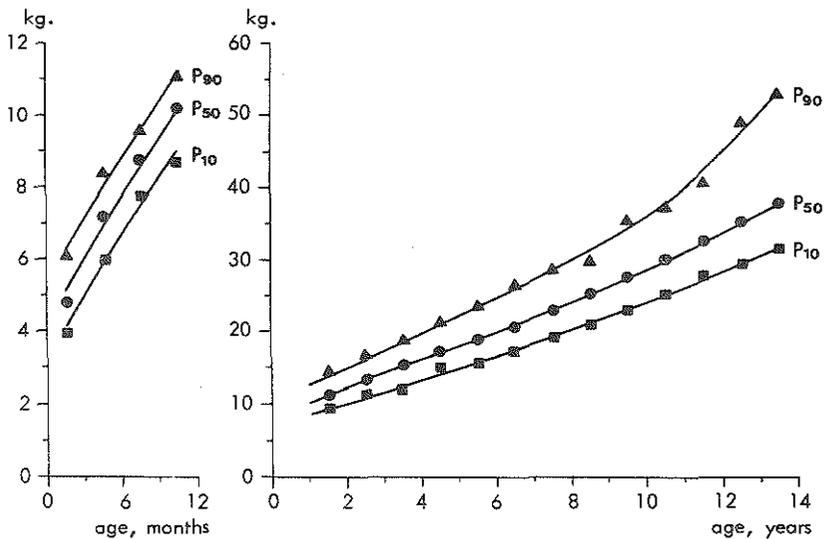


Fig. 3 Standards for weight, boys <14 years of age. Aruba, 1974

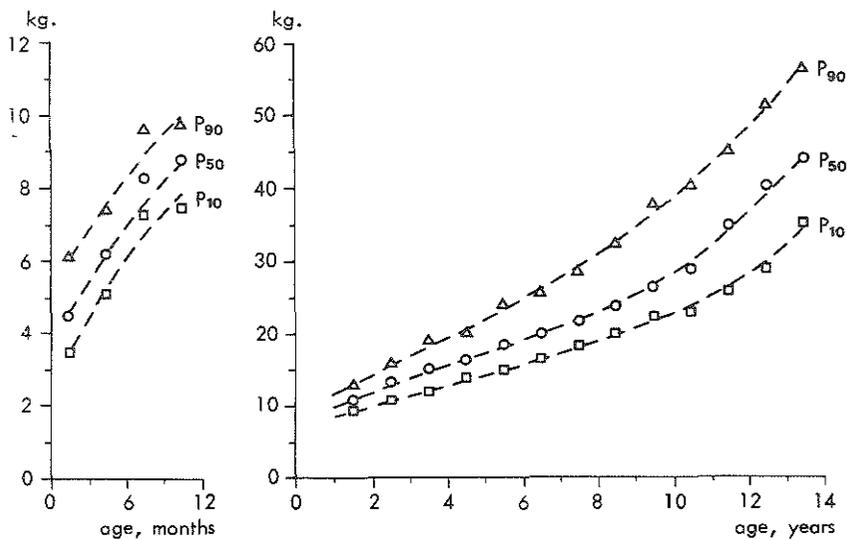


Fig. 4 Standards for weight, girls <14 years of age. Aruba, 1974

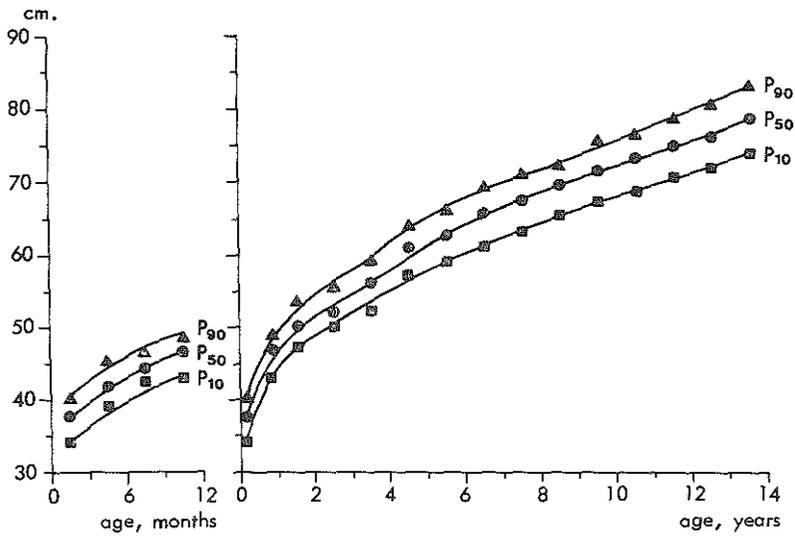


Fig. 5 Standards for sitting height, boys <14 years of age. Aruba, 1974

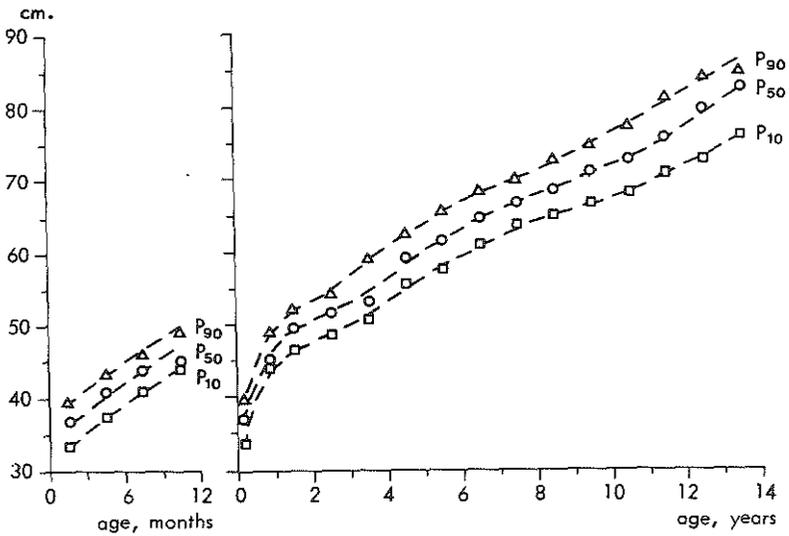


Fig. 6 Standards for sitting height, girls <14 years of age. Aruba, 1974

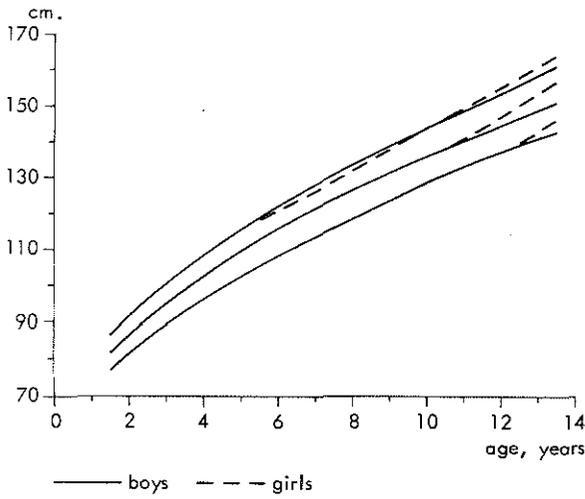


Fig. 7 Comparison of the heights, boys and girls

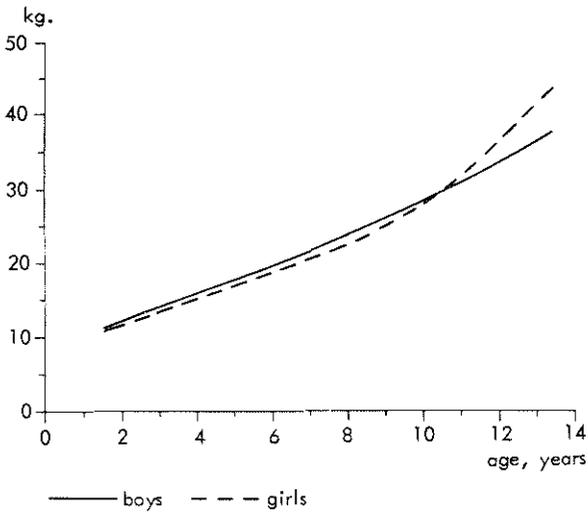


Fig. 8 Comparison of the median weights, boys and girls



Fig. 9 Comparison of the median sitting heights, boys and girls

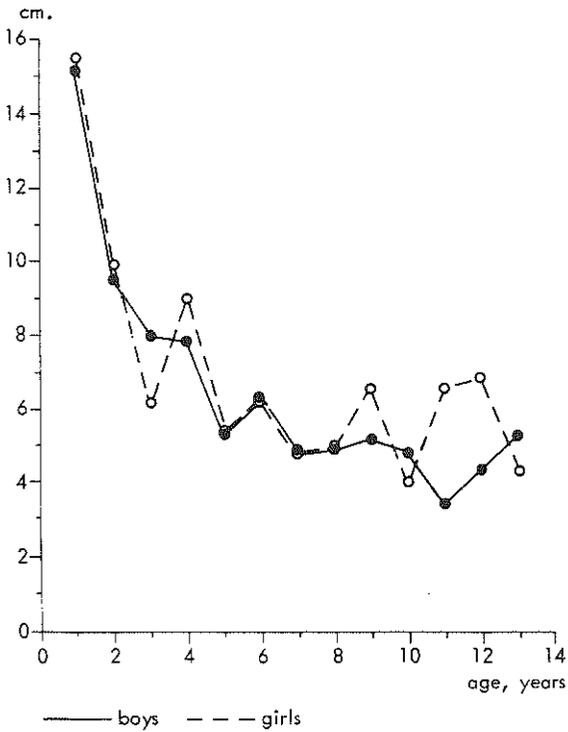


Fig. 10 Yearly increments in height in P₅₀, boys and girls

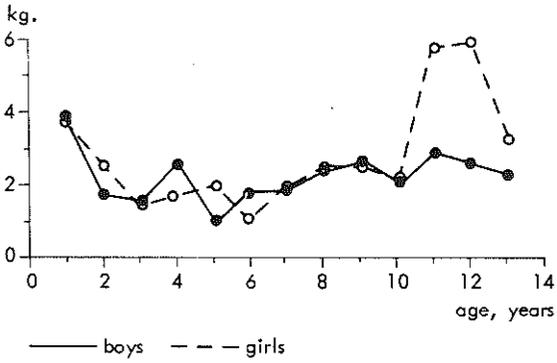


Fig. 11 Yearly increments in weight in P₅₀, boys and girls

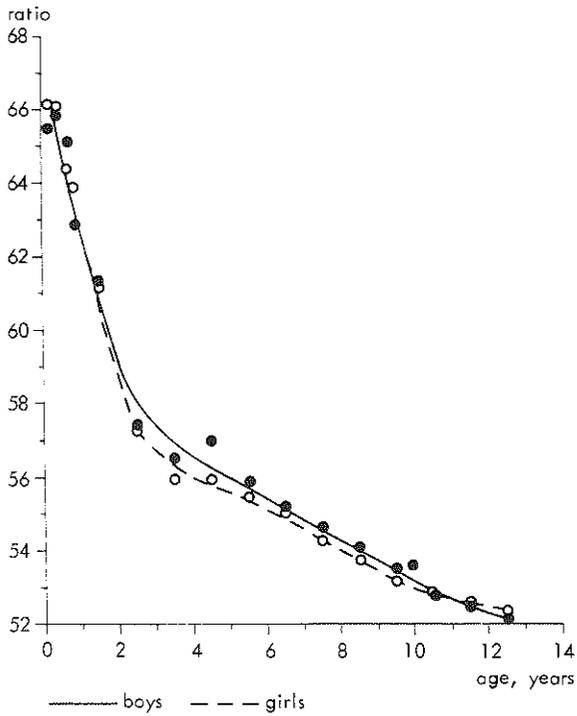


Fig. 12 Ratio of the mean sitting height to stature, boys and girls
 (relative sitting height = $\frac{\text{sitting height}}{\text{height}} \times 100$)

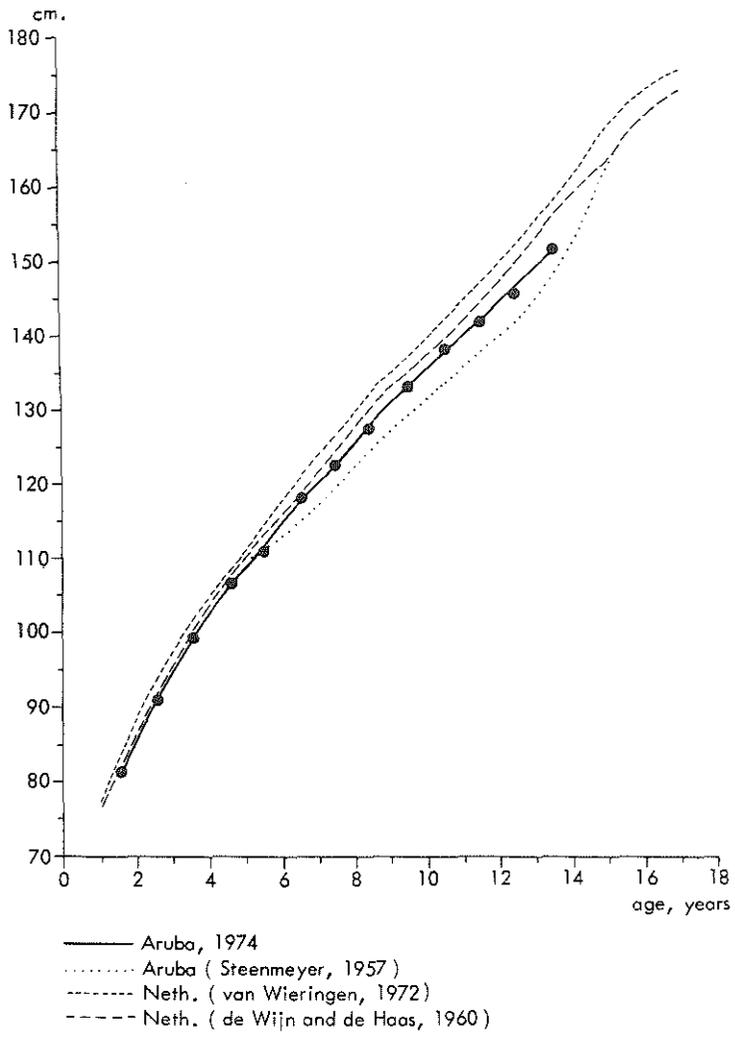


Fig. 13 Mean heights of boys in Aruba in 1974 compared with Aruban boys in 1954 and boys in the Netherlands in 1965 and 1955

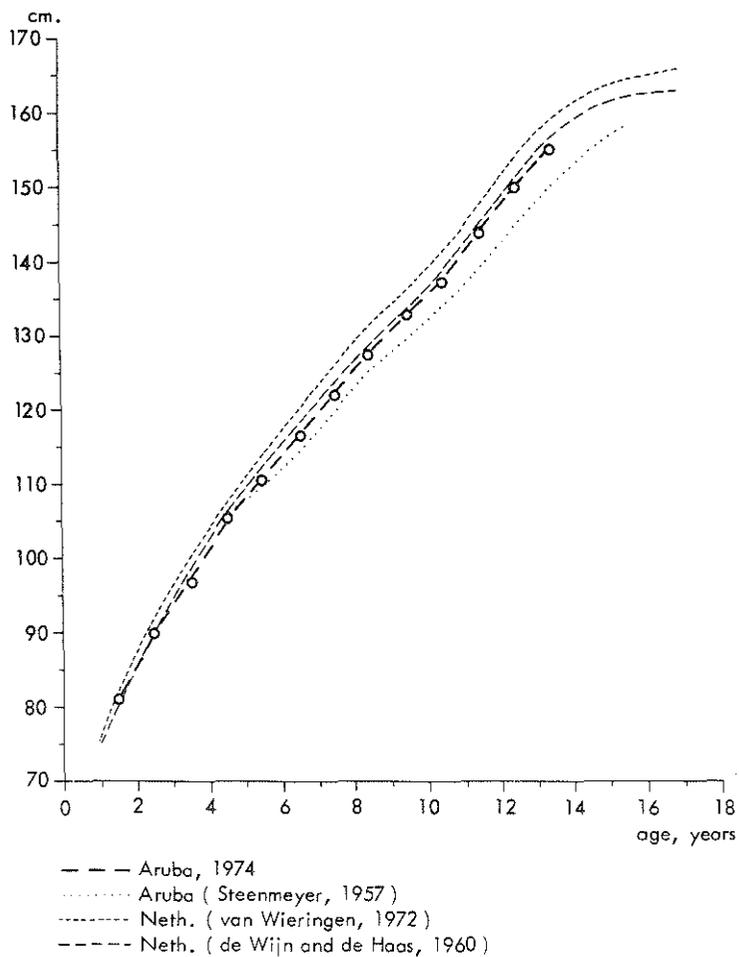


Fig. 14 Mean heights of girls in Aruba in 1974 compared with Aruban girls in 1954 and girls in the Netherlands in 1965 and 1955

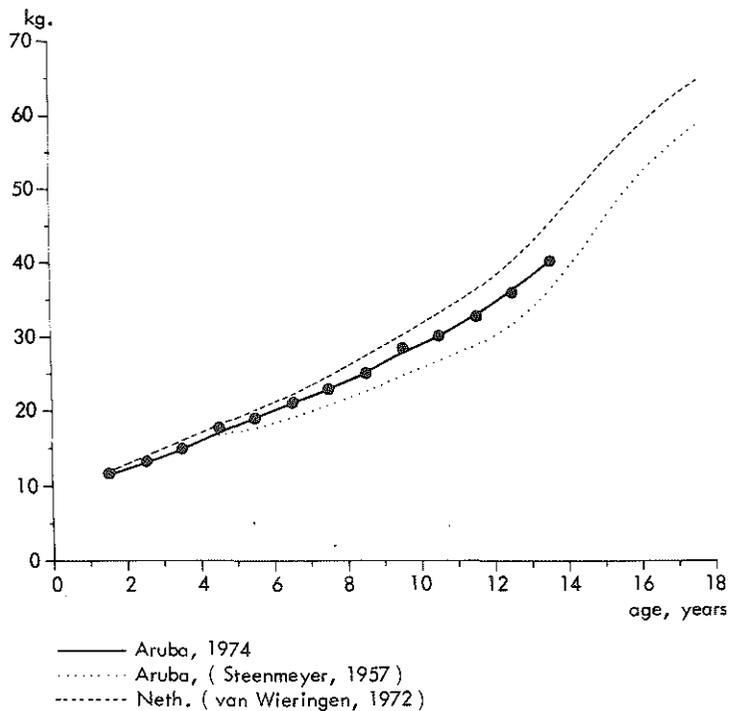


Fig. 15 Mean weights of boys in Aruba in 1974 compared with Aruban boys in 1954 and boys in the Netherlands in 1965

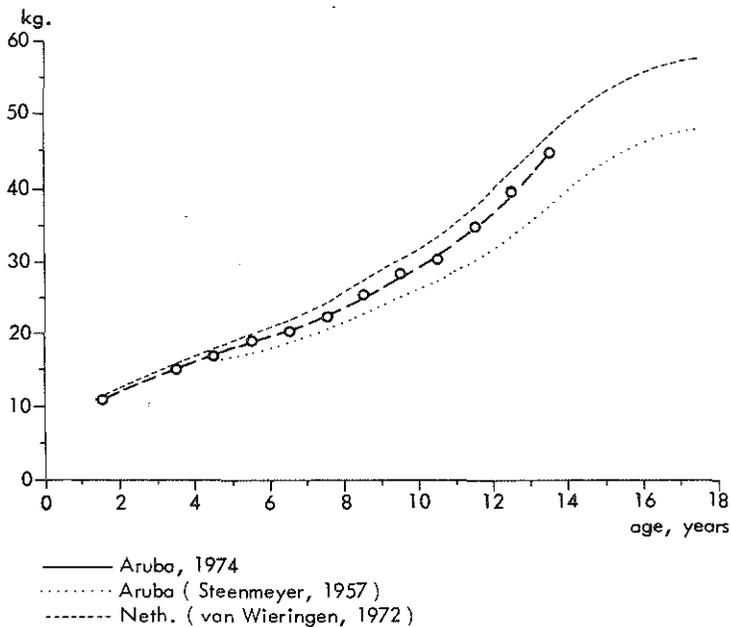


Fig. 16 Mean weights of girls in Aruba in 1974 compared with Aruban girls in 1954 and girls in the Netherlands in 1965

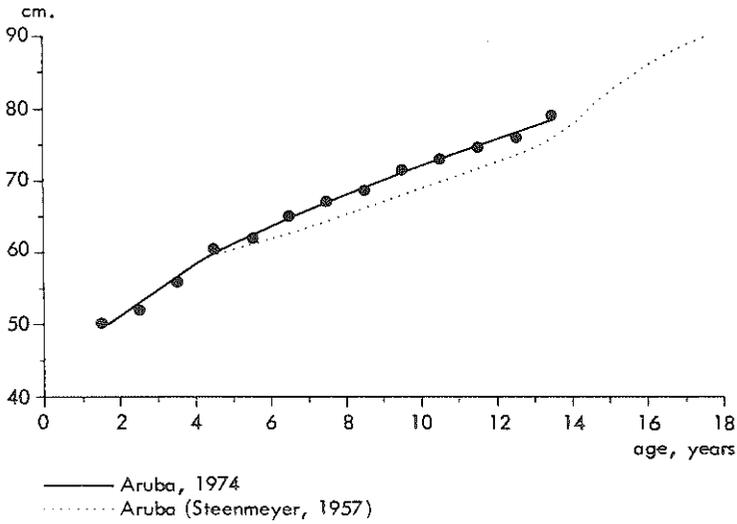


Fig. 17 Mean sitting heights of boys in Aruba in 1974 compared with Aruban boys in 1954

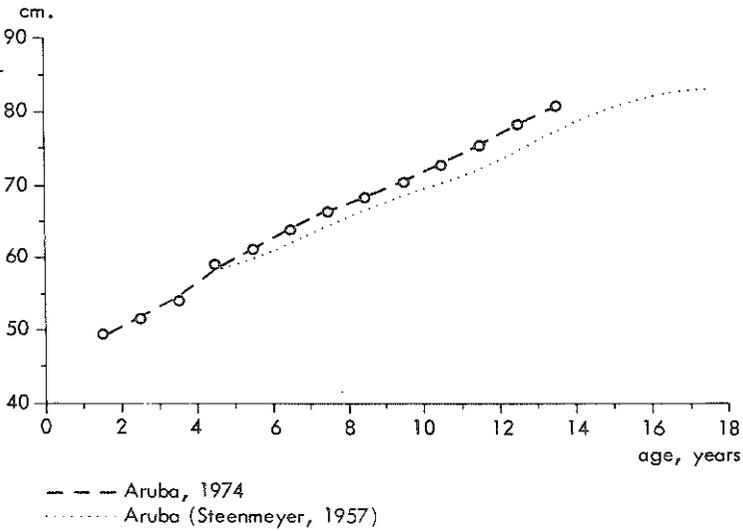


Fig. 18 Mean sitting heights of girls in Aruba in 1974 compared with Aruban girls in 1954

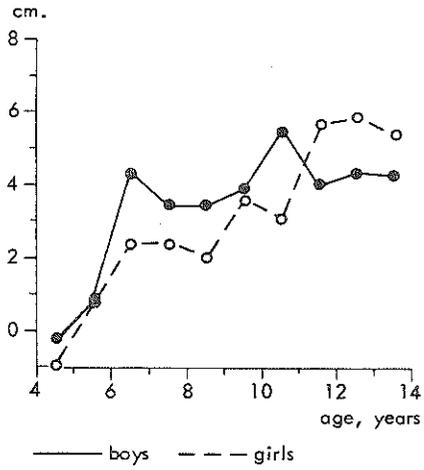


Fig. 19 Secular change in height of boys and girls in Aruba between 1954 and 1974

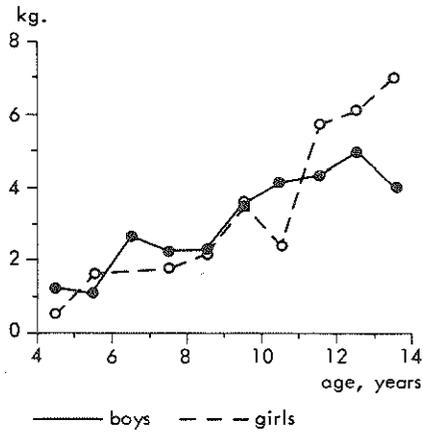


Fig. 20 Secular change in weight of boys and girls in Aruba between 1954 and 1974

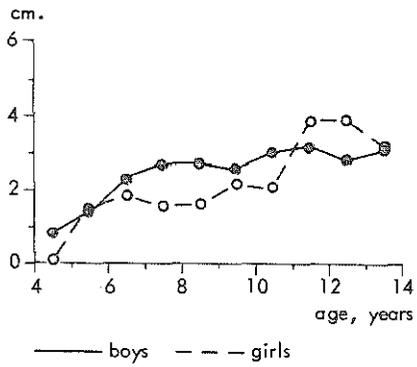


Fig. 21 Secular change in sitting height of boys and girls in Aruba between 1954 and 1974

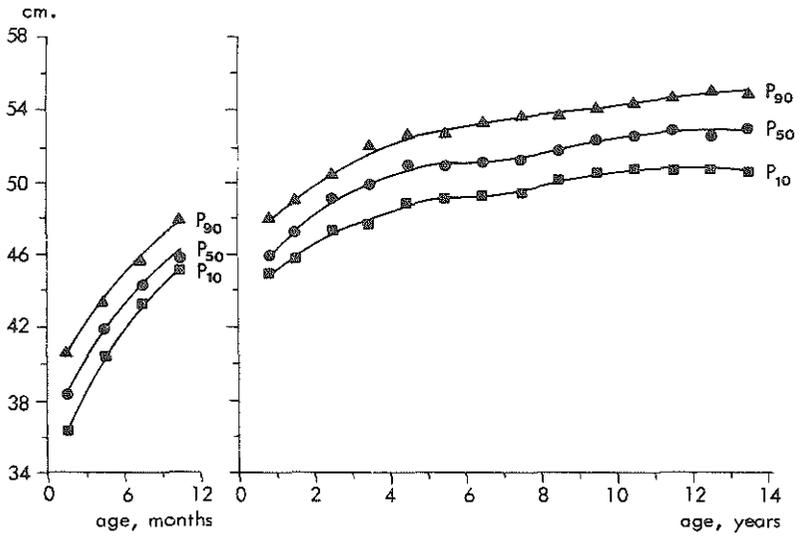


Fig. 22 Standards for headcircumference, boys <14 years of age. Aruba, 1974

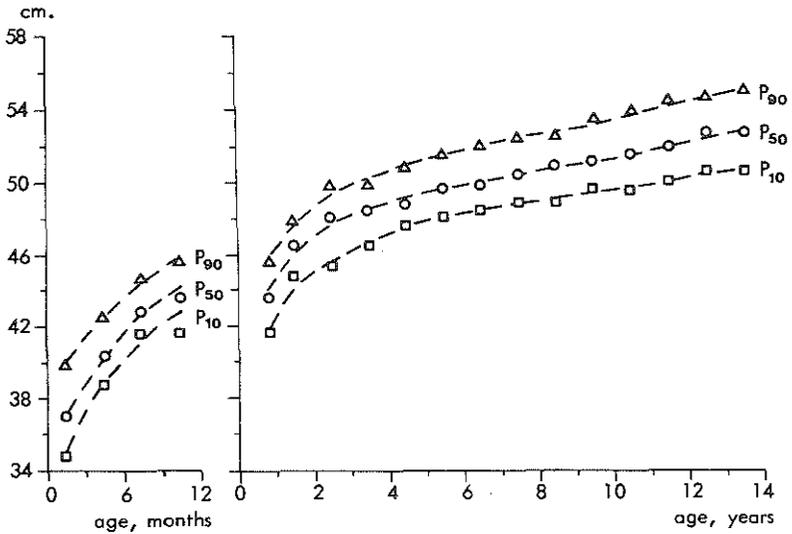


Fig. 23 Standards for headcircumference, girls <14 years of age. Aruba, 1974

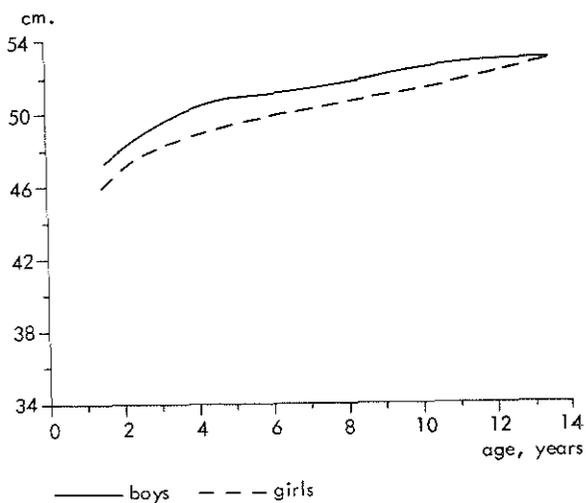


Fig. 24 Comparison of the median headcircumferences, boys and girls

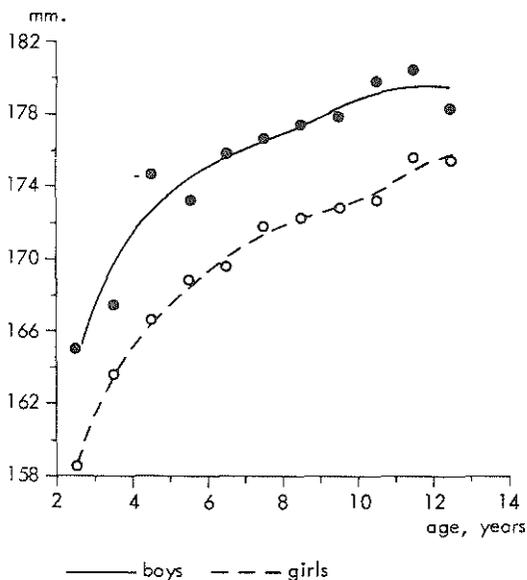


Fig. 25 Mean head lengths of boys and girls in Aruba in 1974

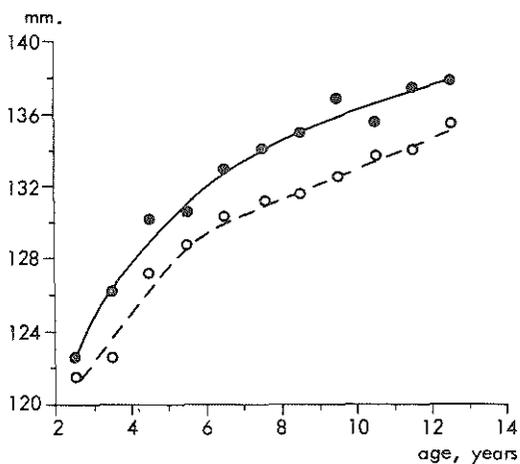


Fig. 26 Mean head breadths of boys and girls in Aruba in 1974

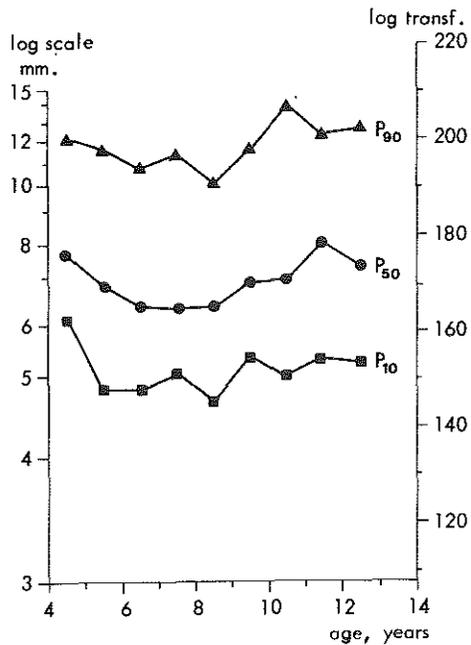


Fig. 27 Standards for triceps skinfolds, boys 4 - 14 years of age. Aruba, 1974

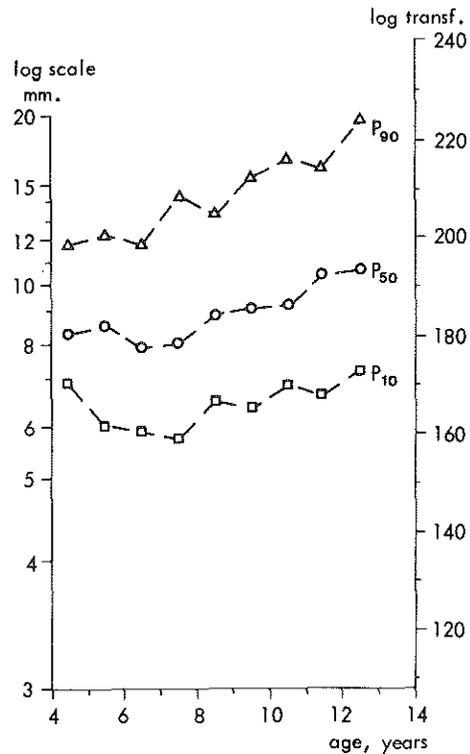


Fig. 28 Standards for triceps skinfolds, girls 4 - 14 years of age. Aruba, 1974

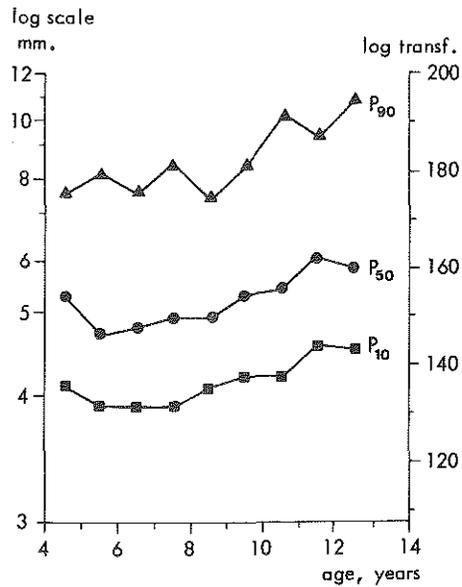


Fig. 29 Standards for subscapular skinfolds, boys 4 - 14 years of age. Aruba, 1974

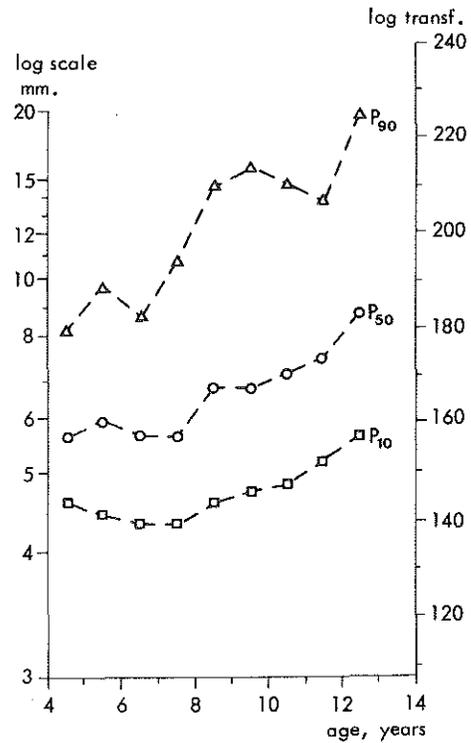


Fig. 30 Standards for subscapular skinfolds, girls 4 - 14 years of age. Aruba, 1974

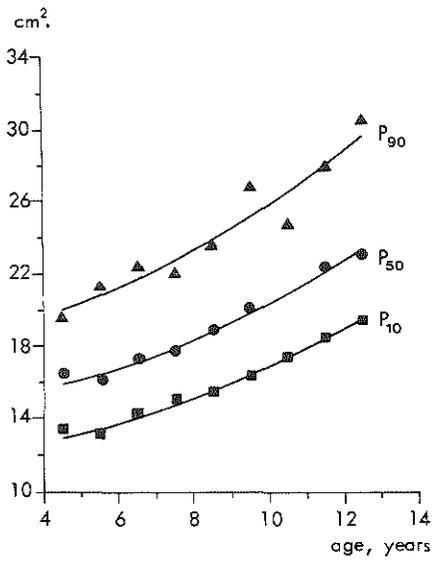


Fig. 31 Standards for arm muscle area, boys between 4 - 14 years of age Aruba, 1974

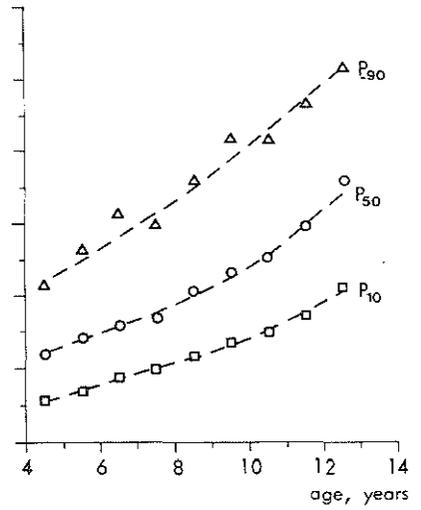


Fig. 32 Standards for arm muscle area, girls between 4 - 14 years of age Aruba, 1974

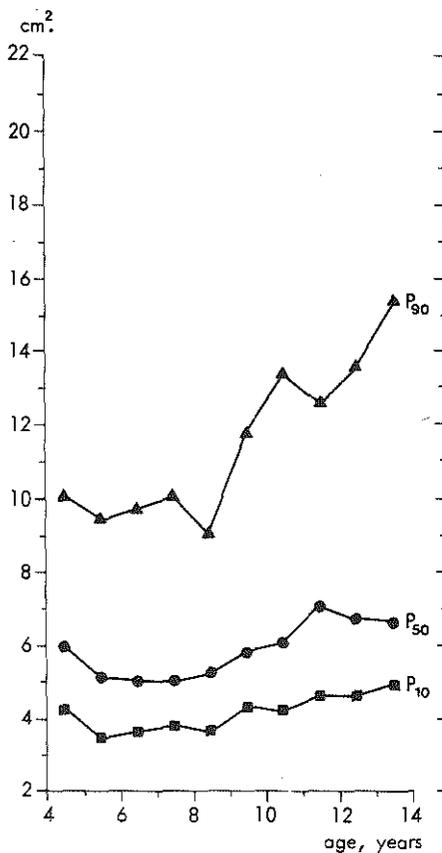


Fig. 33 Standards for arm fat area, boys between 4 - 14 years of age. Aruba, 1974

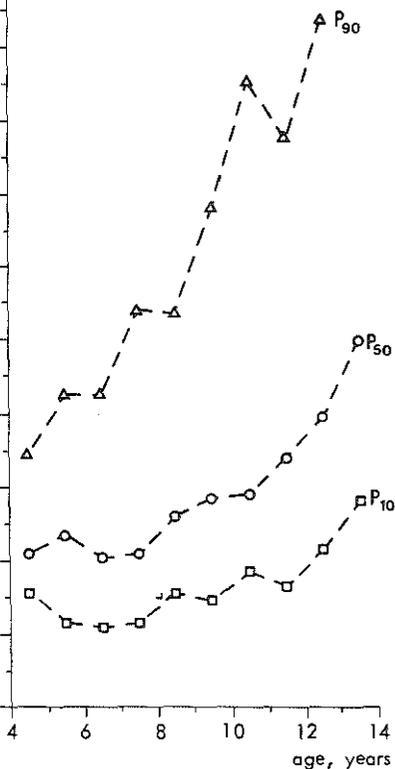


Fig. 34 Standards for arm fat area, girls between 4 - 14 years of age. Aruba, 1974

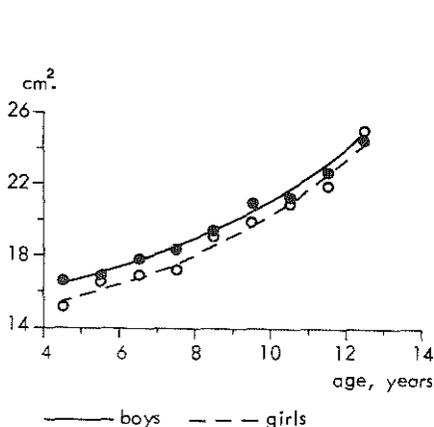


Fig. 35 Comparison of mean arm muscle areas, boys and girls

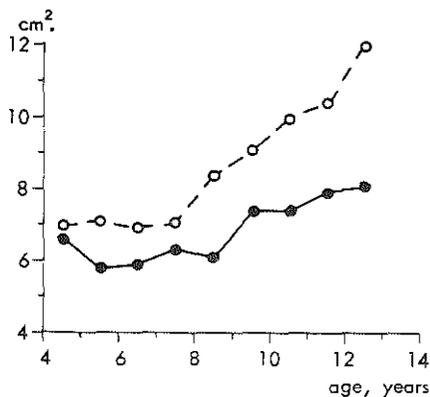


Fig. 36 Comparison of mean arm fat areas, boys and girls

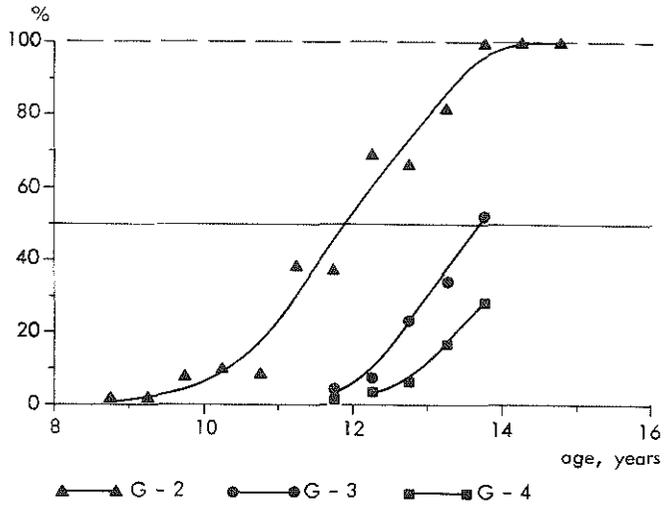


Fig. 37 Genital development stages G - 2, G - 3 and G - 4, cumulative frequency distribution, boys between 8 - 14 years of age

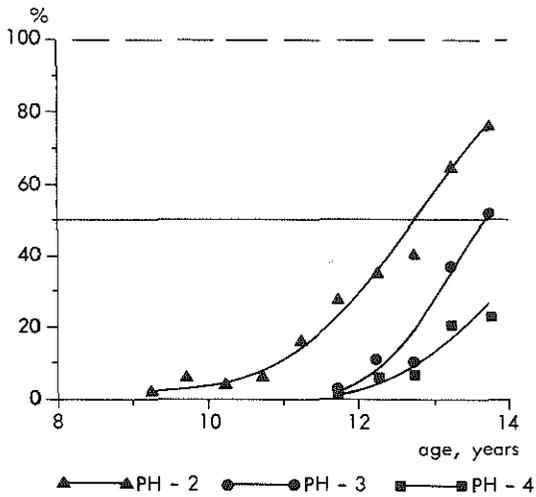


Fig. 38 Pubic hair stages PH - 2, PH - 3 and PH - 4 cumulative frequency distribution, boys between 8 - 14 years of age

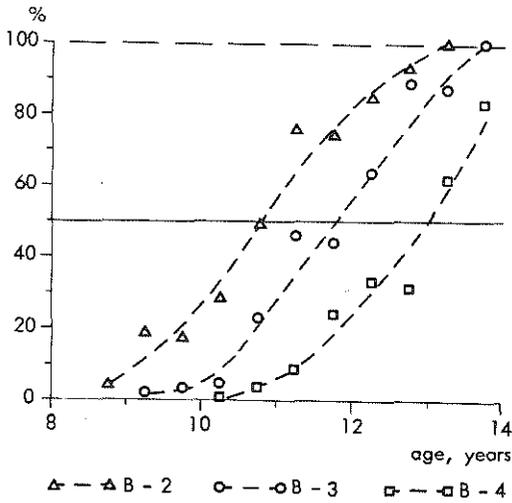


Fig. 39 Breast development stages, B - 2, B - 3 and B - 4, cumulative frequency distribution, girls between 8 - 14 years of age

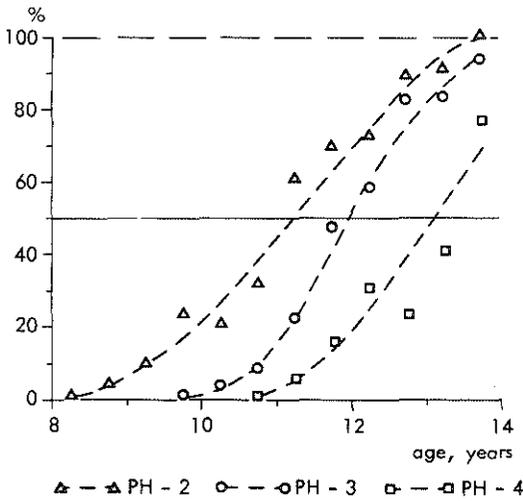


Fig. 40 Pubic hair stages, PH - 2, PH - 3 and PH - 4 cumulative frequency distribution, girls between 8 - 14 years of age

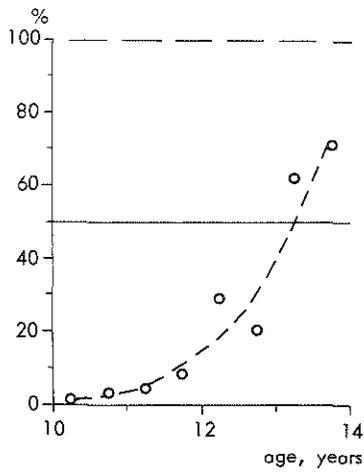


Fig. 41 Menarche, cumulative frequency distribution, between 10 - 14 years of age

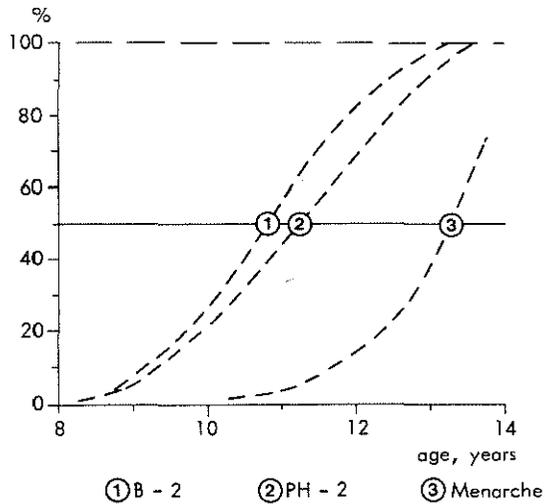


Fig. 42 Relation between breast development stage 2 pubic hair stage 2 and menarche between 8 - 14 years of age

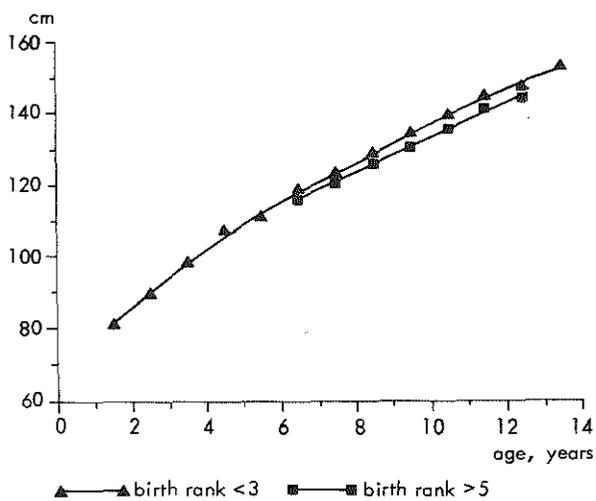


Fig. 43 Birth rank and mean heights of boys in Aruba in 1974

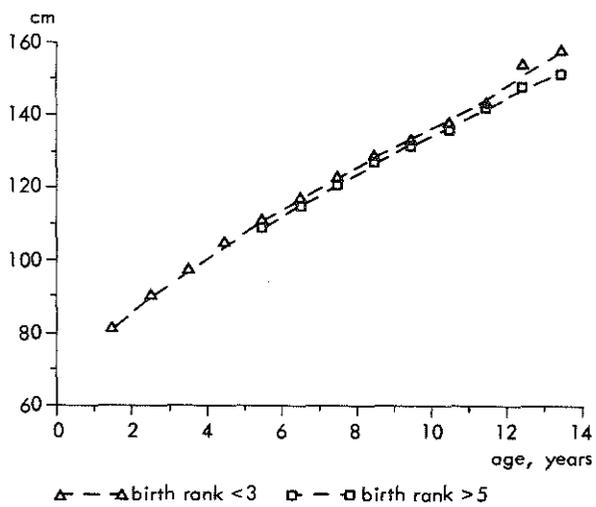


Fig. 44 Birth rank and mean heights of girls in Aruba in 1974

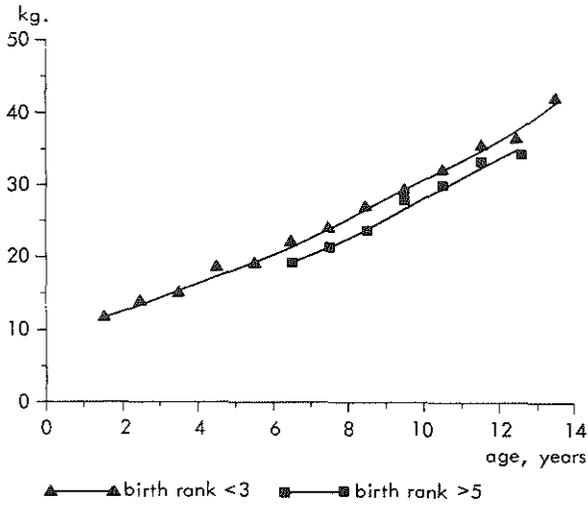


Fig. 45 Birth rank and mean weights of boys in Aruba in 1974

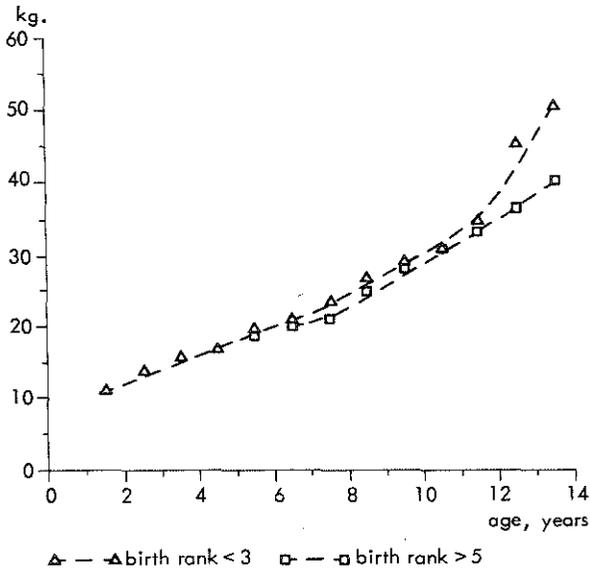


Fig. 46 Birth rank and mean weights of girls in Aruba in 1974

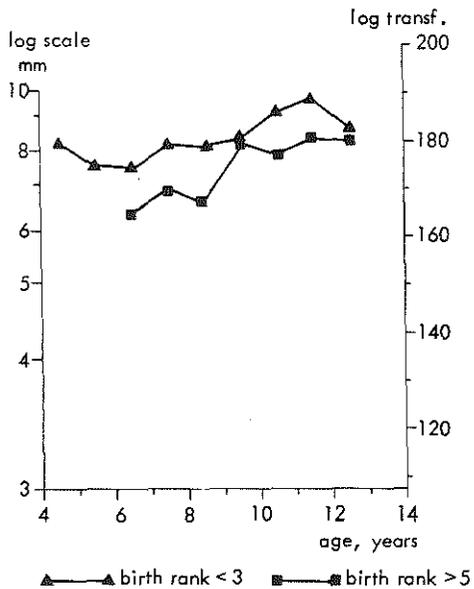


Fig. 47 Birth rank and mean triceps skinfolds of boys in Aruba in 1974

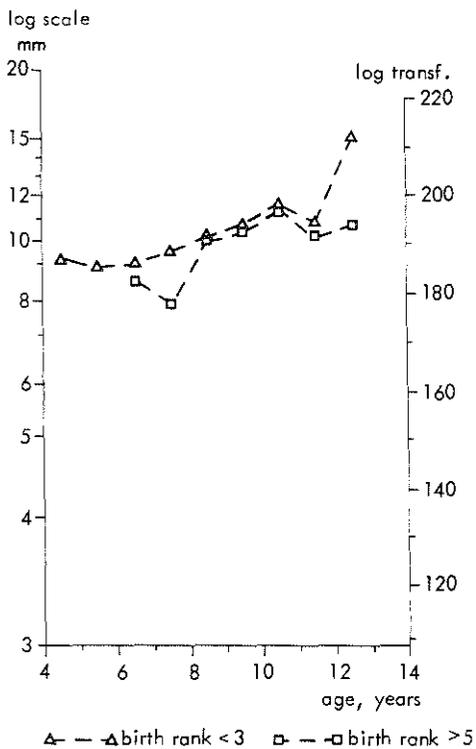


Fig. 48 Birth rank and mean triceps skinfolds of girls in Aruba in 1974

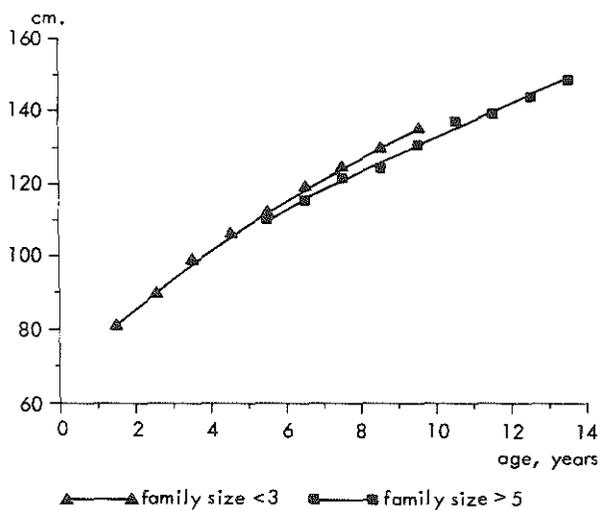


Fig. 49 Family size and mean heights of boys in Aruba in 1974

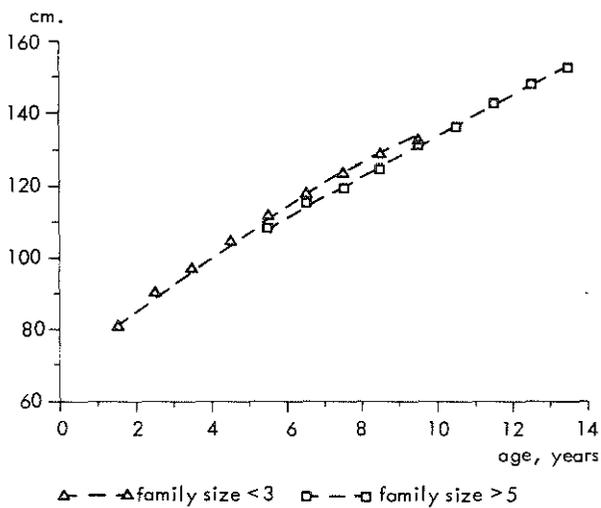


Fig. 50 Family size and mean heights of girls in Aruba in 1974

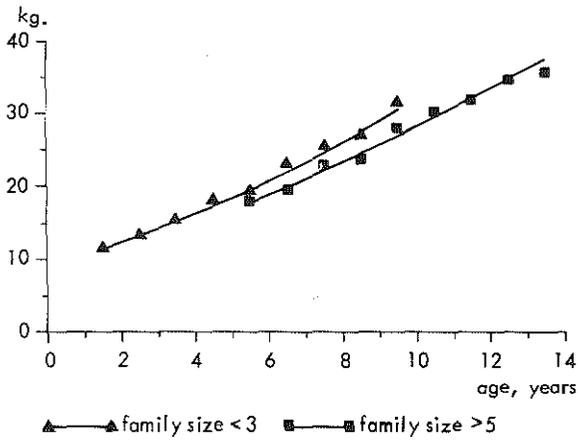


Fig. 51 Family size and mean weights of boys in Aruba in 1974

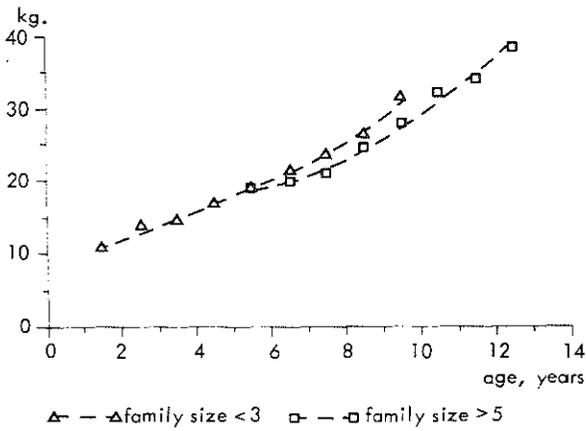


Fig. 52 Family size and mean weights of girls in Aruba in 1974

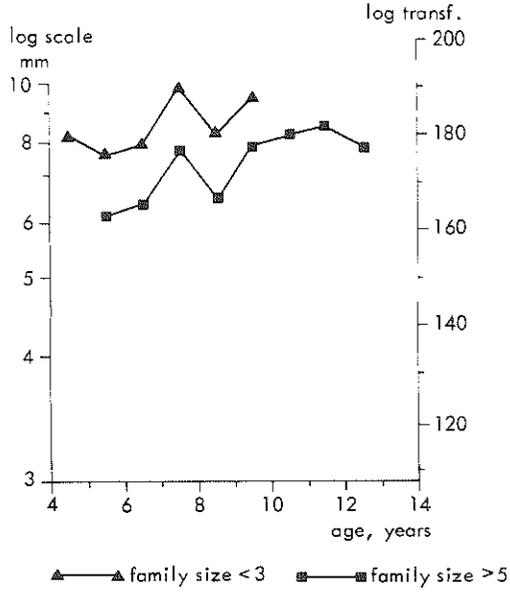


Fig. 53 Family size and mean triceps skinfolds of boys in Aruba in 1974

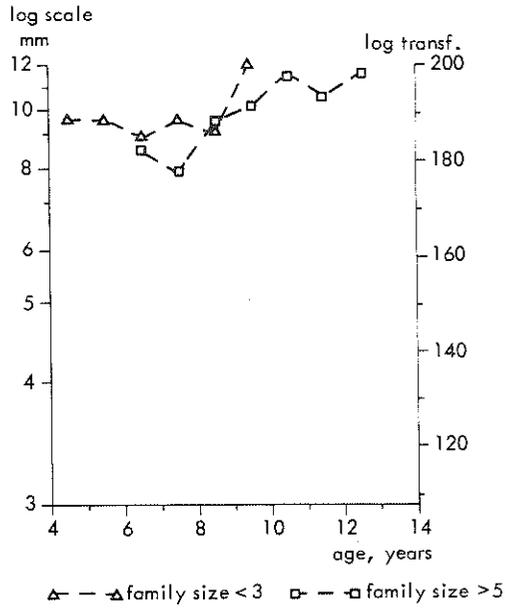


Fig. 54 Family size and mean triceps skinfolds of girls in Aruba in 1974

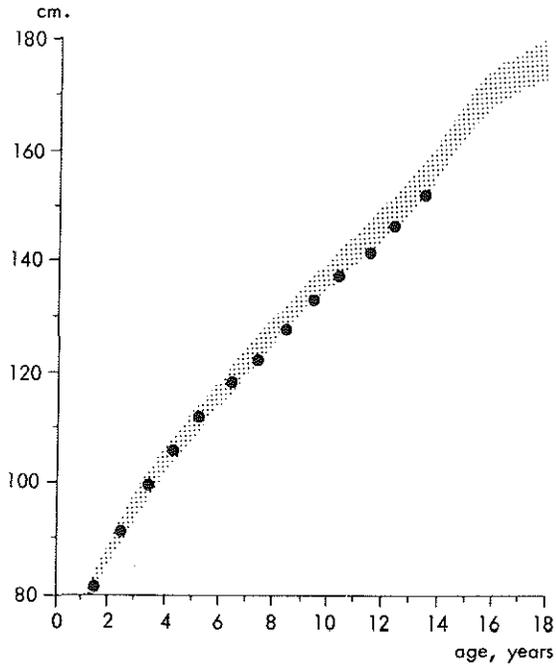


Fig. 55 Mean heights of boys in Aruba in 1974 against the background of the European range of means (Eveleth and Tanner, 1976)

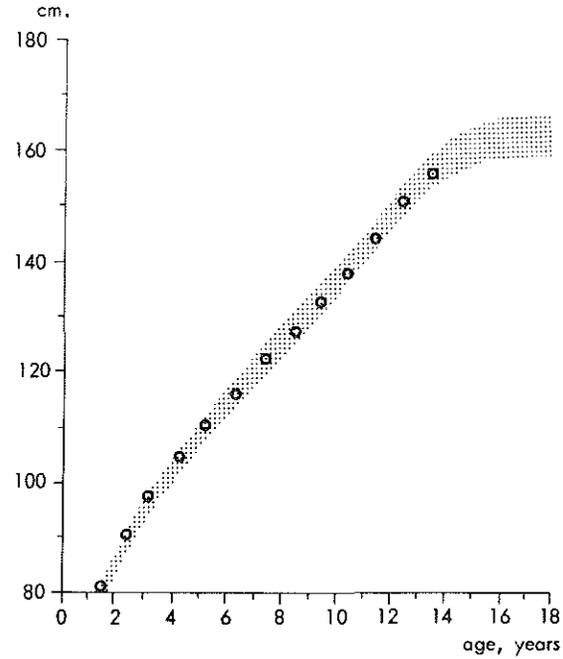


Fig. 56 Mean heights of girls in Aruba in 1974 against the background of the European range of means (Eveleth and Tanner, 1976)

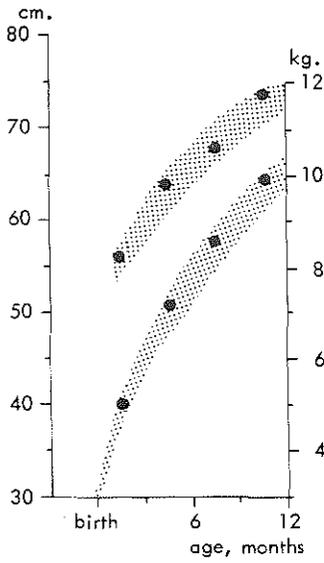


Fig. 57 Mean lengths and weights of infant boys in Aruba in 1974 against the background of the European range of means (Eveleth and Tanner, 1976)

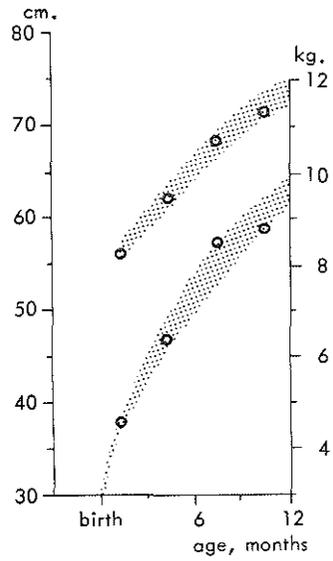


Fig. 58 Mean lengths and weights of infant girls in Aruba in 1974 against the background of the European range of means (Eveleth and Tanner, 1976)

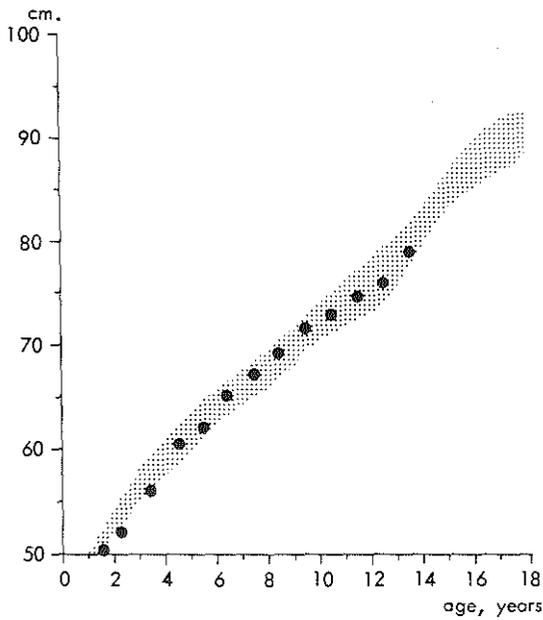


Fig. 59 Mean sitting heights of boys in Aruba in 1974 against the background of the European range of means (Eveleth and Tanner, 1976)

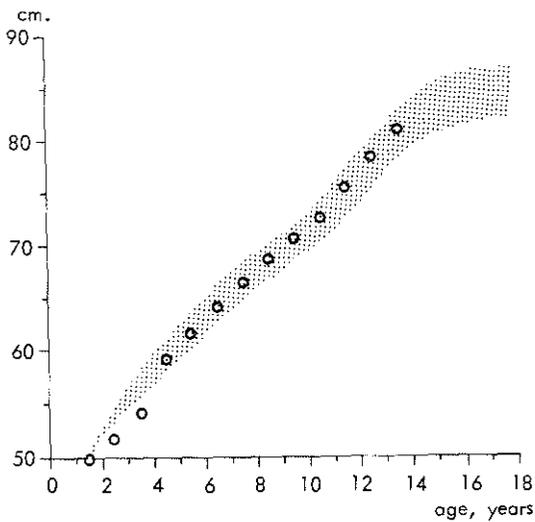


Fig. 60 Mean sitting heights of girls in Aruba in 1974 against the background of the European range of means (Eveleth and Tanner, 1976)

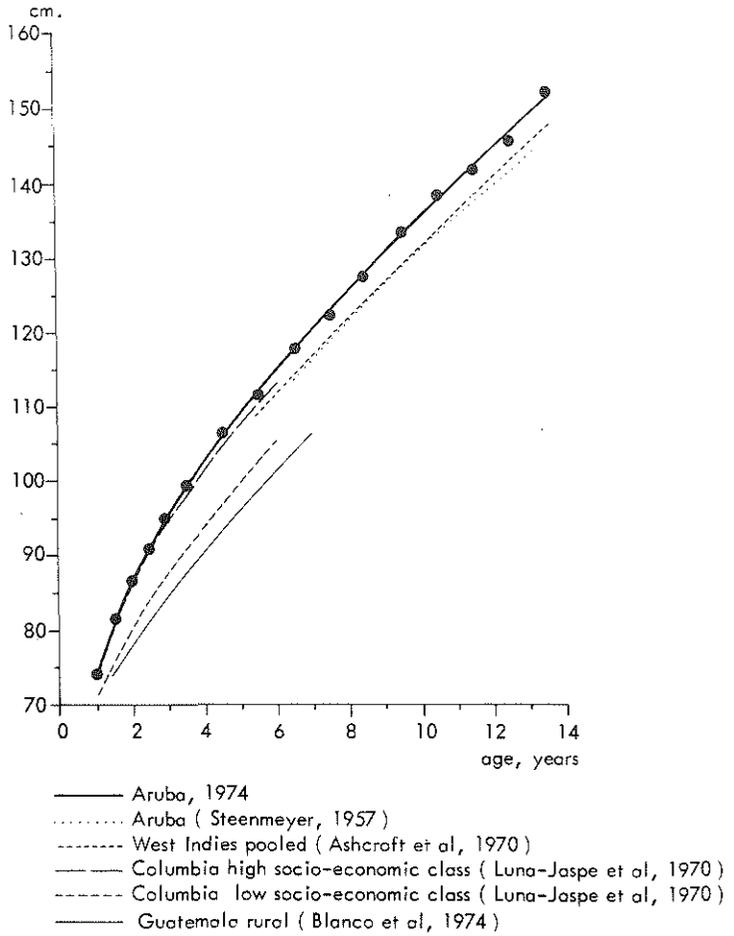


Fig. 61 Mean heights of boys in Aruba in 1974 compared with some other countries in the Caribbean area

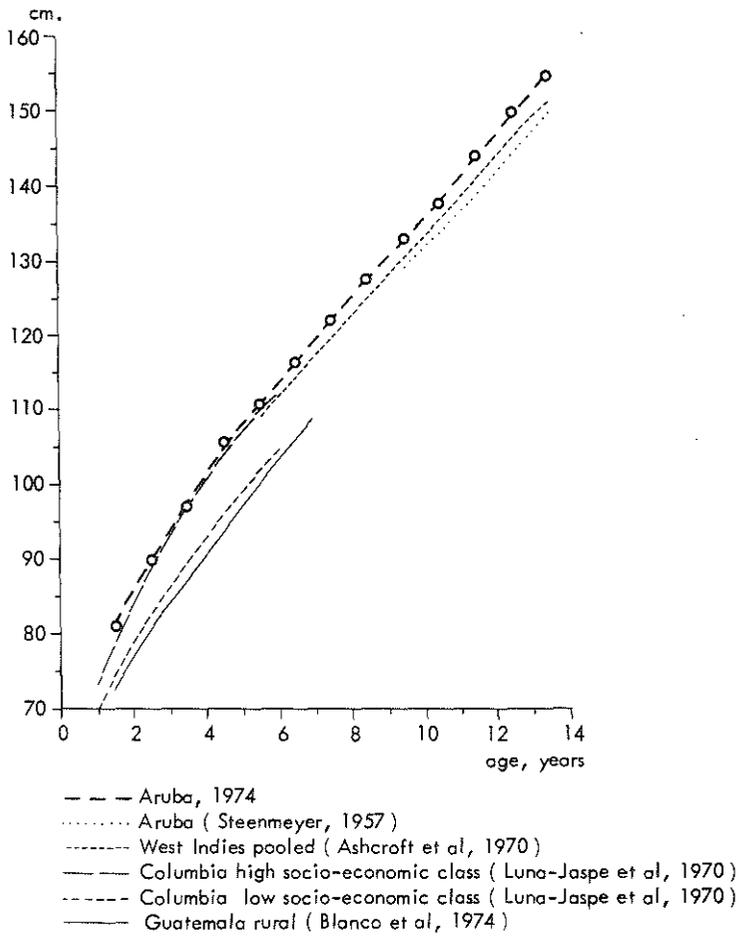


Fig. 62 Mean heights of girls in Aruba in 1974 compared with some other countries in the Caribbean area

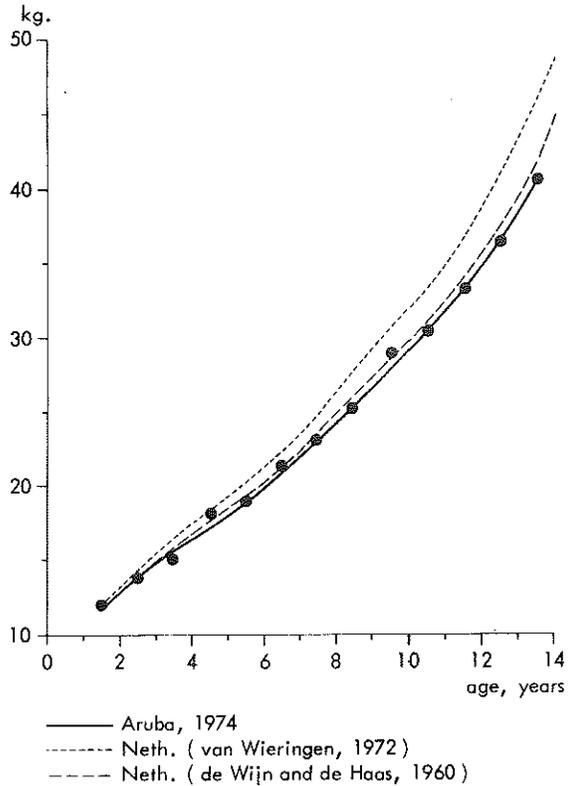


Fig. 63 Mean weights of boys in Aruba in 1974 compared with boys in the Netherlands in 1965 and 1955

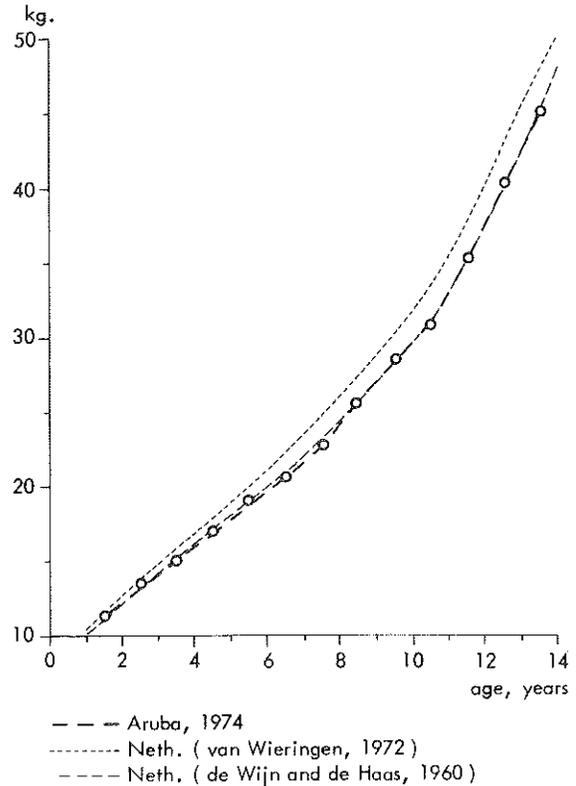


Fig. 64 Mean weights of girls in Aruba in 1974 compared with girls in the Netherlands in 1965 and 1955

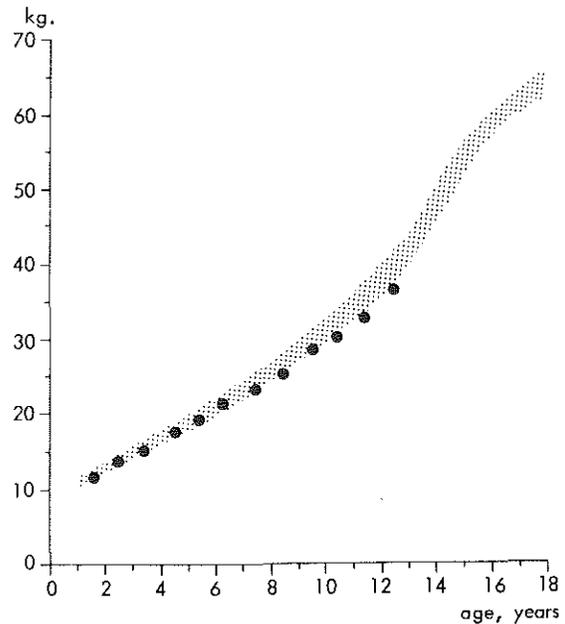


Fig. 65 Mean weights of boys in Aruba in 1974 against the background of the European range of means (Eveleth and Tanner, 1976)

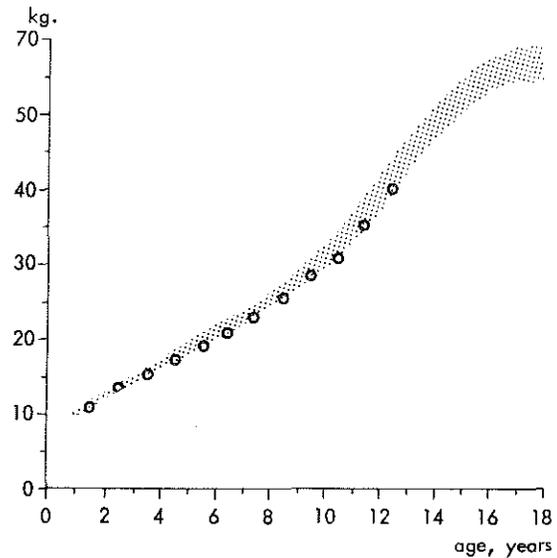
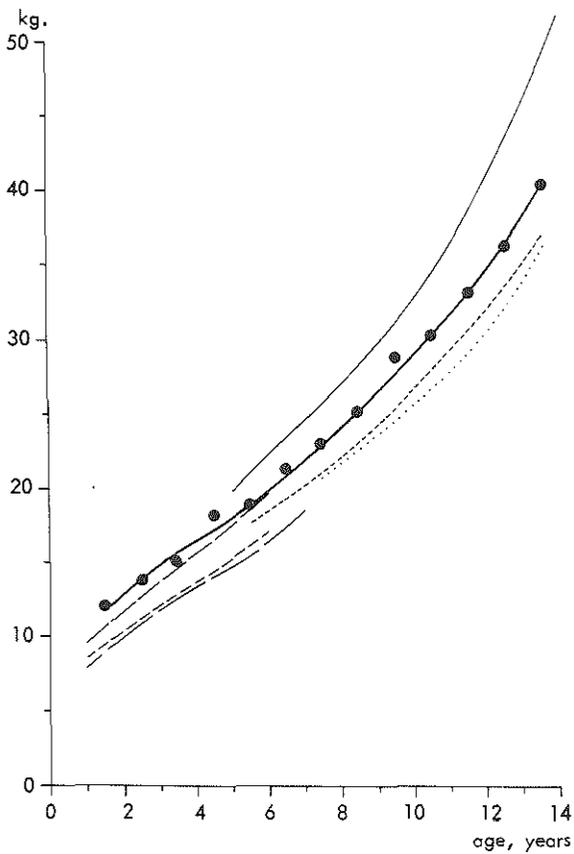


Fig. 66 Mean weights of girls in Aruba in 1974 against the background of the European range of means (Eveleth and Tanner, 1976)



- Aruba, 1974
- Aruba (Steenmeyer, 1957)
- - - West Indies pooled (Ashcroft et al, 1970)
- Colombia high socio-economic class (Luna-Jaspe et al, 1970)
- - - Colombia low socio-economic class (Luna-Jaspe et al, 1970)
- Guatemala high socio-economic class (Johnston et al, 1973)
- - - Guatemala low socio-economic class (Blanco et al, 1974)

Fig. 67 Mean weights of boys in Aruba in 1974 compared with other countries in the Caribbean area

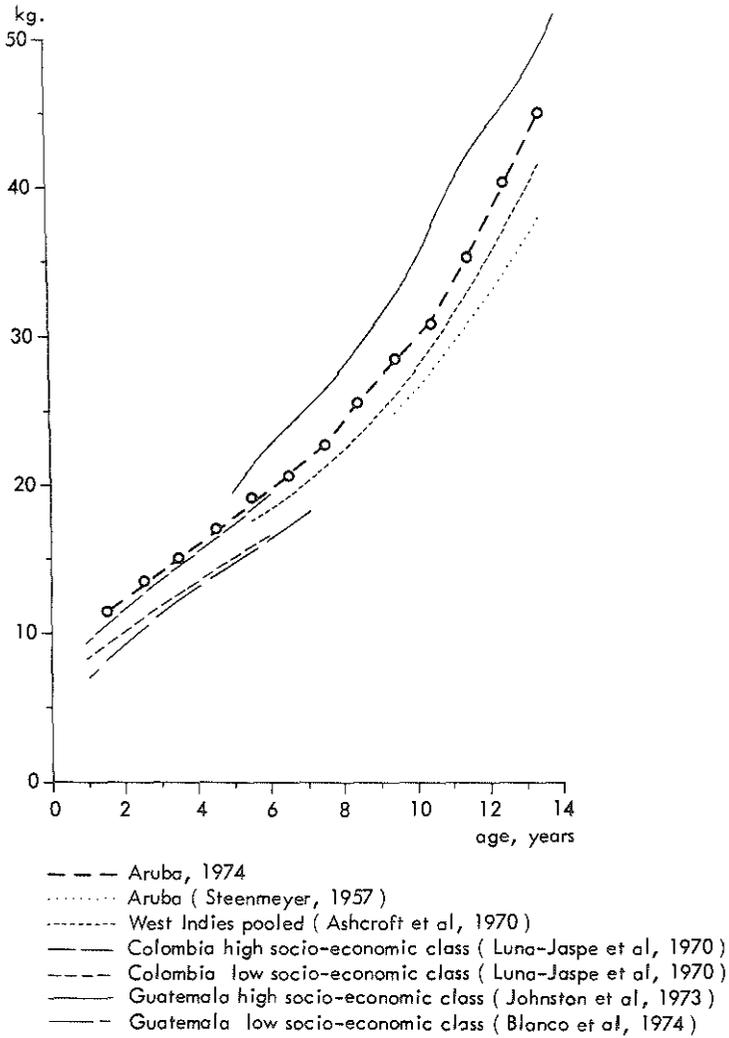


Fig. 68 Mean weights of girls in Aruba in 1974 compared with other countries in the Caribbean area

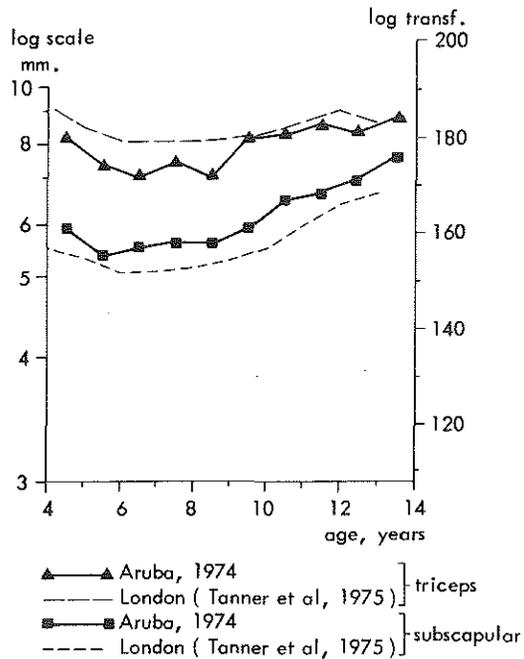


Fig. 69 Mean triceps and subscapular skinfolds of boys in Aruba in 1974 compared with London

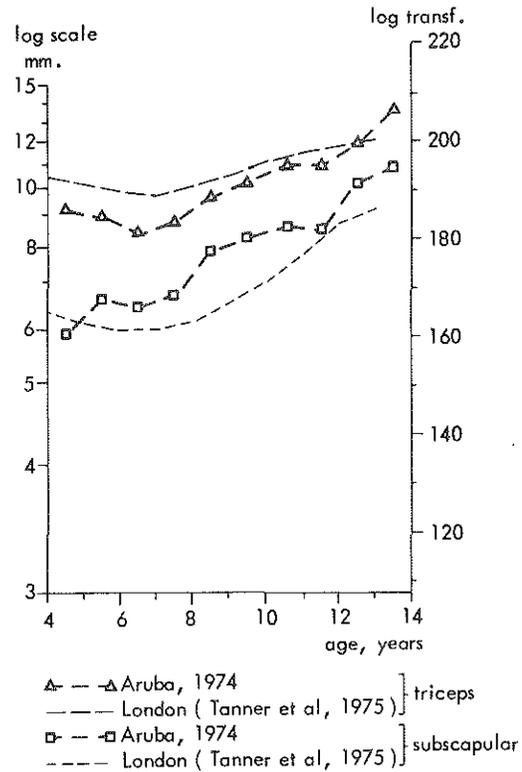


Fig. 70 Mean triceps and subscapular skinfolds of girls in Aruba in 1974 compared with London

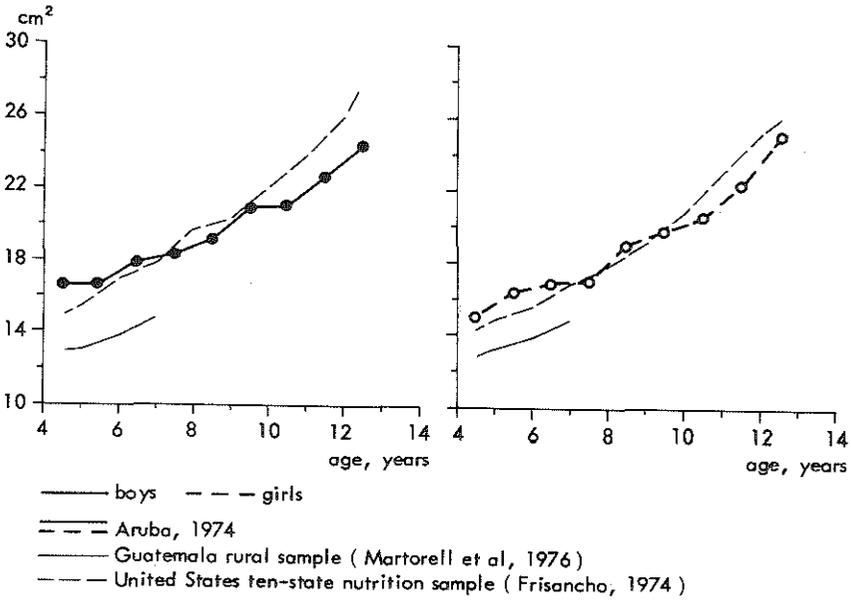


Fig. 71 Mean arm muscle areas of boys and girls in Aruba in 1974 compared with Guatemala and the United States

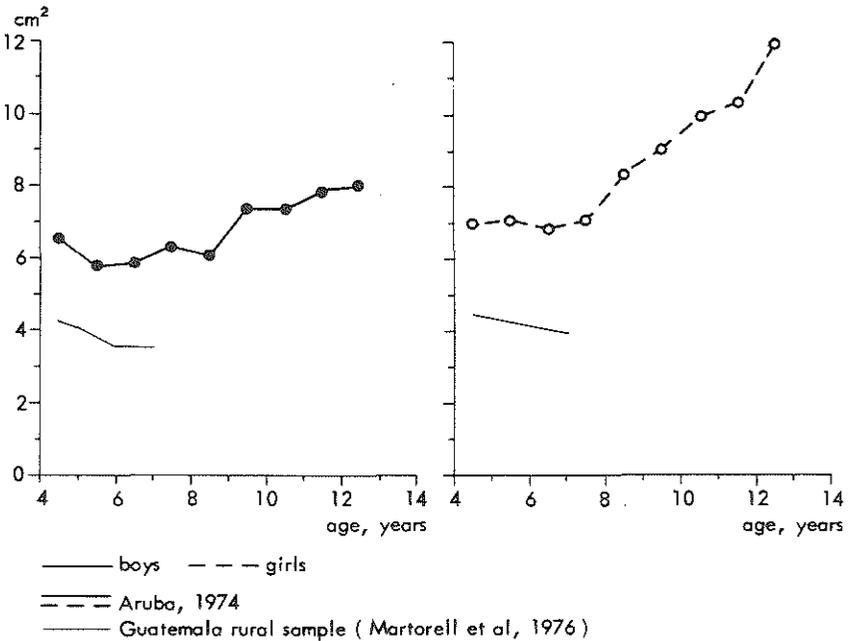


Fig. 72 Mean arm fat areas of boys and girls in Aruba in 1974 compared with Guatemala

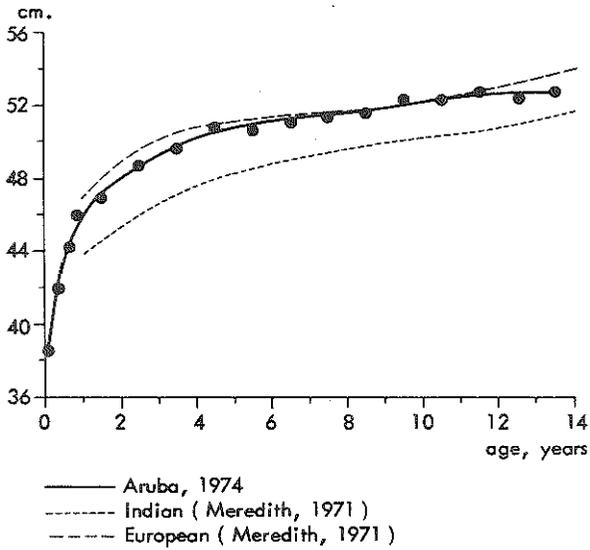


Fig. 73 Mean head circumferences of boys in Aruba in 1974 compared with India and Europa

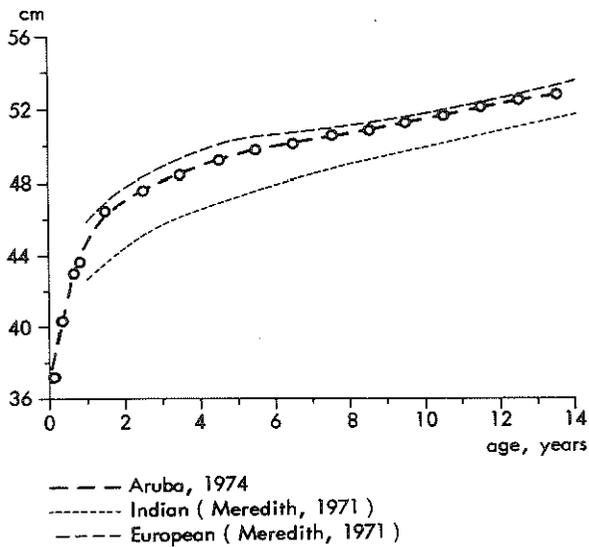


Fig. 74 Mean head circumferences of girls in Aruba in 1974 compared with India and Europa

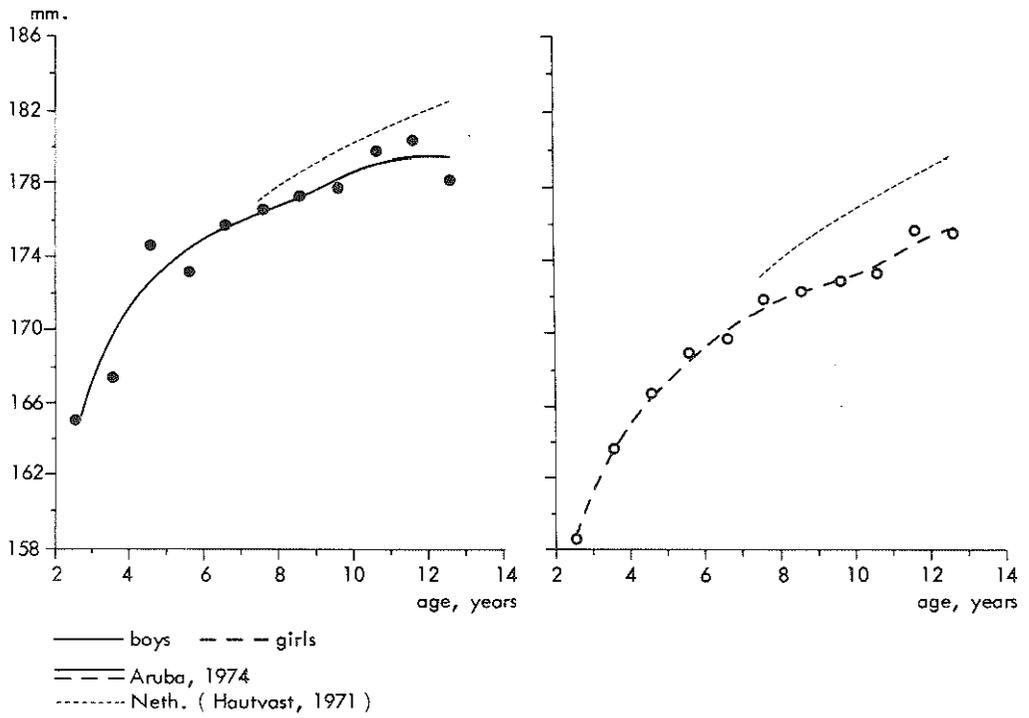


Fig. 75 Mean head lengths of boys and girls in Aruba in 1974 compared with boys and girls in the Netherlands in 1971

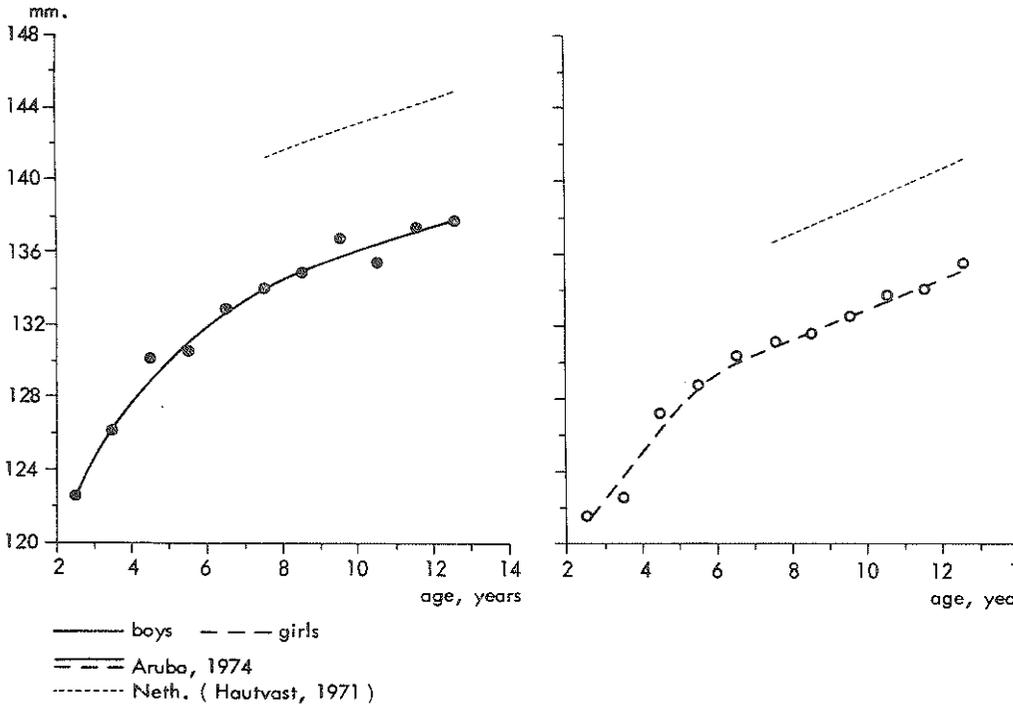


Fig. 76 Mean head breadths of boys of girls in Aruba in 1974 compared with boys and girls in the Netherlands in 1971

Table 4

Height of Aruban boys (cm)

age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
0.0 - < 0.25	51	56.8	3.5	52.5	57.0	61.4
0.25 - < 0.50	47	64.1	2.9	59.8	64.4	67.6
0.50 - < 0.75	22	68.4	1.9	66.2	68.1	70.3
0.75 - < 1.0	25	74.1	2.8	71.0	74.6	78.2
1.0 - < 2.0	51	81.7	5.1	75.1	81.5	87.4
2.0 - < 3.0	34	91.2	3.9	85.3	91.1	95.7
3.0 - < 4.0	32	99.6	4.7	94.2	99.1	106.8
4.0 - < 5.0	75	106.7	4.6	101.2	107.0	112.8
5.0 - < 6.0	112	111.7	5.3	104.0	112.2	118.8
6.0 - < 7.0	138	118.4	5.4	110.3	118.5	124.9
7.0 - < 8.0	120	122.9	5.7	116.1	123.5	130.1
8.0 - < 9.0	140	127.9	5.3	121.3	128.4	134.7
9.0 - < 10.0	131	133.9	6.3	125.8	133.6	142.5
10.0 - < 11.0	125	138.6	5.8	131.8	138.4	145.0
11.0 - < 12.0	103	142.1	5.5	135.7	141.8	148.6
12.0 - < 13.0	93	146.4	7.7	136.3	146.2	157.9
13.0 - < 14.0	52	152.3	7.4	145.2	151.5	161.0

Table 5

Height of Aruban girls (cm)

age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
0.0 - ^ 0.25	63	55.1	3.2	50.9	55.5	58.8
0.25 - ^ 0.50	28	62.2	3.1	57.9	62.0	66.9
0.50 - ^ 0.75	26	68.8	3.7	65.3	68.5	72.5
0.75 - ^ 1.0	25	71.7	2.4	68.6	71.5	74.5
1.0 - ^ 2.0	53	81.1	4.0	76.4	80.7	86.4
2.0 - ^ 3.0	24	90.4	4.2	86.2	90.6	95.0
3.0 - ^ 4.0	31	97.2	5.2	91.6	96.7	104.9
4.0 - ^ 5.0	81	105.5	4.4	99.2	105.7	110.9
5.0 - ^ 6.0	117	110.8	5.2	104.1	111.1	118.4
6.0 - ^ 7.0	117	116.9	4.8	110.1	117.4	122.2
7.0 - ^ 8.0	114	122.5	5.3	116.7	122.3	128.8
8.0 - ^ 9.0	122	127.5	5.5	120.3	127.4	134.7
9.0 - ^ 10.0	125	133.1	6.2	124.9	134.0	140.7
10.0 - ^ 11.0	138	137.6	6.9	128.8	138.0	146.3
11.0 - ^ 12.0	115	144.3	7.6	134.4	144.6	153.2
12.0 - ^ 13.0	86	150.5	7.2	140.9	151.6	159.2
13.0 - ^ 14.0	42	155.5	6.8	147.5	155.9	163.5

Weight of Aruban boys (kg.)

Table 6

age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
0.0 - ^ 0.25	51	5.0	0.9	3.9	4.8	6.1
0.25 - ^ 0.50	47	7.1	0.9	6.0	7.2	8.4
0.50 - ^ 0.75	22	8.7	0.8	7.8	8.7	9.5
0.75 - ^ 1.0	26	10.1	0.9	8.7	10.2	11.0
1.0 - ^ 2.0	49	12.1	2.3	9.9	11.9	14.5
2.0 - ^ 3.0	34	13.9	1.8	11.8	13.6	16.5
3.0 - ^ 4.0	32	15.2	2.6	12.0	15.2	18.5
4.0 - ^ 5.0	75	18.3	2.6	15.3	17.8	21.6
5.0 - ^ 6.0	111	19.2	3.4	15.4	18.8	24.7
6.0 - ^ 7.0	138	21.7	4.2	17.1	20.7	26.5
7.0 - ^ 8.0	120	23.4	4.8	19.1	22.6	28.5
8.0 - ^ 9.0	140	25.3	4.5	20.7	25.0	29.8
9.0 - ^ 10.0	130	29.1	6.6	22.8	27.8	35.5
10.0 - ^ 11.0	125	30.8	5.3	25.1	29.8	37.2
11.0 - ^ 12.0	103	33.4	5.4	27.7	32.7	40.8
12.0 - ^ 13.0	93	36.6	7.7	29.3	35.3	49.3
13.0 - ^ 14.0	52	40.6	8.3	31.5	37.6	53.1

Table 7

Weight of Aruban girls (kg.)

age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
0.0 - < 0.25	63	4.6	1.0	3.5	4.5	6.1
0.25 - < 0.50	28	6.3	0.8	5.1	6.3	7.4
0.50 - < 0.75	26	8.4	1.0	7.3	8.3	9.6
0.75 - < 1.0	25	8.8	1.0	7.5	8.8	9.7
1.0 - < 2.0	53	11.3	1.9	9.5	11.0	13.1
2.0 - < 3.0	24	13.7	2.2	11.0	13.5	16.0
3.0 - < 4.0	31	15.2	2.6	12.2	15.0	18.7
4.0 - < 5.0	81	17.0	2.3	14.4	16.8	20.0
5.0 - < 6.0	117	19.2	3.6	15.4	18.8	24.0
6.0 - < 7.0	117	20.7	3.9	16.7	19.9	25.9
7.0 - < 8.0	114	22.8	4.0	18.8	21.9	28.6
8.0 - < 9.0	121	25.7	5.8	20.3	24.3	32.5
9.0 - < 10.0	125	28.6	6.3	22.5	26.8	38.4
10.0 - < 11.0	138	30.9	7.7	23.4	29.0	40.7
11.0 - < 12.0	115	35.3	8.2	26.0	34.8	45.0
12.0 - < 13.0	86	40.3	8.7	29.1	40.7	51.8
13.0 - < 14.0	42	45.1	8.6	35.4	43.9	56.7

Table 8

Sitting height of Aruban boys (cm)

age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
0.0 - < 0.25	51	37.2	2.2	34.4	37.5	40.1
0.25 - < 0.50	47	42.2	2.1	39.4	42.4	45.5
0.50 - < 0.75	22	44.6	1.5	42.9	44.5	46.6
0.75 - < 1.0	26	46.6	2.2	43.1	47.2	48.6
1.0 - < 2.0	51	50.2	2.9	47.0	50.1	53.6
2.0 - < 3.0	34	52.5	2.3	50.0	52.0	55.7
3.0 - < 4.0	32	56.2	3.1	52.5	56.2	59.7
4.0 - < 5.0	75	60.9	2.7	57.9	61.0	64.1
5.0 - < 6.0	112	62.5	2.9	59.2	62.6	66.0
6.0 - < 7.0	138	65.3	3.1	61.3	65.5	69.4
7.0 - < 8.0	120	67.2	3.0	63.6	67.2	71.4
8.0 - < 9.0	140	69.2	2.7	65.8	69.5	72.4
9.0 - < 10.0	132	71.6	3.3	67.4	71.2	75.6
10.0 - < 11.0	125	73.1	3.1	68.8	73.3	76.8
11.0 - < 12.0	103	74.8	3.1	70.9	75.0	78.5
12.0 - < 13.0	93	76.4	3.9	71.9	76.3	80.9
13.0 - < 14.0	52	79.1	3.8	74.2	79.3	83.4

Table 9

Sitting height of Aruban girls (cm)

age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
0.0 - < 0.25	63	36.5	2.6	33.6	37.0	39.6
0.25 - < 0.50	28	41.1	2.2	37.8	41.3	43.8
0.50 - < 0.75	26	44.3	1.9	41.1	44.4	46.3
0.75 - < 1.0	25	45.8	1.8	44.0	45.4	49.3
1.0 - < 2.0	53	49.7	2.1	46.7	49.6	52.3
2.0 - < 3.0	24	51.6	2.2	48.6	51.7	54.0
3.0 - < 4.0	31	54.5	3.5	50.6	53.0	59.1
4.0 - < 5.0	81	59.2	2.9	55.9	59.2	62.6
5.0 - < 6.0	117	61.5	3.3	57.8	61.6	65.7
6.0 - < 7.0	117	64.5	2.8	61.0	64.5	68.0
7.0 - < 8.0	114	66.6	2.6	63.5	66.6	69.5
8.0 - < 9.0	122	68.6	3.2	65.1	68.0	72.8
9.0 - < 10.0	125	70.8	3.2	66.9	70.7	74.9
10.0 - < 11.0	138	72.7	3.6	67.6	72.6	77.3
11.0 - < 12.0	115	76.0	4.1	70.7	75.6	81.2
12.0 - < 13.0	86	79.0	4.3	72.9	79.7	84.3
13.0 - < 14.0	42	81.2	3.6	76.4	82.5	84.6

Table 10

Yearly increment in height in P_{50} for boys and girls

age groups in years	Boys			Girls		
	n	P_{50}	increment in cm.	n	P_{50}	increment in cm.
0.0 - < 1.0	145	66.3	15.2	142	65.2	15.5
1.0 - < 2.0	51	81.5	9.6	53	80.7	9.9
2.0 - < 3.0	34	91.1	8.0	24	90.6	6.1
3.0 - < 4.0	32	99.1	7.9	31	96.7	9.0
4.0 - < 5.0	75	107.0	5.2	81	105.7	5.4
5.0 - < 6.0	112	112.2	6.3	117	111.1	6.3
6.0 - < 7.0	138	118.5	5.0	117	117.4	4.9
7.0 - < 8.0	120	123.5	4.9	114	122.3	5.1
8.0 - < 9.0	140	128.4	5.2	122	127.4	6.6
9.0 - < 10.0	131	133.6	4.8	125	134.0	4.0
10.0 - < 11.0	125	138.4	3.4	138	138.0	6.6
11.0 - < 12.0	103	141.8	4.4	115	144.6	7.0
12.0 - < 13.0	93	146.2	5.3	86	151.6	4.3
13.0 - < 14.0	52	151.5		42	155.9	

Table 11

Yearly increment in weight in P_{50} for boys and girls

age groups in years	Boys			Girls		
	n	P_{50}	increment in kg	n	P_{50}	increment in kg
0.0 - < 1.0	146	7.9	4.0	142	7.3	3.7
1.0 - < 2.0	49	11.9	1.7	53	11.0	2.5
2.0 - < 3.0	34	13.6	1.6	24	13.5	1.5
3.0 - < 4.0	32	15.2	2.6	31	15.0	1.8
4.0 - < 5.0	75	17.8	1.0	81	16.8	2.0
5.0 - < 6.0	111	18.8	1.9	117	18.8	1.1
6.0 - < 7.0	138	20.7	1.9	117	19.9	2.0
7.0 - < 8.0	120	22.6	2.4	114	21.9	2.4
8.0 - < 9.0	140	25.0	2.8	121	24.3	2.5
9.0 - < 10.0	130	27.8	2.0	125	26.8	2.2
10.0 - < 11.0	125	29.8	2.9	138	29.0	5.8
11.0 - < 12.0	103	32.7	2.6	115	34.8	5.9
12.0 - < 13.0	93	35.3	2.3	86	40.7	3.2
13.0 - < 14.0	52	37.6		42	43.9	

Table 12

Ratio of sitting height to stature

age groups in years	Boys			Girls		
	n	\bar{X}	SD	n	\bar{X}	SD
0.0 - < 0.25	51	65.6	2.1	63	66.2	3.2
0.25 - < 0.50	47	65.9	1.8	28	66.1	1.5
0.50 - < 0.75	22	65.3	1.2	26	64.4	2.2
0.75 - < 1.0	26	62.9	2.2	25	63.9	1.5
1.0 - < 2.0	51	61.4	1.5	53	61.3	1.7
2.0 - < 3.0	34	57.6	1.8	24	57.1	1.5
3.0 - < 4.0	31	56.7	1.7	31	56.1	1.8
4.0 - < 5.0	75	57.1	1.4	81	56.1	1.6
5.0 - < 6.0	112	56.0	1.4	117	55.6	1.6
6.0 - < 7.0	138	55.2	1.4	117	55.1	1.4
7.0 - < 8.0	120	54.7	1.4	114	54.4	1.2
8.0 - < 9.0	140	54.1	1.1	122	53.8	1.2
9.0 - < 10.0	132	53.5	1.2	125	53.2	1.2
10.0 - < 11.0	125	52.7	1.4	138	52.8	1.3
11.0 - < 12.0	103	52.7	1.2	115	52.7	1.2
12.0 - < 13.0	93	52.2	1.2	86	52.5	1.3
13.0 - < 14.0	52	52.0	1.2	42	52.3	1.3

Ratio of sitting height to stature defined as:

$$\frac{\text{sitting height}}{\text{height}} \times 100$$

Table 13

Secular change in height (cm) for Aruban boys and girls between 1954 and 1974

Age groups in years	Boys			Girls		
	Height 1954 *)	Height 1974	Difference	Height 1954 *)	Height 1974	Difference
4.0 - < 5.0	107	106.7	- 0.3	106.5	105.5	- 1.0
5.0 - < 6.0	111	111.7	+ 0.7	110	110.8	+ 0.8
6.0 - < 7.0	114	118.4	+ 4.4	114.5	116.9	+ 2.4
7.0 - < 8.0	119.5	122.9	+ 3.4	120	122.5	+ 2.5
8.0 - < 9.0	124.5	127.9	+ 3.4	125.5	127.5	+ 2.0
9.0 - < 10.0	130	133.9	+ 3.9	129.5	133.1	+ 3.6
10.0 - < 11.0	133	138.6	+ 5.6	134.5	137.6	+ 3.1
11.0 - < 12.0	138	142.1	+ 4.1	138.5	144.3	+ 5.8
12.0 - < 13.0	142	146.4	+ 4.4	144.5	150.5	+ 6.0
13.0 - < 14.0	148	152.3	+ 4.3	150	155.5	+ 5.5

*) Steenmeyer, 1957

Table 14

Secular change in weight (kg) for Aruban boys and girls between 1954 and 1974

Age groups in years	Boys			Girls		
	Weight 1954 *)	Weight 1974	Difference	Weight 1954 *)	Weight 1974	Difference
4.0 - < 5.0	17	18.3	+ 1.3	16.5	17.0	+ 0.5
5.0 - < 6.0	18	19.2	+ 1.2	17.5	19.2	+ 1.7
6.0 - < 7.0	19	21.7	+ 2.7	19	20.7	+ 1.7
7.0 - < 8.0	21	23.4	+ 2.4	21	22.8	+ 1.8
8.0 - < 9.0	23	25.3	+ 2.3	23.5	25.7	+ 2.2
9.0 - < 10.0	25.5	29.1	+ 3.6	25	28.6	+ 3.6
10.0 - < 11.0	26.5	30.8	+ 4.3	28.5	30.9	+ 2.4
11.0 - < 12.0	29	33.4	+ 4.4	29.5	35.3	+ 6.2
12.0 - < 13.0	31.5	36.6	+ 5.1	34	40.3	+ 6.3
13.0 - < 14.0	36.5	40.6	+ 4.1	38	45.1	+ 7.1

*) Steenmeyer, 1957

Table 15

Secular change in sitting height (cm) for Aruban boys and girls between 1954 and 1974

Age groups in years	Boys			Girls		
	Sitting height 1954 *)	Sitting height 1974	Difference	Sitting height 1954 *)	Sitting height 1974	Difference
4.0 - < 5.0	60	60.9	+ 0.9	59	59.2	+ 0.2
5.0 - < 6.0	61	62.5	+ 1.5	60	61.5	+ 1.5
6.0 - < 7.0	63	65.3	+ 2.3	62.5	64.5	+ 2.0
7.0 - < 8.0	64.5	67.2	+ 2.7	65	66.6	+ 1.6
8.0 - < 9.0	66.5	69.2	+ 2.7	67	68.6	+ 1.6
9.0 - < 10.0	69	71.6	+ 2.6	68.5	70.8	+ 2.3
10.0 - < 11.0	70	73.0	+ 3.0	70.5	72.7	+ 2.2
11.0 - < 12.0	71.5	74.8	+ 3.3	72	76.0	+ 4.0
12.0 - < 13.0	73.5	76.4	+ 2.9	75	79.0	+ 4.0
13.0 - < 14.0	76	79.1	+ 3.1	78	81.2	+ 3.2

*) Steenmeyer, 1957

Table 16

Head circumference of Aruban boys (cm)

Age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
0.0 - < 0.25	51	38.4	1.8	36.3	38.3	40.7
0.25 - < 0.50	47	41.9	1.2	40.4	41.9	43.2
0.50 - < 0.75	22	44.3	1.1	43.2	44.2	45.7
0.75 - < 1.0	26	46.0	1.2	45.1	45.8	48.0
1.0 - < 2.0	51	47.1	1.7	45.7	47.2	49.0
2.0 - < 3.0	34	48.9	1.2	47.3	49.1	50.5
3.0 - < 4.0	32	49.7	1.7	47.5	49.8	52.0
4.0 - < 5.0	74	50.8	1.5	48.8	51.0	52.6
5.0 - < 6.0	111	50.7	1.5	49.0	50.7	52.6
6.0 - < 7.0	137	51.2	1.6	49.3	51.2	53.3
7.0 - < 8.0	119	51.5	1.6	49.3	51.3	53.7
8.0 - < 9.0	140	51.7	1.4	50.1	51.8	53.6
9.0 - < 10.0	132	52.4	1.3	50.5	52.3	54.0
10.0 - < 11.0	125	52.5	1.4	50.8	52.5	54.2
11.0 - < 12.0	103	52.9	1.5	50.7	52.8	54.7
12.0 - < 13.0	93	52.7	1.7	50.6	52.5	55.1
13.0 - < 14.0	52	52.9	1.7	50.6	52.9	54.6

Table 17

Head circumference of Aruban girls (cm)

Age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
0.0 - < 0.25	62	37.3	1.8	34.9	37.1	39.9
0.25 - < 0.50	27	40.5	1.4	38.8	40.4	42.5
0.50 - < 0.75	26	43.0	1.2	41.6	42.9	44.6
0.75 - < 1.0	25	43.6	1.5	41.6	43.6	45.6
1.0 - < 2.0	53	46.4	1.3	44.9	46.5	47.8
2.0 - < 3.0	24	47.7	1.6	45.4	48.1	49.7
3.0 - < 4.0	31	48.3	1.7	46.5	48.4	49.8
4.0 - < 5.0	81	49.3	1.4	47.7	48.9	50.8
5.0 - < 6.0	115	49.7	1.4	48.0	49.7	51.5
6.0 - < 7.0	117	50.0	1.4	48.4	49.9	52.0
7.0 - < 8.0	114	50.6	1.5	48.8	50.4	52.4
8.0 - < 9.0	122	50.9	1.5	48.8	41.0	52.6
9.0 - < 10.0	125	51.3	1.5	49.6	51.2	53.4
10.0 - < 11.0	138	51.7	1.7	49.5	51.6	53.9
11.0 - < 12.0	114	52.2	1.6	50.0	52.1	54.2
12.0 - < 13.0	86	52.6	1.6	50.6	52.8	54.5
13.0 - < 14.0	42	52.8	1.6	50.6	52.8	55.0

Table 18

Head length of Aruban boys (cm)

Age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
2.0 - < 3.0	24	16.5	0.7	15.7	16.5	17.5
3.0 - < 4.0	26	16.7	0.7	15.8	16.7	17.9
4.0 - < 5.0	75	17.5	0.7	16.6	17.6	18.3
5.0 - < 6.0	112	17.3	0.7	16.5	17.4	18.1
6.0 - < 7.0	138	17.6	0.8	16.6	17.6	18.6
7.0 - < 8.0	120	17.7	0.8	16.7	17.6	18.7
8.0 - < 9.0	140	17.7	0.7	16.9	17.7	18.7
9.0 - < 10.0	132	17.8	0.7	16.8	17.9	18.7
10.0 - < 11.0	125	18.0	0.7	16.9	18.1	18.8
11.0 - < 12.0	103	18.0	0.7	17.0	18.0	18.9
12.0 - < 13.0	93	17.8	0.8	16.9	17.8	18.9
13.0 - < 14.0	52	17.7	0.9	16.5	17.8	18.5

Table 19

Head length of Aruban girls (cm)

Age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
2.0 - < 3.0	20	15.9	0.8	14.9	15.9	17.1
3.0 - < 4.0	28	16.4	0.6	15.8	16.3	17.2
4.0 - < 5.0	81	16.7	0.6	16.0	16.6	17.5
5.0 - < 6.0	116	16.9	0.7	16.1	16.9	17.7
6.0 - < 7.0	117	17.0	0.6	16.2	16.9	17.8
7.0 - < 8.0	114	17.2	0.7	16.4	17.2	18.0
8.0 - < 9.0	122	17.2	0.6	16.5	17.2	18.0
9.0 - < 10.0	125	17.3	0.6	16.5	17.3	18.1
10.0 - < 11.0	138	17.3	0.7	16.4	17.4	18.2
11.0 - < 12.0	115	17.6	0.7	16.6	17.6	18.4
12.0 - < 13.0	86	17.5	0.7	16.6	17.7	18.4
13.0 - < 14.0	42	17.6	0.8	16.4	17.7	18.5

Table 20

Head breadth of Aruban boys (cm)

age in groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
2.0 - < 3.0	24	12.3	0.5	11.7	12.2	12.8
3.0 - < 4.0	26	12.6	0.5	11.9	12.7	13.1
4.0 - < 5.0	75	13.0	0.5	12.4	13.1	13.7
5.0 - < 6.0	112	13.1	0.5	12.5	13.1	13.8
6.0 - < 7.0	138	13.3	0.5	12.7	13.3	14.0
7.0 - < 8.0	120	13.4	0.5	12.8	13.5	14.1
8.0 - < 9.0	140	13.5	0.5	12.8	13.5	14.0
9.0 - < 10.0	132	13.7	0.5	13.0	13.8	14.2
10.0 - < 11.0	125	13.6	0.4	13.1	13.6	14.2
11.0 - < 12.0	103	13.8	0.5	13.1	13.7	14.4
12.0 - < 13.0	93	13.8	0.5	13.1	13.8	14.5
13.0 - < 14.0	52	13.9	0.5	13.3	13.9	14.4

Table 21

Head breadth of Aruban girls (cm)

age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
2.0 - <3.0	20	12.2	0.5	11.5	12.3	12.7
3.0 - <4.0	28	12.3	0.5	11.7	12.3	12.9
4.0 - <5.0	81	12.7	0.5	12.1	12.8	13.3
5.0 - <6.0	116	12.9	0.6	12.1	12.9	13.7
6.0 - <7.0	117	13.0	0.5	12.5	13.0	13.6
7.0 - <8.0	114	13.1	0.4	12.6	13.1	13.7
8.0 - <9.0	122	13.2	0.5	12.6	13.1	13.9
9.0 - <10.0	125	13.3	0.5	12.7	13.3	13.9
10.0 - <11.0	138	13.4	0.5	12.8	13.4	13.9
11.0 - <12.0	115	13.4	0.5	12.8	13.4	14.0
12.0 - <13.0	86	13.6	0.5	12.9	13.6	14.2
13.0 - <14.0	42	13.6	0.5	12.9	13.6	14.1

Table 22

Triceps skinfold in Aruban boys

age groups in years	n	\bar{X}	SD	Percentiles in mm			Percentiles with log transf. *)		
				P ₁₀	P ₅₀	P ₉₀	P ₁₀	P ₅₀	P ₉₀
4.0 - < 5.0	55	8.4	2.5	6.1	7.6	12.1	163	176	201
5.0 - < 6.0	97	7.4	2.5	4.8	6.7	11.6	148	169	199
6.0 - < 7.0	129	7.2	2.6	4.8	6.4	10.8	148	166	195
7.0 - < 8.0	118	7.5	3.5	5.0	6.4	11.5	151	166	199
8.0 - < 9.0	140	7.1	3.2	4.7	6.4	10.0	145	166	191
9.0 - < 10.0	132	8.1	4.2	5.4	6.9	11.6	156	170	199
10.0 - < 11.0	125	8.2	3.9	5.1	6.9	13.8	152	171	208
11.0 - < 12.0	103	8.5	3.3	5.3	8.0	12.2	154	179	202
12.0 - < 13.0	93	8.3	3.7	5.2	7.3	12.7	153	174	204
13.0 - < 14.0	52	8.7	4.0	4.9	7.4	14.3	149	174	210

*) Log transformation = $100 \log_{10}$ (reading in 0.1 mm - 18) (Edwards et al, 1955)

\bar{X} in mm

Triceps skinfold in Aruban girls

age groups in years	n	\bar{X}	SD	Percentiles in mm			Percentiles with log transf. *)		
				P ₁₀	P ₅₀	P ₉₀	P ₁₀	P ₅₀	P ₉₀
4.0 - < 5.0	52	9.1	2.2	6.9	8.4	11.7	171	182	200
5.0 - < 6.0	88	8.9	2.5	6.0	8.5	12.2	162	183	202
6.0 - < 7.0	108	8.5	2.9	5.9	7.8	11.7	161	177	200
7.0 - < 8.0	114	8.7	3.1	5.7	8.0	14.2	159	179	209
8.0 - < 9.0	122	9.7	3.4	6.5	8.8	13.2	167	185	206
9.0 - < 10.0	125	10.1	3.8	6.4	9.0	15.8	166	186	215
10.0 - < 11.0	138	10.9	4.9	6.8	9.1	17.3	170	186	219
11.0 - < 12.0	115	10.9	4.1	6.6	10.2	16.5	168	192	217
12.0 - < 13.0	86	11.8	4.7	7.1	10.5	19.1	172	194	224
13.0 - < 14.0	42	13.6	5.8	8.1	11.7	20.7	180	200	228

*) Log transformation = $100 \log_{10} (\text{reading in } 0.1 \text{ mm} - 18)$ (Edwards et al, 1955)

\bar{X} in mm

Table 24

Subscapular skinfold in Aruban boys

age groups in years	n	\bar{X}	SD	Percentiles in mm			Percentiles with log transf. *)		
				P ₁₀	P ₅₀	P ₉₀	P ₁₀	P ₅₀	P ₉₀
4.0 - < 5.0	55	5.9	2.2	4.1	5.3	7.6	136	154	176
5.0 - < 6.0	97	5.5	2.4	3.9	4.7	8.1	132	146	180
6.0 - < 7.0	129	5.6	2.7	3.9	4.8	7.6	132	148	176
7.0 - < 8.0	117	5.7	2.9	3.9	4.9	8.4	132	149	182
8.0 - < 9.0	140	5.7	3.0	4.1	4.9	7.3	136	149	174
9.0 - < 10.0	129	5.9	2.5	4.2	5.3	8.3	138	154	181
10.0 - < 11.0	125	6.6	3.7	4.2	5.4	10.1	138	156	192
11.0 - < 12.0	102	6.6	2.2	4.6	6.1	9.3	145	163	188
12.0 - < 13.0	93	7.0	3.7	4.5	5.8	10.9	143	160	196
13.0 - < 14.0	52	7.6	3.9	4.7	6.0	11.6	146	162	199

*) Log transformation = $100 \log_{10} (\text{reading in } 0.1 \text{ mm} - 18)$ (Edwards et al, 1955)

\bar{X} in mm

Table 25

Subscapular skinfold in Aruban girls

age groups in years	n	\bar{X}	SD	Percentiles in mm			Percentiles with log transf. *)		
				P ₁₀	P ₅₀	P ₉₀	P ₁₀	P ₅₀	P ₉₀
4.0 - < 5.0	52	5.9	1.3	4.6	5.6	8.2	145	158	181
5.0 - < 6.0	89	6.6	2.8	4.4	5.9	9.6	142	161	189
6.0 - < 7.0	108	6.5	3.1	4.3	5.7	8.5	140	159	183
7.0 - < 8.0	113	6.7	3.1	4.3	5.6	10.7	140	158	195
8.0 - < 9.0	122	8.0	4.1	4.6	6.6	14.6	145	168	211
9.0 - < 10.0	125	8.3	4.8	4.7	6.6	16.1	146	168	216
10.0 - < 11.0	138	8.6	5.3	4.8	6.9	14.7	148	171	211
11.0 - < 12.0	115	8.6	4.2	5.2	7.3	13.7	153	174	208
12.0 - < 13.0	86	10.3	5.3	5.6	8.7	19.6	158	184	225
13.0 - < 14.0	42	11.0	5.3	6.6	9.3	16.6	168	187	217

*) Log transformation = $100 \log_{10} (\text{reading in } 0.1 \text{ mm} - 18)$ (Edwards et al, 1955)

\bar{X} in mm

Table 26

Arm muscle area for Aruban boys (cm^2)

age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
4.0 - < 5.0	54	16.7	2.7	13.5	16.6	19.5
5.0 - < 6.0	96	16.7	3.0	13.3	16.1	21.2
6.0 - < 7.0	128	17.8	3.5	14.3	17.5	22.2
7.0 - < 8.0	118	18.4	3.5	15.0	18.0	22.0
8.0 - < 9.0	140	19.4	3.5	15.5	19.1	23.7
9.0 - < 10.0	132	21.0	4.3	16.4	20.4	26.8
10.0 - < 11.0	125	21.2	3.4	17.6	20.9	24.9
11.0 - < 12.0	103	22.9	3.8	18.7	22.4	28.2
12.0 - < 13.0	93	24.6	5.3	19.5	23.2	31.0
13.0 - < 14.0	52	27.3	6.1	20.6	26.3	36.1

Table 27

Arm muscle area for Aruban girls (cm²)

age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
4.0 - < 5.0	52	15.2	2.6	12.4	14.8	18.7
5.0 - < 6.0	86	16.6	3.7	12.9	15.9	20.7
6.0 - < 7.0	108	17.1	3.5	13.6	16.4	22.7
7.0 - < 8.0	114	17.4	3.1	14.1	17.0	22.1
8.0 - < 9.0	122	19.3	4.5	15.0	18.5	24.5
9.0 - < 10.0	125	20.0	4.4	15.8	19.3	26.8
10.0 - < 11.0	138	20.9	4.6	16.1	20.2	26.6
11.0 - < 12.0	115	22.8	4.9	17.2	22.1	28.9
12.0 - < 13.0	86	25.2	6.0	18.6	24.6	30.9
13.0 - < 14.0	42	26.3	5.0	20.8	25.7	33.0

Table 28

Arm fat area for Aruban boys (cm²)

age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
4.0 - < 5.0	54	6.7	2.5	4.2	5.9	10.0
5.0 - < 6.0	96	5.8	2.5	3.4	5.1	9.4
6.0 - < 7.0	128	5.9	2.9	3.6	5.0	9.7
7.0 - < 8.0	118	6.3	4.0	3.8	5.0	10.0
8.0 - < 9.0	140	6.2	3.8	3.7	5.2	9.0
9.0 - < 10.0	132	7.4	5.4	4.3	5.8	11.7
10.0 - < 11.0	125	7.4	4.4	4.2	6.0	13.3
11.0 - < 12.0	103	8.0	3.9	4.6	7.0	12.5
12.0 - < 13.0	93	8.1	4.8	4.6	6.7	13.5
13.0 - < 14.0	52	9.0	5.0	4.9	6.6	15.4

Table 29

Arm fat area for Aruban girls (cm²)

age groups in years	n	\bar{X}	SD	Percentiles		
				P ₁₀	P ₅₀	P ₉₀
4.0 - < 5.0	52	7.0	2.1	5.1	6.2	9.0
5.0 - < 6.0	86	7.2	2.7	4.3	6.7	10.5
6.0 - < 7.0	108	6.9	3.3	4.2	6.1	10.5
7.0 - < 8.0	114	7.2	3.4	4.3	6.2	12.8
8.0 - < 9.0	122	8.5	4.0	5.1	7.2	12.6
9.0 - < 10.0	125	9.1	4.6	4.9	7.7	15.6
10.0 - < 11.0	138	10.1	6.1	5.7	7.8	19.0
11.0 - < 12.0	115	10.4	5.1	5.3	8.8	17.5
12.0 - < 13.0	86	12.0	6.4	6.3	9.9	20.7
13.0 - < 14.0	42	14.2	7.8	7.6	11.9	22.0

Table 30

Percentage of Aruban boys attaining various stages of pubertal development in each age interval

age groups in years	n	G ₂	G ₃	G ₄	G ₅	PH ₂	PH ₃	PH ₄	PH ₅
8.0 - < 8.5	72	-	-	-	-	1.4	-	-	-
8.5 - < 9.0	68	1.5	-	-	-	0.0	-	-	-
9.0 - < 9.5	70	1.4	-	-	-	2.9	-	-	-
9.5 - < 10.0	62	8.1	-	-	-	6.5	-	-	-
10.0 - < 10.5	77	10.4	-	-	-	3.9	-	-	-
10.5 - < 11.0	48	8.3	-	-	-	6.3	-	-	-
11.0 - < 11.5	55	38.2	-	-	-	16.4	-	-	-
11.5 - < 12.0	48	37.5	4.2	2.1	-	27.1	2.1	2.1	-
12.0 - < 12.5	63	69.8	7.9	4.8	1.6	34.9	11.1	6.4	1.6
12.5 - < 13.0	30	66.7	23.3	6.7	0.0	40.0	10.0	6.7	3.3
13.0 - < 13.5	35	82.9	34.3	17.1	2.9	65.7	37.1	20.0	2.9
13.5 - < 14.0	17	100.0	52.9	29.4	0.0	76.5	52.9	23.5	0.0

Percentage of Aruban girls attaining various stages of pubertal development in each age interval

age groups in years	n	B ₂	B ₃	B ₄	B ₅	PH ₂	PH ₃	PH ₄	PH ₅	Menarche
7.5 - < 8.0	55	-	-	-	-	-	-	-	-	-
8.0 - < 8.5	60	-	-	-	-	1.7	-	-	-	-
8.5 - < 9.0	62	4.8	-	-	-	4.8	-	-	-	-
9.0 - < 9.5	68	19.1	2.9	-	-	10.3	-	-	-	-
9.5 - < 10.0	57	17.5	3.5	-	-	24.6	1.8	-	-	-
10.0 - < 10.5	73	28.8	5.5	1.4	-	21.9	4.1	-	-	1.4
10.5 - < 11.0	65	49.2	23.1	4.6	-	32.3	9.2	1.5	-	3.1
11.0 - < 11.5	65	76.9	46.2	9.2	-	61.5	23.1	6.2	-	4.6
11.5 - < 12.0	50	74.0	44.0	24.0	-	70.0	48.0	16.0	2.0	8.0
12.0 - < 12.5	57	84.2	64.9	33.3	1.8	73.7	59.7	31.6	1.8	29.8
12.5 - < 13.0	29	93.1	89.7	31.0	0.0	89.7	82.8	24.1	0.0	20.7
13.0 - < 13.5	24	100.0	87.5	62.5	8.3	91.7	83.3	41.7	8.3	62.5
13.5 - < 14.0	17	100.0	100.0	83.3	16.7	100.0	94.4	77.8	11.1	70.6

Table 32

Order of birth and height for boys

age groups in years	Group I			Group II			Group III			S*
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD	
0 - < 1	117	63.9	7.1	20	64.4	7.4	8	-	-	
1 - < 2	34	81.5	4.5	12	83.2	6.7	4	-	-	
2 - < 3	25	90.5	4.1	8	-	-	-	-	-	
3 - < 4	20	99.2	3.7	7	-	-	4	-	-	
4 - < 5	50	107.6	4.1	21	104.9	5.4	3	-	-	
5 - < 6	70	111.9	4.6	33	111.0	6.7	7	-	-	
6 - < 7	77	119.2	4.8	28	116.6	6.7	13	117.5	5.4	
7 - < 8	48	124.0	5.8	31	123.1	6.2	20	121.6	4.9	
8 - < 9	41	129.8	3.7	35	128.2	5.1	32	126.0	5.1	S
9 - < 10	47	135.5	6.4	36	134.1	6.4	23	130.8	6.7	S
10 - < 11	41	139.9	5.4	22	138.2	7.2	27	137.2	5.4	
11 - < 12	26	144.5	6.1	27	140.6	5.1	19	142.1	5.5	
12 - < 13	20	147.1	6.4	19	149.4	7.7	23	143.8	7.5	
13 - < 14	16	153.4	4.4	10	154.3	9.7	8	-	-	

Age groups with a number of nine or less were left out

S* means: the difference between group I and group III is significant (t-test of Student, $\alpha = 0.05$)

Group I order of birth is one or two

Group II order of birth is three, four or five

Group III order of birth is six or more

Order of birth and height for girls

age groups in years	Group I			Group II			Group III			S *
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD	
0 - < 1	113	61.5	7.3	23	63.1	8.1	6	-	-	
1 - < 2	38	81.1	4.0	11	81.3	3.6	4	-	-	
2 - < 3	20	90.8	4.4	3	-	-	-	-	-	
3 - < 4	22	97.7	5.1	6	-	-	2	-	-	
4 - < 5	63	105.9	4.4	12	104.7	4.3	5	-	-	
5 - < 6	72	111.5	5.3	25	111.0	4.4	12	108.4	4.8	
6 - < 7	56	117.1	5.4	34	117.7	3.8	13	116.1	4.6	
7 - < 8	44	123.6	5.5	23	122.3	4.1	20	121.3	4.8	
8 - < 9	43	129.0	5.5	28	126.4	5.3	18	127.1	6.2	
9 - < 10	41	133.5	5.6	32	134.6	6.0	25	132.5	6.8	
10 - < 11	49	138.1	6.8	33	139.0	7.8	30	136.4	6.2	
11 - < 12	35	143.5	8.1	31	146.5	6.6	37	142.9	7.3	
12 - < 13	19	154.2	5.4	26	150.8	6.8	27	148.4	7.9	S
13 - < 14	10	158.0	6.3	17	155.7	4.9	12	151.7	8.4	

Age groups with a number of nine or less were left out

S * means: the difference between group I and group III is significant (t-test of Student, $\alpha = 0.05$)

Group I : order of birth is one or two;

Group II : order of birth is three, four or five;

Group III : order of birth is six or more.

Table 34

Order of birth and weight for boys

age groups in years	Group I			Group II			Group III			S *
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD	
0 - < 1	117	7.1	2.1	20	7.2	2.0	8	-	-	
1 - < 2	32	12.0	2.1	12	12.2	1.8	4	-	-	
2 - < 3	25	13.8	1.9	8	-	-	-	-	-	
3 - < 4	19	15.3	2.6	8	-	-	4	-	-	
4 - < 5	50	18.6	2.5	21	17.9	2.8	3	-	-	
5 - < 6	69	19.3	3.3	33	18.9	3.7	7	-	-	
6 - < 7	77	22.4	4.4	28	20.6	3.9	13	20.0	3.9	
7 - < 8	48	24.1	4.8	31	24.2	6.3	20	21.9	2.3	
8 - < 9	41	27.4	5.7	35	25.1	3.8	32	23.7	3.1	
9 - < 10	46	29.9	6.9	36	29.5	7.2	22	28.5	7.4	
10 - < 11	41	32.3	5.7	22	30.1	6.0	27	30.5	5.0	
11 - < 12	26	36.0	6.6	27	32.1	3.9	19	33.1	4.1	
12 - < 13	20	36.9	6.1	19	38.4	7.7	23	35.0	7.3	
13 - < 14	16	42.3	8.7	10	42.7	9.2	8	-	-	

Age groups with a number of nine or less were left out

S * means: the difference between group I and group III is significant (t-test or Student: $\alpha = 0.05$)

Group I: order of birth is one or two;

Group II: order of birth is three, four or five;

Group III: order of birth is six or more

Order of birth and weight for girls

age groups in years	Group I			Group II			Group III			S *
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD	
0 - < 1	113	6.3	2.0	23	6.7	2.1	6	-	-	
1 - < 2	38	11.2	1.5	11	11.8	2.7	4	-	-	
2 - < 3	20	14.1	2.3	3	-	-	-	-	-	
3 - < 4	22	15.5	2.6	6	-	-	2	-	-	
4 - < 5	63	17.2	2.4	12	16.7	2.4	5	-	-	
5 - < 6	72	19.4	3.7	25	19.2	3.7	12	19.6	3.4	
6 - < 7	56	21.5	4.5	34	20.0	2.5	13	20.8	4.4	
7 - < 8	44	23.8	4.7	23	22.7	3.4	20	21.2	2.5	
8 - < 9	42	27.1	6.5	28	24.6	4.4	18	26.0	7.9	
9 - < 10	41	29.3	7.0	32	29.3	6.6	25	28.6	5.9	
10 - < 11	49	31.3	8.3	33	31.1	8.0	30	31.3	8.1	
11 - < 12	35	35.2	8.6	31	37.7	8.1	37	33.6	7.9	
12 - < 13	19	46.0	7.9	26	39.4	7.7	27	37.4	8.5	S
13 - < 14	10	50.8	9.8	17	44.4	7.6	12	40.9	7.6	S

Age groups with a number of nine or less were left out

S* means : the difference between group I and group III is significant (t-test of Student $\alpha = 0.05$)

Group I: order of birth is one or two;

Group II: order of birth is three, four or five;

Group III: order of birth is six or more

Table 36

Order of birth and triceps skinfold for boys and girls

age groups in years	Group I			Group II			Group III			S *
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD	
boys										
4 - < 5	39	8.2	2.4	13	9.2	2.7	2	-	-	
5 - < 6	58	7.6	2.7	30	7.3	2.4	7	-	-	
6 - < 7	70	7.5	2.7	27	7.0	2.3	13	6.4	2.5	
7 - < 8	46	8.2	4.2	31	7.5	4.1	20	6.9	1.4	
8 - < 9	41	8.1	4.4	35	7.2	2.8	32	6.6	2.3	S
9 - < 10	47	8.3	3.8	36	8.6	4.9	23	8.3	5.3	
10 - < 11	41	9.3	4.6	22	8.4	4.6	27	7.9	3.6	
11 - < 12	26	9.7	4.1	27	8.3	2.6	19	8.3	2.1	
12 - < 13	20	8.7	3.5	19	8.7	5.0	23	8.2	3.1	
13 - < 14	16	9.7	5.1	10	8.8	3.4	8	-	-	
girls	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD	S
4 - < 5	38	9.3	2.1	9	-	-	4	-	-	
5 - < 6	58	8.9	2.4	17	9.0	2.6	9	-	-	
6 - < 7	48	9.1	3.4	33	7.9	2.2	13	8.6	3.2	
7 - < 8	44	9.4	3.7	23	8.3	2.8	20	8.0	2.0	
8 - < 9	43	10.2	4.0	28	9.3	2.6	18	10.1	3.7	
9 - < 10	41	10.5	4.6	32	10.5	3.8	25	10.3	3.1	
10 - < 11	49	11.7	6.1	33	10.2	3.6	30	11.5	5.3	
11 - < 12	35	10.9	4.7	31	11.9	3.9	37	10.2	4.0	
12 - < 13	19	15.1	5.3	26	11.4	3.8	27	10.6	4.2	S
13 - < 14	10	17.1	8.1	17	13.7	5.2	12	10.9	3.0	S

Age groups with a number of nine or less were left out

S* means: the difference between group I and group III is significant (t-test of Student, $\alpha = 0.05$)

Group I : order of birth is one or two;

Group II : order of birth is three, four or five;

Group III : order of birth is six or more

Table 37

Order of birth and menarche

age groups in years	Group I		Group II		Group III	
	n	% ')	n	% ')	n	% ')
10.0 - < 10.5	27	0.0	10	0.0	18	0.0
10.5 - < 11.0	22	0.0	23	4.4	12	0.0
11.0 - < 11.5	17	0.0	20	10.0	22	0.0
11.5 - < 12.0	18	11.1	11	9.1	15	0.0
12.0 - < 12.5	17	47.1	14	28.6	17	17.7
12.5 - < 13.0	2	-	12	16.7	10	20.0

Age groups with a number of nine or less were left out

Group I : order of birth is one or two

Group II : order of birth is three, four or five

Group III : order of birth is six or more.

') percentage of girls who experienced menarche

Menarche for different groups of family size, and menarche for different groups of family income are omitted because of the very small age groups from nine years on.

Family size and height for boys

age groups in years	Group I			Group II			Group III		
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD
0 - < 1	118	63.9	7.0	20	64.9	7.5	7	-	-
1 - < 2	34	81.5	4.5	12	83.2	6.7	4	-	-
2 - < 3	24	90.6	4.1	9	-	-	-	-	-
3 - < 4	17	99.7	3.8	8	-	-	5	-	-
4 - < 5	36	107.9	4.0	35	105.7	5.0	3	-	-
5 - < 6	45	111.9	4.3	52	111.5	6.2	13	111.8	4.8
6 - < 7	43	119.8	5.3	60	117.8	5.3	13	116.4	6.3
7 - < 8	20	125.4	6.2	52	122.7	5.8	24	122.6	5.3
8 - < 9	15	130.6	3.5	48	129.1	4.3	37	125.8	5.3
9 - < 10	13	136.5	6.7	61	135.0	6.5	27	131.0	6.3
10 - < 11	8	-	-	44	138.4	6.0	36	138.1	6.0
11 - < 12	6	-	-	33	143.3	5.6	25	140.2	5.4
12 - < 13	-	-	-	26	150.1	6.8	33	144.1	7.0
13 - < 14	2	-	-	15	153.9	5.3	15	150.3	9.6

Age groups with a number of nine or less were left out.

Group I : number of children in the family is one or two

Group II : number of children in the family is three, four or five

Group III : number of children in the family is six or more.

Family size and height for girls

age groups in years	Group I			Group II			Group III		
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD
0 - < 1	111	61.5	7.4	25	63.0	7.8	6	-	-
1 - < 2	38	81.1	4.0	10	81.0	3.6	5	-	-
2 - < 3	18	90.9	4.6	5	-	-	-	-	-
3 - < 4	16	97.3	5.4	12	96.7	5.3	2	-	-
4 - < 5	43	105.9	4.8	30	105.4	4.0	5	-	-
5 - < 6	44	112.5	5.2	46	110.4	4.8	15	108.4	4.3
6 - < 7	29	118.1	5.5	50	116.5	4.5	16	116.6	4.3
7 - < 8	19	124.0	5.3	35	123.7	5.1	22	120.9	4.9
8 - < 9	16	129.2	5.3	48	128.1	5.6	22	125.7	6.0
9 - < 10	12	133.9	6.8	51	134.4	5.6	31	132.7	6.5
10 - < 11	4	-	-	65	137.7	6.9	41	137.7	7.4
11 - < 12	9	-	-	42	145.7	7.3	53	143.4	7.5
12 - < 13	2	-	-	26	153.7	7.2	44	149.1	6.9
13 - < 14	3	-	-	11	156.3	4.6	24	153.4	7.2

Age groups with a number of nine or less were left out

Group I : number of children in the family is one or two

Group II : number of children in the family is three, four or five

Group III : number of children in the family is six or more.

Table 40

Family size and weight for boys

age groups in years	Group I			Group II			Group III		
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD
0 - <1	118	7.1	2.1	20	7.4	2.1	7	-	-
1 - <2	32	12.0	2.1	12	12.2	1.8	4	-	-
2 - <3	24	13.9	1.9	9	-	-	-	-	-
3 - <4	16	15.5	2.7	8	-	-	6	-	-
4 - <5	36	18.5	2.5	35	18.2	2.7	3	-	-
5 - <6	45	19.3	3.1	51	19.2	3.8	13	18.1	2.2
6 - <7	43	23.1	4.6	60	21.0	3.8	13	19.8	4.0
7 - <8	20	26.0	6.5	52	23.0	3.8	24	23.4	5.9
8 - <9	15	27.3	6.0	48	26.1	4.5	37	23.7	3.0
9 - <10	12	31.5	9.4	61	29.8	6.7	26	28.1	7.0
10 - <11	8	-	-	44	30.6	4.7	36	30.8	5.3
11 - <12	6	-	-	33	34.0	5.6	25	32.4	4.3
12 - <13	-	-	-	26	39.2	7.7	33	34.6	6.0
13 - <14	2	-	-	15	44.7	9.0	15	36.6	6.7

Age groups with a number of nine or less were left out.

Group I: number of children in the family is one or two

Group II: number of children in the family is three, four or five

Group III: number of children in the family is six or more.

Family size and weight for girls

age groups in years	Group I			Group II			Group III		
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD
0 - < 1	111	6.3	2.0	25	6.6	2.0	6	-	-
1 - < 2	38	11.2	1.5	10	11.9	2.9	5	-	-
2 - < 3	18	14.2	2.3	5	-	-	-	-	-
3 - < 4	16	15.0	2.4	12	15.5	3.2	2	-	-
4 - < 5	43	17.2	2.6	30	16.9	2.1	5	-	-
5 - < 6	44	19.9	4.0	46	19.0	3.6	15	19.2	3.2
6 - < 7	29	21.9	4.2	50	20.3	3.6	16	20.4	4.1
7 - < 8	19	23.9	3.9	35	23.4	4.3	22	21.2	2.9
8 - < 9	16	26.9	7.1	47	26.2	5.7	22	25.0	7.3
9 - < 10	12	31.6	5.7	51	29.3	7.3	31	28.4	5.7
10 - < 11	4	-	-	65	30.3	6.6	41	32.4	9.7
11 - < 12	9	-	-	42	37.5	8.1	53	34.1	8.5
12 - < 13	2	-	-	26	42.2	8.4	44	38.7	8.1
13 - < 14	3	-	-	11	49.4	9.6	24	42.1	7.5

Age groups with a number of nine or less were left out.

Group I: number of children in the family is one or two

Group II: number of children in the family is three, four or five

Group III: number of children in the family is six or more.

Table 42

Family size and triceps skinfold for boys and girls

age groups in years	Group I			Group II			Group III		
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD
boys									
4 - < 5	26	8.2	2.4	26	8.7	2.6	2	-	-
5 - < 6	38	7.7	2.9	44	7.4	2.4	13	6.3	1.3
6 - < 7	39	8.0	3.0	57	6.9	2.3	12	6.4	2.5
7 - < 8	19	10.0	5.8	51	6.9	2.4	24	7.9	3.8
8 - < 9	15	8.2	5.0	48	7.7	3.4	37	6.6	2.2
9 - < 10	13	9.4	4.9	61	8.4	4.3	27	7.9	5.0
10 - < 11	8	-	-	44	8.6	4.3	36	8.2	3.9
11 - < 12	6	-	-	33	9.0	3.7	25	8.4	2.7
12 - < 13	-	-	-	26	9.1	4.5	33	8.0	3.3
13 - < 14	2	-	-	15	10.9	5.1	15	7.3	2.0
girls									
4 - < 5	22	9.5	2.3	23	9.1	1.9	4	-	-
5 - < 6	32	9.4	2.0	39	8.7	2.7	9	-	-
6 - < 7	25	8.9	3.3	45	8.4	2.7	16	8.5	3.1
7 - < 8	19	9.6	4.0	35	8.7	2.9	22	8.0	2.0
8 - < 9	16	9.1	3.1	48	10.3	3.8	22	9.7	3.4
9 - < 10	12	12.4	4.9	51	10.3	4.2	31	10.1	3.2
10 - < 11	4	-	-	65	10.8	4.8	41	11.7	5.9
11 - < 12	9	-	-	42	11.8	4.4	53	10.4	4.1
12 - < 13	2	-	-	26	12.0	4.2	44	11.7	4.6
13 - < 14	3	-	-	11	18.4	7.5	24	11.7	4.1

Age groups with a number of nine or less were left out

Group I : number of children in the family is one or two

Group II : number of children in the family is three,
four or five

Group III : number of children in the family is six or more.

Family income and height for boys

age groups in years	Group I			Group II			Group III			S *
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD	
0 - < 1	88	63.4	6.9	43	65.2	7.4	13	63.1	5.0	
1 - < 2	25	80.5	5.0	15	83.4	5.2	6	-	-	
2 - < 3	17	90.8	4.4	6	-	-	6	-	-	
3 - < 4	15	99.0	5.0	11	100.6	4.2	2	-	-	
4 - < 5	32	107.5	5.2	21	105.7	4.6	14	107.6	3.0	
5 - < 6	65	111.5	5.2	26	111.7	6.3	12	113.1	4.5	
6 - < 7	79	118.1	5.4	41	118.6	5.3	9	-	-	
7 - < 8	58	122.5	5.7	38	124.0	5.4	14	123.7	4.5	
8 - < 9	82	127.5	5.3	35	129.0	4.6	13	129.3	4.8	
9 - < 10	65	133.4	6.3	42	133.9	6.9	14	137.8	5.7	S
10 - < 11	76	137.9	5.4	33	139.5	6.6	9	-	-	
11 - < 12	60	141.8	5.9	28	142.3	5.5	11	142.9	4.8	
12 - < 13	62	145.7	7.7	21	147.7	7.8	6	-	-	
13 - < 14	32	150.8	7.4	15	155.5	6.8	2	-	-	

Age groups with a number of nine or less were left out

S * means : the difference between group I and group III is significant (t-test of Student, $\alpha = 0.05$)

Group I: family income 500 Naf a month
 Group II: family income 500-1000 Naf a month
 Group III: family income 1000 Naf a month

Table 44

Family income and height for girls

age groups in years	Group I			Group II			Group III			S *
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD	
0 - < 1	92	62.1	7.2	34	61.5	8.3	11	63.4	6.4	
1 - < 2	27	81.4	3.4	11	80.5	4.0	7	-	-	
2 - < 3	10	92.0	4.5	9	-	-	-	-	-	
3 - < 4	12	96.3	5.7	3	-	-	5	-	-	
4 - < 5	35	105.2	4.2	29	105.6	4.0	10	107.3	4.2	
5 - < 6	32	109.8	5.6	37	112.1	5.0	18	112.7	3.8	S
6 - < 7	68	117.3	5.0	36	116.4	4.9	8	-	-	
7 - < 8	64	122.3	5.3	37	122.4	5.3	6	-	-	
8 - < 9	71	127.0	5.5	38	127.8	5.7	5	-	-	
9 - < 10	67	133.2	6.7	32	133.3	6.2	7	-	-	
10 - < 11	83	137.0	7.0	38	137.4	6.9	7	-	-	
11 - < 12	64	142.8	7.0	35	146.7	7.4	5	-	-	
12 - < 13	54	150.1	7.5	22	151.0	7.3	3	-	-	
13 - < 14	32	155.2	7.1	6	-	-	-	-	-	

Age groups with a number of nine or less were left out

S * means : the difference between group I and group III is significant (t-test of Student, $\alpha = 0.05$)

Group I: Family income 500 Naf a month

Group II: Family income 500 - 1000 Naf a month

Group III: Family income 1000 Naf a month

Family income and weight for boys

age groups in years	Group I			Group II			Group III			S*
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD	
0 - < 1	88	6.9	1.9	43	7.6	2.3	13	7.2	1.7	
1 - < 2	24	12.2	2.8	14	12.2	1.8	6	-	-	
2 - < 3	17	13.8	2.1	6	-	-	6	-	-	
3 - < 4	16	15.2	3.2	10	15.0	1.9	2	-	-	
4 - < 5	32	19.0	2.7	21	17.6	2.9	14	18.6	1.6	
5 - < 6	64	19.0	3.5	26	19.4	3.8	12	20.1	2.8	
6 - < 7	79	21.7	4.5	41	21.2	3.4	9	-	-	
7 - < 8	58	23.2	5.1	38	24.0	5.0	14	23.9	3.5	
8 - < 9	82	25.0	4.7	35	25.9	3.1	13	27.1	6.7	
9 - < 10	63	28.7	5.8	42	28.8	6.7	14	33.8	9.4	
10 - < 11	76	30.1	5.0	33	32.0	6.1	9	-	-	
11 - < 12	60	33.6	5.7	28	33.3	4.3	11	34.3	6.5	
12 - < 13	62	36.2	7.7	21	37.0	7.9	6	-	-	
13 - < 14	32	38.7	8.1	15	45.2	8.0	2	-	-	

Age groups with a number of nine or less were left out

S* means : the difference between group I and group III is significant (t-test of Student $\alpha = 0.05$)

Group I : Family income 600 Naf a month

Group II : Family income 500 - 1000 Naf a month

Group III : Family income 1000 Naf a month

Table 46

Family income and weight for girls

age groups in years	Group I			Group II			Group III			S *
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD	
0 - < 1	92	6.4	2.0	34	6.2	2.1	11	7.0	2.0	
1 - < 2	27	11.2	1.6	11	11.0	1.2	7	-	-	
2 - < 3	10	14.4	1.8	9	-	-	-	-	-	
3 - < 4	12	15.5	3.2	3	-	-	5	-	-	
4 - < 5	35	17.0	2.2	29	17.3	2.3	10	16.7	1.8	
5 - < 6	52	18.7	3.9	37	19.7	3.0	18	20.0	4.3	
6 - < 7	68	21.1	4.3	36	20.2	3.0	8	-	-	
7 - < 8	64	22.8	3.9	37	22.6	3.9	6	-	-	
8 - < 9	70	25.7	6.0	38	25.5	6.0	5	-	-	
9 - < 10	67	28.9	5.5	32	29.1	8.5	7	-	-	
10 - < 11	83	31.1	8.2	38	29.9	7.0	7	-	-	
11 - < 12	64	34.2	8.0	35	37.3	8.1	5	-	-	
12 - < 13	54	39.5	8.7	22	42.1	9.8	3	-	-	
13 - < 14	32	45.0	9.0	6	-	-	-	-	-	

Age groups with a number of nine or less were left out

S * means : the difference between group I and group III is significant (t-test of Student, $\alpha = 0.05$)

Group I: Family income 500 Naf a month
 Group II: Family income 500 - 1000 Naf a month
 Group III: Family income 1000 Naf a month

Table 47

Family income and triceps skinfold ') for boys and girls

age groups in years	Group I			Group II			Group III			S*
	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD	
boys										
4 - < 5	26	178.9	17.8	16	174.7	12.0	9	-	-	
5 - < 6	59	171.0	18.4	23	174.2	17.5	6	-	-	
6 - < 7	77	169.4	19.2	38	167.9	14.5	8	-	-	
7 - < 8	57	170.2	19.0	37	170.3	22.1	14	169.9	19.1	
8 - < 9	82	167.0	19.0	35	171.0	17.6	13	171.8	23.0	
9 - < 10	65	173.6	19.2	42	172.9	20.4	14	182.1	27.9	
10 - < 11	76	173.1	19.9	33	177.7	23.2	9	-	-	
11 - < 12	60	178.2	19.3	28	178.2	17.9	11	186.2	13.6	
12 - < 13	62	175.7	20.8	21	174.6	23.9	6	-	-	
13 - < 14	32	177.0	22.9	15	180.4	23.7	2	-	-	
girls	n	\bar{X}	SD	n	\bar{X}	SD	n	\bar{X}	SD	
4 - < 5	27	183.2	11.1	17	187.5	13.4	7	-	-	
5 - < 6	44	181.3	16.0	29	185.0	12.4	13	179.9	14.1	
6 - < 7	65	180.1	16.7	30	178.2	15.0	8	-	-	
7 - < 8	64	179.5	16.5	37	179.0	17.1	6	-	-	
8 - < 9	71	186.7	18.7	38	184.9	14.9	5	-	-	
9 - < 10	67	189.5	16.4	32	187.4	23.0	7	-	-	
10 - < 11	83	191.4	20.0	38	189.1	18.6	7	-	-	
11 - < 12	64	189.3	19.6	35	195.2	16.5	5	-	-	
12 - < 13	54	195.8	20.6	22	198.2	17.1	3	-	-	
13 - < 14	32	202.2	18.5	6	-	-	-	-	-	

Age groups with a number of nine or less were left out.

S* means : the difference between group I and group III is significant (t-test of Student, $\alpha = 0.05$).

') with transformation to a logarithmic scale (Edwards et al, 1955)

Group I : Family income 500 Naf a month;
 Group II : Family income 500 - 1000 Naf a month;
 Group III : Family income 1000 Naf a month.