

Original Article

The double malnutritional burden and regional disparities in Taiwan elementary school children: survey database and reference values

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This special issue on the Nutrition and Health Survey in Taiwan Elementary School Children carried out during 2001-2002 (NAHSIT Children 2001-2002) portrays the current dilemma of the so-called "double nutritional burden" in Taiwanese children with papers addressing topics on the dietary characteristics, nutrition-related knowledge, attitudes, and behaviors, usage of nutritional supplements, nutritional biochemistry, and various aspects of diet, nutrition, behavior, health and wellbeing in children. The emergence of a double health burden in Taiwanese children is more prevalent in the underprivileged and less urbanized communities than in metropolitan cities. The NAHSIT Children 2001-2002 survey provides age-, and gender- specific percentile values for anthropometric measurements, physiological variables like physical fitness, blood pressure and pulse, respiratory function and bone density; nutritional hematology and biochemistry. For international comparison, these reference data are tabulated in this report and the survey data are made available in the data archive system maintained by the Center for Survey Research, Academia Sinica.

Key Words: Nutrition and Health Survey in Taiwan Elementary School Children, NAHSIT Children 2001-2002, double malnutrition burden, database, reference values

INTRODUCTION

The Nutrition and Health Survey in Taiwan Elementary School Children (NAHSIT Children) carried out during 2001-2002 is one among a series of NAHSIT surveys¹⁻² sponsored by the Bureau of Foods and Hygiene of the Department of Health in Taiwan. The NAHSIT Children 2001-2002 survey was specifically designed for elementary school children, which gave a snapshot of the situation in Taiwan in the early 21st century. It provides information on nutrition, and health, allowing us not only to document the current dilemma of the so-called "double nutritional burden" in Taiwanese children, but also to analyze and hypothesize why these children are in this situation.

Researchers from several disciplinary areas were involved in the planning and design phases. In addition to information about nutrition, and health, we assessed nutrition-related knowledge, attitudes, behaviors, and emotional disturbance. Not only children's, but also parents' and caretakers' profiles were included. Variables at both the individual level and the aggregate level such as school environment and resources were considered. The immediate aim was to understand the particular relationships between diet and wellbeing. The long-term goal was to develop and implement appropriate public health and educational measures to promote health through nutrition and to help our children develop their full potential.

A detailed description of the study design, methods, and scope of the NAHSIT Children 2001-2002 survey is in-

cluded in this issue.³ Papers address the dietary characteristics, nutrition-related knowledge, attitudes, and behaviors, usage of nutritional supplements, nutritional biochemistry, and various aspects on diet, nutrition, behavior, health and wellbeing of children.

In relation to the Taiwanese Dietary Reference Intakes (DRIs),⁴ the children's mean nutrient intakes demonstrate that the average Taiwan child has adequate nutrient intakes, except for calcium.⁵ Over 90% of the children would appear to be low in dietary calcium intakes, which raises questions about the validity of the calcium DRIs. On the basis of intakes and nutritional biochemistry, a substantial number of boys and girls in upper grades had multiple marginal deficiencies of vitamins and minerals.⁶⁻⁸

The prevalence of obesity¹⁰ has doubled (in girls) or tripled (in boys) since NAHSIT 1993-1996. Along with this, there have been increases in blood pressure, and also in the metabolic indices of blood glucose, lipids, and uric acid.⁹⁻¹⁰ The mean dietary cholesterol intake levels were well over 300 mg per day⁵ and close to 20% had plasma cholesterol concentrations over 200 mg/dL.¹⁰

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Accepted 12 July 2007

Our data along with other evidence indicate that this double health burden is likely to be due principally to more sedentary lifestyle and diets characterized by much refined food and imbalanced distribution of the six Taiwanese food groups.⁵ The consequences go beyond the usual increased risk of obesity and chronic diseases. Food preference and frequency¹¹ and dietary supplements¹² have been associated with school performance and emotional disturbance, pointing to the impact of food intake and nutritional status on people's total wellbeing. We were also able to connect dietary practices to parental characteristics and household environment.¹³

We over-sampled populations in several remote regions including mountainous areas, the east coast, Penghu islands, and regions with low population densities, so that there would be sufficient numbers to discover important nutritional and health issues among the underprivileged. The afore-mentioned emergence of a double health burden in Taiwanese children is more prevalent in these underprivileged and less urbanized communities than in metropolitan cities, pointing to the urgent need for public health action, both nation-wide and locally.

Nutrition and health-related reference values are lacking for children. The NAHSIT Children survey provides age-, and gender- specific percentile values for anthropometric measurements, physiological variables like physical fitness, blood pressure and pulse, respiratory function and bone density; nutritional haematology and biochemistry like complete blood count, clinical and nutritional biochemistry. They are tabulated in this report for future comparison and trend analysis. (Table 1A - 38B)

We hope that publishing this series of papers in the Asia Pacific Journal of Clinical Nutrition will provide information for the international community about the nutritional and health burdens faced by Taiwan children who probably reflect the changing nutritional scene elsewhere in North-East Asia if not beyond. The survey data will be available in the public data archive system¹⁴ maintained by the Center for Survey Research, Academia Sinica, to which application can be made for access to the data by local and international academics. Such access will promote international comparative studies which may further enhance the understanding of nutrition and health in children.

Table 1A. Age-, Sex- specific percentile values for height (cm), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	112	244	227	213	223	230	85	100	182	190	190	196	182	99
1th	107.0	111.4	119.9	123.9	128.2	132.4	135.7	107.3	112.9	116.3	123.0	126.0	130.8	129.1
3th	109.2	115.1	121.9	124.5	131.0	135.5	139.4	110.5	113.8	119.1	123.7	130.2	135.0	140.8
5th	110.9	116.6	122.4	125.1	131.9	137.2	140.7	111.2	115.3	120.4	124.7	131.3	136.3	142.5
10th	113.1	118.2	123.2	127.6	133.2	140.4	144.8	111.9	116.0	123.1	126.3	133.0	138.7	145.6
15th	114.2	119.1	124.4	129.2	134.7	140.9	145.8	113.4	117.6	125.1	127.4	135.2	140.9	147.0
20th	115.2	120.3	125.2	130.3	135.2	141.8	148.1	114.0	119.2	125.9	128.7	136.4	141.6	148.1
25th	117.1	121.5	126.0	131.7	136.1	142.7	150.1	115.2	120.9	126.3	130.7	137.0	142.8	148.3
30th	117.6	122.3	126.7	132.5	137.4	143.8	151.6	115.4	121.7	127.7	132.1	138.0	143.7	150.2
50th	119.4	125.2	129.9	135.7	140.4	147.2	155.4	119.2	123.7	130.1	136.1	142.1	147.8	153.8
70th	123.7	127.4	133.2	139.0	145.1	150.9	161.0	120.4	126.5	133.0	139.7	145.0	150.2	158.0
75th	124.1	128.0	134.5	139.9	145.6	153.0	162.1	121.4	127.4	133.8	140.5	146.0	151.1	158.3
80th	125.4	128.5	135.5	141.1	146.4	154.0	162.8	122.8	128.9	134.9	141.8	147.1	152.8	158.9
85th	126.0	130.1	136.2	142.4	147.2	156.0	163.9	123.3	129.7	135.9	142.4	148.0	154.7	159.6
90th	128.0	131.7	137.6	143.4	148.7	156.7	166.7	124.0	130.4	139.1	144.4	149.0	156.2	161.1
95th	129.2	133.3	139.8	145.5	150.6	160.6	167.5	126.3	132.4	141.9	146.7	151.1	159.0	163.1
97th	130.5	134.1	142.2	148.1	153.8	162.3	167.8	126.4	132.7	142.3	148.0	152.8	160.0	165.1
99th	130.5	136.0	143.4	150.2	160.1	167.2	170.5	130.9	135.2	144.3	152.5	157.6	166.2	167.7

Table 1B. Age-, Sex- specific percentile values for height (cm), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	237	209	238	185	162	199	179	191	176	185
1th	109.0	117.5	119.9	124.0	131.6	135.7	111.3	113.9	114.5	126.0	126.8	129.1
3th	111.4	119.0	123.0	127.6	132.9	137.2	111.8	116.1	123.0	127.6	130.6	135.0
5th	112.4	119.4	124.1	128.1	133.8	139.4	112.1	116.7	123.7	130.2	131.3	139.8
10th	115.0	121.9	125.1	130.1	135.5	141.5	114.0	118.7	125.7	132.1	135.8	141.9
15th	117.0	122.4	126.9	132.1	137.4	143.1	115.3	121.6	126.2	133.1	137.1	143.8
20th	117.7	123.5	127.6	133.1	138.6	144.8	116.0	122.5	126.7	134.4	138.2	146.2
25th	118.6	124.3	128.2	134.2	139.4	145.9	117.4	123.2	127.7	135.3	139.8	146.9
30th	119.3	124.8	129.8	135.0	140.5	146.8	118.3	123.8	128.8	136.3	141.1	147.5
50th	122.6	127.1	132.9	138.3	144.0	152.2	121.4	127.0	132.9	139.0	143.7	150.5
70th	125.6	130.0	136.0	142.1	147.6	156.5	123.3	130.0	136.4	142.4	146.5	154.8
75th	126.0	131.2	136.9	143.4	148.3	157.4	124.0	130.4	137.4	144.2	147.9	156.0
80th	127.1	132.3	137.6	144.5	148.7	159.7	124.9	131.7	139.5	144.7	148.4	157.4
85th	127.6	132.7	139.4	145.4	149.7	161.7	125.9	132.2	141.2	145.8	149.3	158.0
90th	128.7	134.3	140.6	146.6	152.3	162.7	127.5	132.8	142.3	147.6	150.2	159.6
95th	130.1	135.8	143.2	148.9	155.6	166.7	130.4	135.7	144.3	149.0	152.6	161.1
97th	131.3	136.7	143.4	150.4	156.7	167.5	130.9	137.7	145.9	149.8	154.8	164.2
99th	133.5	139.2	145.5	153.2	159.0	168.7	132.6	142.1	146.7	154.6	157.3	166.2

Table 2A. Age-, Sex- specific percentile values for weight* (kg), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	112	244	227	213	223	230	85	100	182	190	190	196	182	99
1th	18.0	18.4	20.3	21.1	24.2	28.2	28.6	16.7	16.5	19.2	19.7	23.0	22.9	25.8
3th	18.5	18.6	21.2	22.5	25.9	28.8	34.5	16.8	18.5	19.7	21.5	24.6	27.5	27.6
5th	18.7	19.1	22.1	23.5	26.2	30.0	34.6	17.4	18.8	20.5	22.2	25.0	29.1	33.0
10th	19.3	20.6	23.3	24.8	27.4	31.2	36.2	17.8	20.1	22.0	23.8	27.2	31.5	35.8
15th	20.2	20.9	23.7	25.7	28.9	32.3	37.6	18.4	21.2	23.1	24.6	28.0	31.9	36.9
20th	20.4	21.8	24.1	26.5	30.0	34.7	39.1	18.9	21.6	24.2	25.9	29.0	32.8	37.6
25th	21.0	22.3	24.7	27.4	30.9	35.6	40.4	19.2	22.1	24.4	27.1	29.8	33.4	38.8
30th	21.3	22.9	25.4	28.5	32.1	36.7	41.0	19.9	22.6	25.1	27.6	30.6	34.3	39.5
50th	24.3	25.3	28.3	32.1	35.7	42.6	48.5	21.2	24.4	27.3	31.3	34.3	39.6	43.4
70th	26.5	28.8	32.5	38.6	42.5	48.0	51.6	23.6	26.5	31.1	36.8	38.0	45.2	50.5
75th	28.3	29.7	34.4	41.5	44.2	50.2	53.5	25.1	27.7	32.4	38.8	38.9	47.2	52.7
80th	29.4	30.5	35.6	43.2	46.1	54.0	56.3	25.8	28.9	34.5	39.7	41.4	48.5	56.1
85th	30.1	32.2	38.8	45.2	48.1	58.0	63.4	26.8	29.9	36.4	41.7	43.0	51.1	58.2
90th	30.4	34.7	41.9	46.3	52.0	59.3	65.7	27.9	31.8	39.9	43.7	44.0	53.1	63.4
95th	36.8	39.2	44.0	50.9	56.7	63.3	80.5	33.0	33.4	40.8	49.5	50.5	56.8	73.6
97th	42.5	42.6	47.0	55.9	63.9	71.1	85.1	37.4	37.1	41.8	49.6	55.4	62.4	75.6
99th	46.4	43.0	51.4	58.0	70.2	73.8	86.4	39.1	41.3	46.7	55.3	63.6	75.5	83.8

*Weights of clothes have been deducted.

Table 2B. Age-, Sex- specific percentile values for weight* (kg), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	237	209	238	185	162	199	179	191	176	185
1th	17.8	18.8	20.9	22.5	24.8	28.7	16.8	17.6	19.7	22.7	22.9	25.8
3th	18.4	19.8	21.3	23.7	26.8	30.0	17.4	18.8	21.5	23.9	25.2	27.6
5th	18.6	20.6	22.6	24.8	27.6	31.2	17.7	19.2	22.1	24.6	27.4	30.7
10th	19.9	22.1	23.7	26.2	29.6	32.9	18.9	20.7	23.2	26.5	28.8	32.3
15th	20.5	22.9	24.3	27.0	30.6	35.2	19.5	21.5	24.2	27.2	29.9	33.9
20th	20.9	23.7	25.2	28.1	31.9	36.4	20.0	22.0	24.8	27.9	30.8	35.5
25th	21.3	24.1	25.9	29.4	33.4	38.2	20.4	22.6	25.1	29.4	31.1	36.5
30th	21.8	24.4	26.6	30.8	34.8	40.1	21.0	23.4	26.1	30.3	31.7	37.2
50th	24.4	26.4	30.2	34.4	39.2	46.2	23.2	25.5	28.9	34.2	35.0	42.4
70th	27.6	29.6	34.8	41.5	45.2	52.0	25.2	28.0	33.4	38.4	41.0	47.9
75th	29.0	30.6	36.1	42.9	47.0	54.4	25.7	28.8	35.2	39.3	41.7	50.0
80th	30.1	31.6	38.6	43.8	48.0	58.0	26.4	30.7	35.6	41.7	43.0	52.7
85th	30.4	33.9	40.9	45.7	51.1	59.3	27.9	32.4	38.3	42.6	44.0	54.1
90th	33.3	38.8	43.3	49.7	56.5	62.6	30.1	35.5	40.0	44.5	47.8	56.8
95th	39.0	43.0	46.6	54.9	63.9	71.9	33.0	41.0	42.8	49.6	53.2	62.4
97th	39.7	43.0	47.2	57.5	70.2	80.5	33.4	41.5	46.7	50.2	56.7	75.5
99th	44.9	44.9	52.0	62.6	72.6	86.4	37.4	49.4	52.4	52.1	65.0	83.8

*Weights of clothes have been deducted.

Table 3A. Age-, Sex- specific percentile values for body mass index (kg/m²), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	112	244	227	213	223	230	85	100	182	190	190	196	182	99
1th	13.8	12.7	13.0	13.2	13.4	14.1	14.6	12.6	12.9	12.6	12.4	13.1	13.3	13.3
3th	14.1	13.3	13.5	13.6	14.4	14.9	15.4	13.2	13.2	13.2	13.4	13.9	14.4	15.5
5th	14.3	13.4	14.2	14.2	14.6	15.3	15.5	13.3	13.3	13.8	13.8	14.0	14.6	15.5
10th	14.5	14.0	14.5	14.6	15.0	15.6	16.5	13.6	13.8	14.0	14.5	14.5	15.3	16.0
15th	14.7	14.4	14.9	15.1	15.6	16.1	16.9	14.1	14.2	14.3	14.8	14.9	15.5	16.3
20th	15.1	14.7	15.2	15.5	15.8	16.4	17.1	14.2	14.6	14.6	15.1	15.0	15.9	16.7
25th	15.3	15.0	15.4	15.7	16.2	16.8	17.4	14.3	14.8	14.9	15.4	15.3	16.2	17.2
30th	15.5	15.4	15.6	15.9	16.6	17.3	17.8	14.5	15.1	15.2	15.5	15.7	16.5	17.3
50th	16.2	16.2	16.4	17.6	18.1	19.7	19.2	15.3	16.1	16.1	16.9	16.8	17.7	18.8
70th	17.9	17.9	18.9	20.1	21.1	21.3	21.7	16.7	17.2	17.5	19.1	18.5	19.9	20.7
75th	18.5	18.3	19.5	21.2	21.6	22.0	22.1	17.6	17.4	18.6	19.8	19.2	20.8	21.4
80th	19.0	19.0	20.2	21.9	22.4	22.9	23.1	18.1	18.0	19.2	20.3	19.6	21.7	22.2
85th	19.1	20.0	21.4	22.7	22.9	24.1	23.8	18.2	18.6	19.5	21.0	20.4	22.2	23.5
90th	20.4	21.9	22.2	23.8	24.0	25.8	28.5	18.5	19.3	21.0	21.3	21.6	22.9	24.9
95th	23.5	23.4	23.4	26.0	26.4	27.6	30.6	21.8	20.9	22.3	23.4	24.0	25.9	28.7
97th	25.0	24.1	25.0	26.6	27.2	28.2	32.1	22.8	21.7	23.9	26.2	25.1	27.7	30.5
99th	28.1	26.3	29.7	28.9	29.1	31.7	32.6	23.4	24.7	25.2	26.7	27.2	29.6	33.4

Table 3B. Age-, Sex- specific percentile values for body mass index (kg/m²), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	237	209	238	185	162	199	179	191	176	185
1th	12.7	12.7	13.2	13.6	13.7	14.4	12.6	12.9	13.2	12.4	13.3	13.9
3th	13.4	13.3	13.5	14.2	14.5	15.4	13.1	13.2	13.8	13.2	13.9	14.4
5th	13.7	13.5	13.9	14.5	14.9	15.5	13.3	13.4	14.0	14.0	14.3	14.8
10th	14.3	14.3	14.6	15.0	15.3	15.8	13.6	13.9	14.4	14.7	14.7	15.5
15th	14.7	14.5	14.8	15.2	15.8	16.3	14.1	14.1	14.7	15.0	15.0	15.6
20th	14.9	15.0	15.2	15.6	16.1	16.9	14.2	14.4	15.0	15.3	15.3	16.1
25th	15.2	15.3	15.5	16.0	16.4	17.2	14.5	14.6	15.3	15.6	15.7	16.5
30th	15.4	15.5	15.7	16.4	17.1	17.6	14.7	14.9	15.4	16.1	16.2	16.9
50th	16.0	16.3	16.8	18.1	19.1	19.6	15.9	15.8	16.4	17.1	17.2	18.3
70th	17.8	17.9	19.1	20.5	21.3	22.1	16.9	17.2	18.5	19.3	19.3	20.7
75th	18.2	18.4	19.8	21.4	21.7	22.5	17.3	17.6	18.9	20.0	19.6	21.2
80th	19.1	19.0	20.3	22.3	22.7	23.7	17.7	18.2	19.3	20.5	20.1	21.7
85th	20.5	20.6	21.6	22.7	23.8	24.3	18.5	19.1	20.0	21.1	20.8	22.4
90th	21.0	22.0	22.3	23.9	25.4	26.3	19.1	20.9	21.0	21.8	21.9	23.7
95th	23.5	23.9	23.8	26.4	28.2	27.9	20.5	22.3	22.6	24.1	23.9	26.8
97th	24.6	24.4	25.0	27.0	29.1	30.6	21.8	24.2	23.3	25.1	26.9	29.6
99th	25.2	26.6	29.7	28.9	31.7	32.6	23.4	26.8	24.1	26.7	29.2	33.4

Table 4A. Age-, Sex- specific percentile values for pulse* (times/min), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	112	244	227	213	223	230	85	100	182	189	190	196	182	99
1th	77.0	70.5	69.0	67.5	65.5	66.5	68.5	82.5	72.5	72.5	71.5	71.5	72.0	60.0
3th	77.5	77.5	70.5	70.5	73.0	70.0	69.0	85.0	80.5	78.0	74.5	77.0	73.5	66.5
5th	77.5	80.0	74.0	73.5	73.5	71.0	71.0	86.5	81.5	81.0	77.0	79.5	77.0	71.0
10th	82.0	82.5	78.5	79.0	76.0	76.0	76.0	88.5	84.0	83.0	79.5	82.0	81.5	76.5
15th	85.0	84.5	83.5	81.0	81.5	79.0	77.0	90.5	85.5	83.5	81.5	85.5	82.5	78.5
20th	85.5	87.0	85.0	82.5	84.0	82.5	79.0	93.0	88.5	85.5	84.0	87.5	85.5	80.5
25th	87.5	89.0	86.5	85.0	85.5	83.5	80.5	93.5	90.0	87.5	85.0	89.0	86.5	84.5
30th	89.0	89.5	88.0	88.0	86.5	85.0	83.0	94.0	91.5	90.0	86.5	89.5	88.5	85.5
50th	95.5	96.5	92.5	92.0	91.5	90.0	89.5	99.5	97.5	96.0	93.5	96.5	93.0	89.5
70th	103.0	102.5	99.5	97.5	96.5	94.5	94.5	104.0	102.0	100.0	99.5	102.0	98.5	97.0
75th	106.0	104.0	100.0	101.0	98.5	96.0	96.0	106.0	104.0	102.5	102.5	104.0	100.5	100.0
80th	108.5	107.0	101.5	101.5	100.5	98.5	98.0	108.0	106.5	104.0	104.0	105.0	102.0	102.0
85th	110.5	108.5	103.5	103.5	102.5	100.5	102.0	109.0	110.5	107.0	106.5	106.5	106.5	103.0
90th	115.0	110.0	106.0	105.0	105.5	104.0	106.0	118.0	117.0	110.0	109.0	108.5	109.0	106.0
95th	121.0	113.0	108.5	109.5	109.5	110.5	113.0	125.0	121.0	114.5	114.0	112.0	111.0	108.0
97th	122.0	116.0	112.0	110.0	116.0	117.0	117.0	126.0	130.0	116.0	121.0	118.5	111.0	112.0
99th	124.0	124.0	115.0	120.0	123.0	121.0	121.0	128.5	137.0	122.0	126.5	127.0	116.0	130.5

*The average of the last two measurements of the three measurements

Table 4B. Age-, Sex- specific percentile values for pulse* (times/min), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	237	209	238	185	162	198	179	191	176	185
1th	77.0	67.0	69.0	67.0	66.5	68.0	72.5	77.5	70.0	74.5	71.5	60.0
3th	80.0	71.0	71.5	70.5	70.0	70.0	83.0	80.5	74.5	78.0	76.0	72.0
5th	81.0	76.5	74.5	72.5	73.5	71.0	84.0	81.0	78.0	78.5	77.0	74.5
10th	83.0	80.0	80.0	78.0	76.0	74.5	85.5	83.5	81.5	80.5	82.0	79.0
15th	86.5	83.0	82.0	81.5	80.5	77.0	88.0	86.0	83.0	82.5	86.0	81.5
20th	87.0	86.0	84.0	83.0	82.5	79.5	90.5	88.0	84.0	85.0	88.5	83.0
25th	88.5	87.5	87.0	85.0	84.5	83.0	92.0	89.5	85.5	86.5	89.5	85.0
30th	89.5	89.5	88.0	87.5	85.5	84.0	93.0	91.0	87.5	88.0	90.0	86.0
50th	96.0	95.5	92.0	91.5	91.5	89.5	97.5	97.5	94.5	93.5	95.0	91.5
70th	103.0	101.0	97.5	96.5	96.5	94.5	104.0	102.5	98.0	101.0	101.0	99.0
75th	105.5	102.0	100.0	99.0	98.5	96.0	105.5	104.5	101.0	103.5	102.5	100.5
80th	108.0	104.0	101.5	100.5	101.0	98.0	108.0	107.0	102.5	105.0	105.5	102.5
85th	109.5	107.0	103.5	102.5	103.5	101.0	110.5	109.5	105.5	107.0	106.5	104.0
90th	112.0	108.5	105.5	104.0	105.5	104.0	118.0	115.0	108.5	109.5	109.0	108.0
95th	118.0	112.0	108.5	110.0	109.5	113.0	125.0	120.0	113.0	114.0	111.0	110.0
97th	122.0	113.0	110.0	113.0	111.0	119.0	128.5	122.0	114.0	117.0	119.0	112.0
99th	125.0	116.5	115.0	123.0	117.0	121.0	130.5	137.0	121.0	126.5	127.0	121.0

*The average of the last two measurements of the three measurements

Table 5A. Age-, Sex- specific percentile values for diastolic blood pressure* (mmHg), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	112	244	227	213	223	230	85	100	182	189	190	196	182	99
1th	42.0	42.0	42.0	45.0	41.0	46.5	45.0	40.0	43.5	34.0	45.0	43.5	44.5	45.0
3th	43.5	43.5	43.5	46.5	45.0	48.0	47.0	43.5	45.5	42.5	46.0	47.0	47.5	48.0
5th	44.0	44.5	44.5	47.5	46.0	48.0	47.5	43.5	46.5	46.0	47.5	48.5	48.5	48.5
10th	44.5	46.0	46.5	49.5	47.5	51.0	48.0	45.0	48.5	48.0	49.0	50.0	49.5	51.5
15th	45.5	47.5	48.5	51.5	50.5	52.0	50.5	45.5	49.5	49.0	50.5	51.0	52.0	52.5
20th	47.0	48.0	51.0	52.5	52.0	53.0	52.5	46.5	50.5	50.5	51.5	52.0	53.0	54.0
25th	48.5	49.5	51.5	53.5	52.5	53.5	53.5	47.5	51.5	52.5	52.5	53.0	53.5	55.0
30th	49.0	51.0	52.5	54.5	54.0	54.5	54.5	50.0	52.0	53.5	53.0	54.5	54.5	56.0
50th	54.0	55.0	56.0	58.0	57.5	59.0	59.5	53.0	55.5	56.0	56.0	58.0	58.5	59.0
70th	58.0	59.0	59.5	61.5	61.0	63.0	63.0	56.5	60.5	59.5	59.5	62.0	62.5	63.0
75th	60.0	60.0	60.5	63.0	62.5	64.5	63.5	57.5	61.5	61.0	60.0	62.5	63.5	64.5
80th	60.5	61.0	62.0	64.0	64.0	66.0	64.0	58.5	62.0	62.5	61.0	63.5	64.5	66.0
85th	63.0	62.0	63.0	65.0	65.5	66.5	66.0	60.0	63.0	63.5	62.0	65.0	66.0	67.0
90th	63.5	64.5	65.0	66.5	67.0	69.5	68.5	61.5	64.0	64.5	63.5	67.0	68.0	68.0
95th	64.5	68.5	67.5	68.0	69.5	73.0	74.5	63.5	67.0	67.0	67.5	70.0	73.0	69.0
97th	66.5	71.0	68.5	71.0	73.5	74.5	77.5	66.5	71.0	68.5	69.0	73.5	74.0	70.5
99th	69.5	73.5	70.0	75.0	77.0	75.5	82.0	71.5	72.0	72.5	73.5	74.5	83.0	72.5

*The average of the last two measurements of the three measurements

Table 5B. Age-, Sex- specific percentile values for diastolic blood pressure* (mmHg), NAHSIT Children 2001-2002

Age (years)	Boys					Girls						
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	237	209	238	185	162	198	179	191	176	185
1th	43.0	42.0	43.0	42.5	42.5	45.0	43.5	41.5	39.5	45.0	43.5	45.0
3th	44.0	43.0	45.5	45.5	45.5	47.5	43.5	46.5	45.5	47.0	48.5	48.0
5th	44.5	43.5	46.5	47.5	46.5	48.0	44.0	47.5	46.0	48.0	48.5	49.0
10th	46.0	45.0	48.0	50.5	49.5	49.0	46.5	49.0	47.5	49.5	51.5	50.5
15th	47.0	47.5	49.5	52.0	51.5	51.0	47.5	50.0	49.0	50.0	52.0	52.0
20th	48.0	49.5	51.0	53.0	52.5	52.5	49.5	51.0	51.0	51.0	53.0	53.0
25th	49.5	51.0	51.5	54.0	53.0	53.5	50.5	51.5	52.5	52.0	53.0	54.0
30th	50.0	51.5	53.0	55.5	54.5	54.5	51.5	52.5	53.5	53.0	54.0	55.0
50th	54.0	55.5	57.0	57.5	58.5	59.0	54.5	56.0	56.5	56.5	58.0	59.5
70th	59.0	59.0	61.0	61.5	62.5	63.5	57.0	59.5	60.5	60.5	62.0	63.0
75th	60.0	59.5	62.0	63.0	63.5	64.5	58.5	61.0	61.5	62.0	63.0	64.5
80th	61.5	60.0	63.0	64.0	66.0	66.0	60.5	62.0	62.0	63.0	63.5	66.0
85th	63.0	61.5	64.5	65.0	67.0	66.5	61.5	63.0	63.0	65.0	64.5	67.5
90th	64.5	62.5	66.0	66.0	69.0	70.0	63.0	64.0	64.5	67.0	66.5	68.5
95th	68.0	65.0	68.5	68.5	73.0	74.5	66.5	66.5	67.5	70.0	70.0	71.0
97th	69.5	67.5	69.0	71.0	75.0	75.0	68.0	67.5	69.0	73.5	73.5	73.0
99th	75.5	70.0	77.5	75.0	79.0	77.5	71.5	72.0	72.5	75.5	78.5	77.0

*The average of the last two measurements of the three measurements

Table 6A. Age-, Sex- specific percentile values for systolic blood pressure* (mmHg), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	112	244	227	213	223	230	85	100	182	189	190	196	182	99
1th	74.5	74.0	80.0	76.5	75.0	84.0	78.5	72.0	74.5	78.0	77.0	76.5	83.5	83.0
3th	79.0	77.5	81.0	83.0	81.5	87.0	83.5	76.0	79.0	80.5	79.5	79.5	85.5	85.5
5th	79.5	79.5	83.0	84.5	83.5	89.0	84.0	77.5	82.0	81.5	82.5	82.0	86.5	89.5
10th	81.5	83.5	84.0	86.0	88.0	91.5	90.5	78.5	83.5	84.0	85.5	86.0	87.5	90.5
15th	82.5	85.0	86.5	88.0	89.0	94.0	94.0	81.5	84.5	86.5	87.5	88.5	90.0	92.5
20th	84.0	86.5	87.5	90.0	91.0	95.5	96.0	83.5	85.5	87.5	89.5	89.5	91.5	93.5
25th	85.5	87.5	89.0	91.5	91.5	97.5	97.5	84.5	86.5	88.0	91.5	91.0	93.0	96.0
30th	87.0	89.0	90.5	93.5	92.0	98.5	98.5	85.5	87.5	89.0	92.0	92.5	93.5	97.5
50th	91.0	92.5	95.5	98.5	98.0	103.0	102.5	90.0	91.0	92.5	96.0	97.5	98.0	102.0
70th	96.5	98.0	99.0	102.5	103.5	107.0	110.0	92.5	96.0	97.5	100.5	101.5	103.0	107.5
75th	98.0	99.0	101.5	103.5	104.5	109.0	111.0	94.0	97.5	99.5	102.0	103.0	104.5	108.0
80th	100.0	100.0	103.0	106.0	105.5	110.0	113.5	95.0	98.5	101.5	102.5	104.5	107.0	110.0
85th	102.0	102.0	105.0	108.0	107.5	111.5	116.0	98.0	101.0	102.5	106.0	107.0	108.0	110.5
90th	106.0	103.5	108.0	111.0	112.0	114.0	123.0	98.5	104.0	104.0	108.0	109.0	112.0	111.5
95th	106.0	106.0	111.5	114.0	114.0	121.0	124.0	100.0	106.5	108.0	111.5	115.0	116.5	115.5
97th	109.0	110.0	114.5	115.0	117.0	125.5	128.0	101.0	107.5	109.5	114.0	117.0	118.5	116.0
99th	115.5	119.5	119.0	122.0	124.0	134.5	135.5	107.0	110.0	119.5	118.0	119.0	121.0	117.0

*The average of the last two measurements of the three measurements

Table 6B. Age-, Sex- specific percentile values for systolic blood pressure* (mmHg), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	237	209	238	185	162	198	179	191	176	185
1th	74.0	76.0	80.0	74.5	81.0	83.5	72.0	78.0	76.0	75.0	81.0	83.0
3th	78.0	80.5	81.0	83.0	82.5	85.0	77.5	79.5	81.0	78.0	83.5	86.5
5th	79.5	82.5	84.5	84.5	85.0	89.0	78.5	81.0	82.5	80.5	84.0	88.5
10th	81.0	83.5	86.0	88.0	88.5	92.5	81.5	82.5	85.5	86.5	87.0	91.0
15th	83.5	85.0	87.5	89.0	90.5	94.5	83.5	84.5	87.0	88.0	89.0	92.0
20th	85.5	86.5	88.5	91.0	91.5	95.5	84.5	86.0	88.0	89.5	89.5	93.0
25th	86.5	87.5	90.0	92.0	93.0	97.5	85.5	87.0	89.5	91.0	92.0	94.0
30th	88.0	89.0	91.5	94.5	95.5	98.0	86.5	87.5	91.0	92.5	92.5	95.0
50th	92.5	94.0	96.0	99.0	100.5	103.0	90.5	92.0	94.5	96.0	98.5	100.0
70th	97.0	98.0	101.0	103.5	104.5	109.5	95.0	96.0	100.0	100.5	103.0	104.5
75th	99.0	99.5	102.0	104.5	105.5	110.0	97.0	97.5	101.5	102.0	104.5	106.5
80th	100.5	101.0	103.5	106.0	107.0	112.0	98.5	100.0	102.5	104.5	107.0	108.0
85th	102.5	103.0	105.5	108.0	109.0	113.5	100.0	101.5	103.5	107.0	108.5	110.0
90th	104.0	104.5	109.0	112.0	112.0	118.0	101.0	104.0	106.5	110.0	111.0	112.0
95th	106.5	109.5	112.0	114.5	114.5	124.0	104.0	105.5	112.0	112.0	116.5	115.5
97th	110.5	111.0	118.0	116.5	122.5	127.0	107.0	107.0	114.0	114.0	118.5	116.5
99th	119.5	114.5	119.5	122.0	126.5	134.5	109.0	109.5	119.5	118.0	120.5	121.0

*The average of the last two measurements of the three measurements

Table 7A. Age-, Sex- specific percentile values for wrist circumference (cm), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	112	244	227	213	223	230	85	99	181	190	190	196	182	99
1th	11.0	11.0	11.6	11.6	12.0	12.9	13.0	10.5	10.8	11.0	10.9	11.5	11.6	12.8
3th	11.2	11.2	11.8	12.0	12.4	13.1	13.6	10.9	11.0	11.4	11.4	12.2	12.6	13.2
5th	11.5	11.3	12.0	12.1	12.5	13.3	13.8	10.9	11.3	11.5	12.0	12.2	12.9	13.3
10th	11.7	11.8	12.3	12.4	13.0	13.5	14.3	11.1	11.4	11.8	12.1	12.6	13.3	13.4
15th	11.9	12.0	12.5	12.5	13.2	13.6	14.3	11.2	11.7	12.0	12.4	12.8	13.3	13.6
20th	12.0	12.1	12.5	12.8	13.4	13.8	14.4	11.4	11.9	12.1	12.5	12.9	13.4	13.8
25th	12.1	12.2	12.6	13.0	13.5	14.0	14.8	11.5	12.0	12.2	12.7	13.0	13.6	13.9
30th	12.2	12.3	12.7	13.2	13.7	14.3	15.0	11.6	12.1	12.3	12.8	13.1	13.7	14.0
50th	12.6	12.8	13.4	13.7	14.3	14.9	15.6	11.9	12.4	12.9	13.4	13.7	14.2	14.5
70th	13.1	13.5	13.9	14.6	15.0	15.6	16.2	12.2	12.8	13.4	14.0	14.2	14.8	15.0
75th	13.4	13.5	14.1	14.9	15.2	15.7	16.5	12.5	13.0	13.6	14.4	14.4	14.9	15.3
80th	13.5	13.7	14.4	15.4	15.5	16.0	16.5	12.6	13.1	13.8	14.4	14.5	15.1	15.6
85th	14.0	14.2	14.6	15.6	15.7	16.2	16.7	12.7	13.3	14.0	14.5	14.6	15.4	15.6
90th	14.1	14.5	15.1	15.8	16.0	16.5	17.4	13.4	13.5	14.3	15.0	14.8	15.5	16.0
95th	14.6	15.0	15.5	16.1	16.6	17.3	17.7	13.7	14.2	14.4	15.3	15.5	15.9	17.0
97th	15.0	15.4	15.9	16.3	16.7	17.5	17.7	14.2	14.4	14.7	15.5	16.0	16.3	17.3
99th	15.8	16.0	16.3	17.2	18.0	18.2	19.0	15.5	15.0	15.0	15.8	16.6	18.1	18.4

Table 7B. Age-, Sex- specific percentile values for wrist circumference (cm), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	237	209	238	185	160	199	179	191	176	185
1th	11.2	10.9	11.6	12.0	12.4	13.0	10.5	10.8	11.3	11.6	11.5	11.6
3th	11.3	11.3	11.8	12.1	12.6	13.2	10.9	11.0	11.6	12.0	12.5	12.8
5th	11.5	11.9	12.0	12.2	13.0	13.4	11.3	11.3	11.9	12.0	12.6	13.0
10th	11.8	12.2	12.4	12.6	13.3	13.6	11.4	11.5	12.0	12.3	12.8	13.3
15th	12.0	12.2	12.5	13.0	13.5	14.0	11.5	11.7	12.2	12.6	13.0	13.4
20th	12.0	12.4	12.6	13.2	13.6	14.3	11.6	11.9	12.3	12.8	13.1	13.6
25th	12.1	12.5	12.8	13.4	13.8	14.5	11.7	12.1	12.5	13.0	13.3	13.7
30th	12.3	12.5	12.9	13.5	14.0	14.6	11.9	12.2	12.5	13.1	13.3	13.9
50th	12.6	13.0	13.5	14.0	14.6	15.4	12.1	12.5	13.0	13.8	13.8	14.3
70th	13.4	13.6	14.1	14.8	15.3	16.1	12.5	13.0	13.5	14.3	14.4	14.9
75th	13.5	13.7	14.4	14.9	15.5	16.2	12.6	13.2	13.7	14.4	14.6	15.0
80th	13.7	14.0	14.6	15.2	15.7	16.4	12.7	13.4	13.9	14.5	14.7	15.3
85th	14.1	14.5	15.0	15.6	16.0	16.5	13.0	13.6	14.1	14.5	14.9	15.5
90th	14.5	14.6	15.4	15.8	16.1	17.0	13.3	14.1	14.4	15.0	15.4	15.7
95th	15.0	15.2	15.9	16.4	16.8	17.5	13.9	14.4	14.7	15.2	15.7	16.2
97th	15.5	15.4	16.1	17.0	17.4	17.7	14.1	14.9	15.0	15.5	16.0	17.0
99th	16.1	16.0	16.2	17.8	18.0	18.5	14.5	15.3	15.8	16.1	16.9	17.4

Table 8A. Age-, Sex- specific percentile values for waist circumference* (cm), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10- 10.9	11- 11.9	12- 12.9	6-6.9	7-7.9	8-8.9	9-9.9	10- 10.9	11- 11.9	12- 12.9
Number	112	244	227	212	223	230	85	99	181	190	190	196	182	99
1th	46.4	44.5	47.5	48.1	49.0	51.5	51.6	43.9	44.7	46.6	44.9	46.4	46.5	51.9
3th	47.6	45.2	47.8	49.5	50.5	52.5	53.6	45.5	46.5	47.3	47.0	49.0	49.6	53.0
5th	48.3	47.0	49.1	50.0	51.2	53.2	56.0	45.5	47.0	47.7	48.0	50.0	51.2	53.5
10th	49.5	48.0	50.5	51.2	53.0	54.9	57.7	46.1	47.8	48.6	49.9	51.1	53.2	54.5
15th	50.4	49.5	51.2	52.2	54.3	56.2	58.4	46.5	48.4	50.0	50.2	51.3	53.5	56.1
20th	50.5	50.5	52.4	53.0	55.6	57.1	59.0	47.0	48.9	50.5	51.0	52.0	54.0	56.5
25th	51.4	51.0	53.0	54.0	56.1	58.2	60.0	48.2	49.9	51.0	51.5	52.5	54.1	57.0
30th	51.8	51.7	53.8	55.2	57.0	59.1	60.7	48.5	50.5	51.4	52.2	53.5	54.7	57.6
50th	53.9	54.2	56.0	59.2	61.3	63.6	63.5	50.0	52.0	53.5	55.4	56.3	58.3	61.0
70th	56.5	57.1	60.5	65.5	66.7	69.3	69.1	53.0	55.1	57.0	61.1	59.8	63.2	65.3
75th	58.7	58.5	62.3	67.2	68.0	71.4	71.2	53.5	56.0	58.4	61.9	60.5	65.0	66.6
80th	60.0	60.8	63.5	69.2	70.5	74.5	74.3	54.5	57.0	60.9	63.5	62.4	66.1	70.1
85th	61.6	63.0	66.5	70.5	72.2	76.9	79.2	56.5	58.2	62.3	64.4	64.5	68.5	73.3
90th	61.8	65.4	68.4	74.0	74.5	82.1	84.9	61.0	59.9	63.8	66.5	67.7	70.5	77.5
95th	68.7	69.5	70.0	78.5	80.3	84.3	92.0	65.5	63.0	69.9	70.6	71.0	73.5	81.0
97th	68.8	73.0	74.3	79.4	81.6	86.6	98.2	66.5	65.5	70.2	76.0	72.5	80.2	82.0
99th	76.1	73.5	82.0	82.6	88.1	89.6	99.1	68.9	70.4	71.6	76.0	76.4	83.9	93.3

*Waist circumference was measured horizontally at the level of natural waist, which was identified as the level at the hollow molding of trunk when the trunk was concaved laterally.

Table 8B. Age-, Sex- specific percentile values for waist circumference* (cm), NAHSIT Children 2001-2002

Age (years)	Boys					Girls						
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5- 11.4	11.5- 12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5- 10.4	10.5- 11.4	11.5- 12.4
Number	213	218	237	208	238	185	160	199	179	191	176	185
1th	45.0	45.0	47.5	48.6	49.8	52.5	43.9	44.7	47.0	46.7	46.4	49.5
3th	46.8	46.9	47.8	50.0	51.2	53.1	45.9	46.5	47.7	49.0	49.1	51.2
5th	47.3	48.2	49.5	51.2	51.6	53.9	46.2	47.0	48.1	50.0	50.9	52.3
10th	48.0	49.5	50.5	52.5	53.5	55.5	47.0	47.9	49.5	51.0	51.1	53.2
15th	49.5	50.5	51.1	54.0	54.9	57.0	47.8	48.5	50.0	51.3	52.0	54.1
20th	50.5	51.1	52.2	54.3	56.1	58.5	48.4	49.5	50.5	52.2	53.0	55.0
25th	51.1	52.4	53.0	55.5	57.5	59.2	49.0	50.2	51.2	53.0	53.4	56.1
30th	51.7	52.8	54.0	56.4	58.6	60.4	49.1	50.5	51.6	54.0	53.8	56.5
50th	53.9	55.4	57.0	59.7	62.5	64.9	51.2	52.3	54.1	57.4	56.9	60.5
70th	56.5	58.1	61.3	66.5	67.3	71.4	53.6	56.2	58.4	60.9	60.1	64.2
75th	59.0	59.5	62.6	67.8	69.9	74.5	55.1	57.0	60.0	62.9	61.4	65.6
80th	60.5	61.5	65.8	69.5	71.5	77.0	55.7	58.5	61.6	63.9	64.5	67.8
85th	63.0	63.0	67.2	70.8	74.1	80.4	56.8	61.1	62.6	65.5	66.0	70.1
90th	65.5	67.1	68.6	74.4	76.6	84.2	58.5	62.5	64.1	67.9	68.5	71.9
95th	68.8	70.0	73.5	78.5	83.9	86.7	61.4	67.7	69.1	70.6	71.9	79.6
97th	71.5	73.5	76.1	80.2	85.0	92.0	64.0	70.2	69.9	72.5	76.4	82.0
99th	73.4	75.5	82.0	84.0	89.6	99.1	66.5	71.6	74.6	76.0	83.9	93.5

*Waist circumference was measured horizontally at the level of natural waist, which was identified as the level at the hollow molding of trunk when the trunk was concaved laterally.

Table 9A. Age-, Sex- specific percentile values for waist circumference* (cm), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10- 10.9	11- 11.9	12- 12.9	6-6.9	7-7.9	8-8.9	9-9.9	10- 10.9	11- 11.9	12- 12.9
Number	112	244	227	212	223	230	85	99	181	190	190	196	182	99
1th	46.9	45.5	47.7	48.4	49.8	53.0	52.8	45.1	44.7	47.0	47.2	48.0	49.8	54.1
3th	47.8	47.1	48.8	50.0	50.9	54.2	54.4	46.4	47.2	48.2	49.3	50.6	51.5	54.5
5th	48.0	47.5	49.5	50.6	51.7	54.6	57.0	46.6	47.7	48.5	49.8	51.8	52.8	55.6
10th	49.5	48.5	51.1	51.2	53.9	56.5	59.2	47.0	49.0	50.0	50.5	52.0	54.5	57.6
15th	49.6	49.5	51.8	52.4	55.0	57.2	60.5	47.6	49.7	50.9	51.5	53.1	54.8	58.5
20th	50.5	50.3	52.3	54.0	56.0	58.1	61.1	48.0	50.2	51.4	53.0	54.0	56.2	59.5
25th	50.8	51.1	53.1	54.8	57.5	60.0	61.5	48.2	50.6	52.3	54.0	55.0	56.6	60.0
30th	51.5	52.0	54.0	55.5	58.2	60.9	61.8	48.5	51.0	52.7	54.5	55.3	57.5	60.8
50th	54.7	54.2	56.5	60.2	63.2	66.2	66.9	50.5	53.2	55.0	58.0	58.7	61.4	65.1
70th	58.2	58.6	62.2	68.0	71.5	73.4	72.8	54.0	56.2	59.5	64.5	62.0	68.3	70.4
75th	60.3	61.3	64.5	70.7	73.1	75.2	75.5	55.0	57.8	61.7	65.5	63.5	69.5	73.6
80th	61.5	63.0	66.0	72.5	75.0	78.5	80.0	56.7	59.1	62.9	67.7	65.2	70.7	76.0
85th	64.5	64.8	69.0	74.8	77.3	81.8	86.0	59.5	60.5	65.9	70.0	68.9	72.5	78.1
90th	65.0	67.7	72.3	77.3	80.7	85.7	88.8	64.7	63.0	67.8	71.0	72.5	73.6	80.7
95th	73.1	73.0	75.5	82.7	83.5	90.2	95.6	66.5	67.0	73.5	75.8	75.3	81.5	81.9
97th	77.2	76.5	78.1	84.0	85.4	91.0	104	69.4	70.0	74.3	81.0	77.0	84.5	86.3
99th	84.9	78.5	84.0	88.4	90.5	95.5	108	71.2	77.9	76.0	81.6	80.6	97.9	89.5

*Waist circumference was measured horizontally at the level of natural waist and was going through belly button.

Table 9B. Age-, Sex- specific percentile values for waist circumference* (cm), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	237	208	238	185	160	199	179	191	176	185
1th	45.3	45.8	47.7	49.5	50.0	53.0	45.1	45.1	47.1	49.5	48.0	49.8
3th	47.3	47.3	49.0	50.8	52.2	54.4	46.4	47.0	49.3	50.3	51.5	53.1
5th	47.7	48.5	49.7	51.5	53.5	54.6	46.7	47.3	49.8	50.8	51.9	54.1
10th	48.3	50.4	51.0	52.6	54.7	56.7	47.7	49.0	50.5	52.3	52.5	54.9
15th	49.5	51.1	51.7	54.3	56.0	58.7	48.2	49.8	50.9	53.8	54.0	57.0
20th	49.9	51.7	52.5	55.1	57.3	60.5	48.8	50.2	51.8	54.2	54.6	57.8
25th	50.8	52.0	53.9	56.5	58.1	61.5	49.5	51.0	52.9	55.2	54.9	58.5
30th	51.5	52.9	54.2	57.5	60.0	62.0	50.0	51.3	53.5	55.5	55.5	59.5
50th	54.1	55.7	58.1	61.6	64.8	68.0	52.0	53.8	56.3	60.0	59.0	63.0
70th	58.3	60.1	64.0	69.4	72.3	75.5	55.3	58.4	61.7	64.3	63.3	68.5
75th	60.3	61.6	65.5	71.5	74.3	79.4	56.1	59.5	62.9	66.1	65.2	70.4
80th	63.0	63.5	68.7	73.7	75.7	81.8	57.7	61.5	65.3	68.4	69.5	72.5
85th	64.9	66.0	71.3	75.5	78.5	85.2	58.5	63.0	66.0	70.2	70.5	73.6
90th	68.5	71.5	73.0	79.0	82.4	87.4	60.3	67.7	68.2	72.5	71.7	77.0
95th	73.1	74.5	77.9	82.9	88.5	91.5	64.9	73.3	73.5	75.6	76.0	83.5
97th	76.5	77.5	80.6	84.4	90.3	95.6	67.0	73.9	74.3	80.5	80.6	86.3
99th	78.1	78.5	84.0	87.9	95.5	104	69.4	79.2	77.1	81.6	92.0	97.0

*Waist circumference was measured horizontally at the level of natural waist and was going through belly button.

Table 10A. Age-, Sex- specific percentile values for hip circumference (cm), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	112	244	227	212	223	230	85	99	181	190	190	196	182	99
1th	55.5	57.7	58.0	61.9	64.4	68.7	70.6	56.3	57.5	58.5	61.0	64.9	62.9	67.5
3th	57.3	58.3	60.6	62.7	65.7	69.3	73.3	57.2	59.5	60.4	63.2	66.0	68.8	69.0
5th	57.5	59.0	62.2	63.5	67.6	70.1	74.0	57.4	59.7	62.0	64.1	67.3	71.2	75.0
10th	59.7	60.5	64.0	65.5	68.1	71.9	76.2	57.9	61.5	63.4	66.3	68.7	72.1	77.5
15th	60.0	62.0	65.0	66.5	69.6	72.6	76.5	59.0	62.0	64.4	67.5	70.4	73.5	79.2
20th	61.2	62.8	65.7	67.2	70.5	74.3	77.3	60.0	62.7	65.0	68.0	70.6	74.1	80.5
25th	61.4	63.5	66.5	68.4	71.6	76.4	78.4	60.3	63.5	65.9	68.7	71.8	75.2	80.9
30th	62.1	64.1	67.0	69.5	73.2	77.2	79.2	60.5	63.6	66.6	70.3	72.5	76.5	81.5
50th	66.0	67.0	70.0	74.0	77.2	82.5	84.2	62.5	67.3	69.5	73.5	75.5	80.5	84.7
70th	69.2	71.4	75.4	80.6	83.0	85.9	88.0	66.6	69.9	74.5	77.9	79.6	85.9	90.2
75th	70.5	72.1	76.8	81.5	84.2	87.5	88.9	67.5	70.3	75.5	80.3	81.0	87.0	92.1
80th	71.2	73.6	78.1	83.0	85.7	91.0	91.7	68.7	71.7	76.8	81.4	82.0	88.3	93.4
85th	71.9	75.0	80.5	85.0	87.0	93.5	97.6	69.6	74.0	78.2	82.1	82.8	91.0	94.2
90th	73.7	78.5	83.0	86.8	89.7	96.0	99.5	71.5	76.3	81.7	84.6	84.5	92.5	101
95th	79.6	82.7	86.2	88.5	92.2	97.4	105	79.1	80.2	83.5	89.0	91.3	94.7	105
97th	83.5	83.7	86.8	91.9	97.6	102	110	79.5	82.1	84.5	89.0	93.1	98.5	105
99th	89.0	85.6	91.5	93.7	101	104	112	82.0	87.7	87.2	92.8	100	104	107

Table 10B. Age-, Sex- specific percentile values for hip circumference (cm), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	237	208	238	185	160	199	179	191	176	185
1th	55.5	59.0	58.0	62.7	65.1	68.9	57.2	58.0	61.0	64.3	62.9	67.5
3th	57.7	59.5	61.9	64.5	68.0	69.3	57.4	59.9	63.2	65.7	67.8	69.0
5th	58.7	60.6	62.6	65.5	68.1	71.2	57.6	60.3	63.7	66.5	68.3	71.4
10th	59.7	63.0	64.5	66.5	69.9	73.0	59.3	61.5	64.5	68.0	70.4	73.9
15th	61.0	63.7	65.7	68.5	70.9	74.9	60.3	62.2	65.9	69.0	71.6	75.6
20th	61.5	64.6	67.0	69.2	72.1	76.5	60.9	63.2	67.1	70.5	72.1	77.2
25th	62.1	65.1	67.2	71.0	74.3	78.0	61.8	64.1	67.6	71.3	72.9	78.5
30th	62.7	66.0	68.1	72.2	76.2	78.5	62.1	65.0	68.0	72.2	73.5	79.1
50th	66.0	68.6	72.0	75.4	80.2	84.0	65.4	67.6	71.6	75.7	77.2	83.4
70th	70.6	72.0	77.0	81.5	84.2	88.5	68.0	71.5	75.3	80.2	82.0	87.7
75th	71.5	73.5	78.2	82.7	85.3	91.9	68.7	72.2	76.5	81.0	82.9	89.9
80th	72.0	74.9	80.5	84.2	86.5	94.1	69.5	74.6	77.7	81.5	83.9	91.0
85th	73.7	76.8	82.0	86.5	88.8	96.1	71.0	76.6	80.0	83.6	85.6	92.2
90th	77.5	81.5	84.0	87.8	91.9	97.4	73.6	79.9	82.1	85.2	88.0	94.1
95th	80.6	84.2	86.6	91.6	97.0	102	79.1	82.7	84.5	89.0	93.0	98.5
97th	82.7	84.8	87.3	93.0	101	104	79.5	85.0	87.7	89.0	94.7	104
99th	87.2	86.4	91.5	95.6	104	112	82.0	91.6	92.1	91.5	100	107

Table 11A . Age-, Sex- specific percentile values for upper arm circumference (cm), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10- 10.9	11- 11.9	12- 12.9	6-6.9	7-7.9	8-8.9	9-9.9	10- 10.9	11- 11.9	12- 12.9
Number	112	244	227	213	223	230	85	99	181	190	190	196	182	99
1th	15.3	14.6	15.0	15.1	15.8	17.3	17.8	14.4	14.4	15.2	15.2	15.2	15.7	17.5
3th	15.3	14.8	15.9	15.6	17.1	17.7	19.5	14.8	15.0	15.5	15.8	16.4	17.2	18.5
5th	15.5	15.5	16.2	16.0	17.4	18.0	20.0	15.5	15.6	15.8	16.5	16.6	17.5	18.9
10th	16.0	15.9	16.9	16.9	17.8	18.9	20.1	15.7	16.3	16.4	17.1	17.6	18.4	19.3
15th	16.1	16.3	17.2	17.5	18.2	19.4	20.6	16.0	16.4	16.8	17.7	18.1	18.7	19.8
20th	16.4	16.6	17.4	17.7	18.6	20.0	20.6	16.0	16.7	17.0	18.1	18.3	18.9	20.2
25th	16.6	16.8	17.5	18.0	19.2	20.5	21.1	16.3	16.9	17.3	18.3	18.5	19.1	20.5
30th	16.9	17.1	17.7	18.5	19.5	21.0	21.5	16.5	17.1	17.5	18.6	18.6	19.5	20.6
50th	18.5	18.1	19.1	20.4	21.4	23.4	23.5	17.0	18.3	18.9	19.9	20.0	21.2	22.0
70th	20.0	20.0	21.5	23.3	24.5	25.1	25.6	18.5	19.5	20.9	22.3	21.9	23.7	24.3
75th	20.4	20.5	22.0	24.1	25.0	26.0	26.4	18.8	19.9	21.4	23.0	22.4	24.5	25.9
80th	20.7	21.1	22.8	24.7	25.4	27.2	27.0	19.5	20.5	21.6	23.5	23.2	25.0	26.7
85th	21.8	22.3	24.1	26.0	26.4	28.1	29.0	19.6	21.0	22.6	23.9	23.9	25.5	27.9
90th	22.6	23.5	24.7	26.5	27.4	29.0	31.3	21.2	22.0	23.6	25.0	24.5	26.2	28.6
95th	25.7	24.8	25.9	27.6	29.0	31.0	32.3	23.0	22.9	25.0	26.5	26.8	29.8	30.3
97th	26.7	25.8	26.7	29.5	30.4	32.3	34.2	24.3	24.1	25.5	28.0	27.6	30.5	33.7
99th	26.7	27.0	28.5	31.5	31.3	33.6	35.6	26.0	25.5	26.8	29.0	28.4	32.1	34.4

Table 11B. Age-, Sex- specific percentile values for upper arm circumference (cm), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5- 10.4	10.5- 11.4	11.5- 12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5- 10.4	10.5- 11.4	11.5- 12.4
Number	213	218	237	209	238	185	160	199	179	191	176	185
1th	14.6	14.7	15.0	15.8	17.0	17.5	14.4	14.4	15.2	15.2	15.7	17.2
3th	15.5	15.0	15.2	16.3	17.4	18.2	14.8	15.2	15.6	16.4	16.6	17.5
5th	15.5	15.6	15.8	16.7	17.7	18.7	15.6	15.5	16.4	16.6	17.1	18.2
10th	16.0	16.2	16.7	17.5	18.0	19.5	16.0	16.1	17.1	17.7	17.7	18.7
15th	16.4	16.7	17.2	17.7	18.8	20.0	16.3	16.5	17.4	18.1	18.2	19.2
20th	16.5	17.2	17.5	18.0	19.3	20.5	16.4	16.7	17.7	18.4	18.5	19.5
25th	16.7	17.4	17.7	18.6	19.7	21.0	16.5	17.0	17.9	18.7	18.6	19.8
30th	16.9	17.6	18.0	19.2	20.5	21.5	16.7	17.1	18.1	19.0	18.9	20.3
50th	18.0	18.7	19.5	20.9	22.5	23.6	17.8	18.4	19.1	20.6	20.3	22.0
70th	20.0	20.1	21.9	23.6	25.0	26.2	19.0	20.0	21.4	22.5	23.2	23.6
75th	20.4	20.7	22.3	24.5	25.5	27.0	19.4	20.5	21.9	23.0	23.5	24.5
80th	21.1	21.6	23.6	24.9	26.4	28.0	20.1	21.0	22.1	23.5	24.0	25.4
85th	22.2	22.7	24.5	25.9	27.4	29.0	20.8	21.6	23.1	24.3	24.5	26.3
90th	23.3	23.8	25.3	26.8	28.5	29.3	21.6	22.6	23.7	25.2	25.5	27.3
95th	25.0	25.0	26.5	29.0	31.0	31.6	23.0	24.4	24.9	27.3	26.8	30.0
97th	25.7	26.6	27.7	29.8	32.2	32.3	24.1	25.5	25.8	27.6	28.4	30.9
99th	26.7	27.0	28.5	31.5	33.6	35.6	24.3	27.4	27.1	28.0	29.9	34.4

Table 12A . Age-, Sex- specific percentile values for triceps skinfold thickness (mm), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10- 10.9	11- 11.9	12- 12.9	6-6.9	7-7.9	8-8.9	9-9.9	10- 10.9	11- 11.9	12- 12.9
Number	112	244	227	213	223	230	85	99	181	190	190	196	182	99
1th	5.2	4.0	4.5	4.5	5.0	5.5	5.0	5.5	6.0	5.0	5.0	5.0	6.0	6.0
3th	5.2	4.5	5.0	4.8	6.0	5.8	5.5	6.5	6.8	6.0	6.0	6.0	6.0	7.0
5th	5.5	5.0	5.5	5.0	6.5	6.0	6.0	6.5	7.0	6.8	6.8	6.2	7.0	7.5
10th	6.8	5.5	6.0	6.0	7.5	8.0	6.0	7.0	7.2	7.0	8.5	7.5	8.0	9.0
15th	7.0	6.0	6.8	7.0	8.0	8.5	6.8	7.0	7.8	8.0	9.0	8.0	8.5	10.0
20th	7.2	6.5	7.0	7.5	9.0	9.5	7.0	7.8	8.0	8.0	9.0	8.0	9.0	10.8
25th	7.8	7.0	7.8	8.0	10.0	10.0	7.8	8.0	8.2	9.0	10.0	8.8	10.0	11.5
30th	8.0	7.5	8.0	9.0	11.0	11.0	9.0	9.0	9.0	9.0	11.0	9.8	10.5	12.0
50th	10.0	10.0	10.2	12.2	15.0	14.5	12.2	10.0	11.0	12.0	14.2	12.0	12.5	15.0
70th	13.5	13.0	15.5	18.0	19.0	20.0	17.0	11.8	14.0	15.5	16.8	15.2	18.0	18.0
75th	15.0	14.0	17.5	19.5	20.5	20.5	18.2	12.5	14.5	16.0	17.5	16.5	18.5	19.5
80th	15.5	16.0	18.5	20.0	22.0	22.0	21.0	14.0	15.8	16.5	19.5	17.8	20.0	22.5
85th	16.5	19.0	20.0	22.0	23.0	24.8	22.5	15.0	17.0	19.0	20.2	18.5	21.0	23.0
90th	18.2	20.8	21.5	24.0	25.5	26.0	24.5	18.0	19.0	20.0	22.0	20.0	22.8	26.5
95th	21.0	22.5	25.0	26.8	26.5	29.5	29.5	22.5	20.8	23.2	25.0	23.0	27.0	29.5
97th	23.0	24.0	28.0	27.5	29.0	30.2	33.0	22.8	23.5	24.0	28.5	26.2	29.5	31.0
99th	25.5	25.0	29.0	31.0	30.0	30.5	39.5	26.0	28.0	28.5	29.0	28.0	34.5	34.0

Table 12B. Age-, Sex- specific percentile values for triceps skinfold thickness (mm), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	237	209	238	185	160	199	179	191	176	185
1th	4.5	4.0	4.5	4.8	5.0	5.5	6.0	5.0	5.5	5.0	6.0	6.0
3th	5.0	5.0	4.8	5.0	6.5	5.5	6.0	6.8	6.0	6.5	6.0	7.0
5th	5.5	5.2	5.0	5.8	7.0	5.8	6.5	6.8	6.8	7.0	6.0	7.5
10th	6.0	6.0	6.0	7.0	8.0	6.8	7.0	7.0	7.5	8.2	7.5	8.5
15th	6.5	6.5	6.8	7.2	9.0	7.8	7.5	7.5	8.0	8.8	8.0	9.0
20th	7.0	7.0	7.0	8.0	10.0	8.5	8.0	8.0	9.0	9.0	8.0	10.0
25th	7.5	7.2	8.0	9.0	10.5	9.5	8.0	8.5	10.0	10.0	8.5	10.8
30th	7.5	8.0	8.8	10.0	11.5	10.5	9.0	9.0	10.5	11.0	9.0	11.2
50th	9.8	10.0	11.0	14.0	15.5	14.2	11.0	10.5	13.5	13.8	12.0	14.0
70th	12.0	13.5	16.5	18.5	19.5	20.0	12.8	13.5	16.0	16.5	16.5	18.0
75th	14.0	15.0	18.0	20.0	20.5	20.5	14.0	15.0	16.5	17.0	17.5	18.5
80th	15.5	16.8	19.0	21.5	22.5	21.5	15.5	16.0	17.0	19.0	18.5	20.0
85th	17.5	18.0	20.0	23.5	24.0	24.5	16.0	18.2	19.0	20.0	20.0	22.5
90th	21.0	20.8	22.0	25.5	26.5	26.0	18.0	20.0	20.0	22.5	21.0	24.5
95th	21.8	22.5	25.0	26.8	29.5	29.5	21.5	23.2	22.0	26.2	24.5	29.0
97th	24.0	24.5	27.5	28.5	30.0	30.5	23.0	25.5	24.0	27.5	27.0	31.0
99th	25.5	27.5	29.0	31.0	31.5	34.0	28.0	29.0	25.0	29.0	29.0	34.0

Table 13A. Age-, Sex- specific percentile values for subscapular skinfold thickness (mm), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	112	244	227	213	223	230	85	99	181	190	190	196	182	99
1th	3.5	3.5	3.5	4.0	4.0	4.5	5.0	4.5	4.0	4.0	4.5	4.0	4.8	5.5
3th	4.0	3.8	4.0	4.0	4.2	5.0	5.0	4.8	4.8	4.5	4.8	4.8	5.2	5.8
5th	4.0	4.0	4.0	4.5	4.5	5.0	5.2	5.0	5.0	4.5	5.0	5.0	5.8	7.0
10th	4.5	4.2	4.8	5.0	5.0	5.8	5.5	5.0	5.0	5.0	5.5	5.5	6.0	7.0
15th	5.0	4.8	5.0	5.0	5.5	6.0	5.8	5.2	5.0	5.5	6.0	6.0	6.5	7.5
20th	5.0	5.0	5.2	5.5	6.0	6.5	6.2	5.5	5.2	5.8	6.0	6.5	7.0	7.8
25th	5.2	5.0	5.5	6.0	6.2	7.0	6.5	5.8	5.5	6.0	6.8	6.8	7.0	8.0
30th	5.5	5.2	5.8	6.0	6.8	7.5	7.0	6.0	6.0	6.0	7.0	7.0	7.5	8.2
50th	6.5	6.5	6.5	8.0	9.0	10.0	8.0	7.0	7.0	7.5	9.5	8.0	10.0	11.0
70th	9.5	8.2	10.0	12.5	14.0	15.2	15.0	9.2	8.8	10.8	13.5	10.5	13.5	13.5
75th	12.0	9.5	11.5	15.2	15.0	16.2	15.8	10.0	9.0	11.2	15.0	12.0	14.8	15.0
80th	13.0	11.2	13.0	16.5	16.5	18.5	17.5	11.5	10.0	12.0	16.0	13.5	15.5	17.0
85th	14.0	13.5	15.2	17.5	18.5	20.0	21.5	13.2	12.0	14.8	17.8	15.5	17.0	22.5
90th	15.0	16.5	18.0	20.8	20.5	22.5	23.5	14.0	14.2	17.5	19.0	18.5	19.5	24.5
95th	18.0	19.0	20.5	22.0	23.5	25.5	25.5	18.0	18.5	20.0	20.5	22.0	22.5	26.0
97th	20.0	21.5	21.0	24.5	24.5	26.8	29.0	20.0	20.5	22.0	23.5	25.0	26.5	28.5
99th	26.2	26.0	25.0	28.0	25.0	29.5	32.0	26.0	25.5	22.5	27.5	27.5	31.0	28.5

Table 13B. Age-, Sex- specific percentile values for subscapular skinfold thickness (mm), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	237	209	238	185	160	199	179	191	176	185
1th	3.5	3.5	3.5	4.0	4.0	4.5	4.0	4.0	4.5	4.5	4.0	5.0
3th	4.0	3.8	4.0	4.5	4.5	5.0	4.8	4.2	4.5	5.0	5.0	5.5
5th	4.0	4.0	4.0	4.8	5.0	5.2	5.0	4.8	5.0	5.0	5.2	5.8
10th	4.5	4.2	4.8	5.0	5.2	5.8	5.0	5.0	5.2	6.0	6.0	7.0
15th	4.8	5.0	5.0	5.5	6.0	6.0	5.0	5.0	5.8	6.0	6.0	7.0
20th	5.0	5.0	5.2	6.0	6.2	6.2	5.2	5.5	5.8	6.8	6.5	7.5
25th	5.0	5.2	5.5	6.0	6.5	7.0	5.5	5.8	6.0	7.0	6.8	8.0
30th	5.2	6.0	5.8	6.2	7.0	7.0	6.0	6.0	6.5	7.0	7.0	8.5
50th	6.0	6.8	7.0	9.0	10.0	10.0	6.8	7.0	8.5	9.2	8.0	10.5
70th	8.2	9.0	11.5	13.0	15.0	15.5	8.5	9.0	11.2	12.5	11.2	13.5
75th	11.0	10.0	12.0	14.0	16.2	17.2	9.0	10.0	13.2	15.0	13.0	14.8
80th	12.5	11.2	13.5	16.2	17.8	19.5	10.0	11.8	14.2	16.0	14.0	15.5
85th	13.5	15.0	16.0	18.5	19.5	22.0	11.5	13.2	15.5	18.5	16.0	19.0
90th	16.0	16.5	17.5	20.5	22.0	23.5	14.0	15.5	17.5	21.0	17.0	20.5
95th	17.0	20.0	20.5	23.0	24.0	26.0	17.0	20.5	19.0	23.0	21.0	26.0
97th	20.0	21.0	21.0	24.5	24.5	29.0	18.0	22.0	20.5	25.5	25.0	28.5
99th	26.0	26.5	24.5	28.0	28.0	31.0	20.5	26.5	22.5	27.5	30.0	30.0

Table 14A. Age-, Sex- specific percentile values for peak flow* (mm), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	112	244	227	213	223	230	85	99	181	190	190	196	182	99
1th	130	115	140	140	160	170	220	90	100	120	140	120	165	180
3th	130	150	150	180	180	220	220	95	130	150	150	160	190	200
5th	140	150	160	180	190	220	240	110	140	150	150	170	200	200
10th	150	160	175	200	200	230	245	130	140	160	160	190	210	210
15th	160	170	180	200	210	240	260	140	150	170	180	200	220	220
20th	170	180	190	210	220	250	275	150	150	170	190	210	230	230
25th	170	180	200	210	220	250	280	150	160	180	200	220	235	250
30th	170	190	210	220	230	260	300	150	170	185	200	220	240	260
50th	190	200	230	240	250	290	330	170	185	200	225	250	260	290
70th	205	220	250	260	290	320	360	180	200	220	240	280	290	320
75th	210	220	250	270	300	330	370	185	210	225	250	280	300	330
80th	210	230	260	280	310	340	380	190	210	240	260	290	305	330
85th	220	230	270	290	310	355	385	200	220	240	265	300	320	340
90th	220	240	270	300	340	370	400	200	230	260	270	310	330	360
95th	230	250	290	330	360	385	470	210	240	270	300	315	360	370
97th	230	260	310	340	370	400	500	220	260	280	320	330	370	410
99th	240	270	310	355	400	450	570	220	265	300	340	360	390	630

*The highest value of the three measurements

Table 14B. Age-, Sex- specific percentile values for peak flow* (mm), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	237	209	238	185	160	199	179	191	176	185
1th	130	130	140	170	160	220	90	135	120	150	120	165
3th	140	140	160	180	170	230	100	140	140	150	190	190
5th	150	150	170	190	200	230	120	140	150	150	190	200
10th	160	160	190	200	220	240	140	150	160	170	200	200
15th	170	170	200	200	220	250	150	150	170	180	210	220
20th	175	180	210	215	230	260	150	160	180	190	220	230
25th	180	190	210	220	240	270	160	170	190	200	230	230
30th	180	190	210	220	250	270	160	180	200	210	240	240
50th	200	210	230	250	270	310	180	190	220	240	250	270
70th	210	230	250	280	300	340	190	210	240	260	280	305
75th	215	230	260	285	310	350	190	210	245	270	285	310
80th	220	240	260	300	320	360	200	220	260	270	300	320
85th	225	245	270	310	340	370	210	230	260	290	310	330
90th	230	260	280	320	360	385	220	240	270	300	315	350
95th	240	270	310	345	370	400	230	250	290	320	330	370
97th	250	280	330	360	380	450	240	250	300	330	340	380
99th	260	310	330	400	400	490	240	260	320	360	360	410

*The highest value of the three measurements

Table 15A. Age-, Sex- specific percentile values for platelet count (10,000/mm³), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9
Number	70	106	90	97	92	101	52	75	81	86	93	82
1th	213	107	167	141	242	117	172	131	118	37	103	180
3th	225	210	167	176	255	166	172	196	198	209	196	223
5th	250	212	193	219	258	206	233	222	212	226	217	228
10th	265	227	233	230	274	252	254	239	232	244	246	251
15th	269	242	250	258	286	270	279	258	244	264	256	266
20th	273	279	271	262	298	279	291	273	252	265	264	271
25th	275	284	281	282	304	288	317	279	254	269	281	279
30th	280	295	302	290	311	294	321	286	276	276	292	283
50th	320	348	330	338	336	329	346	325	309	316	327	304
70th	376	387	354	372	366	364	372	364	372	348	380	336
75th	416	391	369	383	374	368	378	371	384	359	383	353
80th	428	408	377	400	382	379	386	384	387	370	400	376
85th	446	429	389	416	401	405	430	400	400	389	446	379
90th	466	446	403	435	415	418	470	408	416	452	466	393
95th	493	491	414	459	432	439	476	435	435	513	469	417
97th	501	498	439	477	445	450	581	461	465	515	495	419
99th	593	571	518	596	529	518	581	506	491	529	521	528

Table 15B. Age-, Sex- specific percentile values for platelet count (10,000/mm³), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	106	90	101	81	107	68	70	81	78	93	76	76
1th	170	107	176	141	117	166	131	164	37	209	103	180
3th	210	167	193	219	245	202	220	239	118	217	196	195
5th	213	210	213	222	252	206	222	239	212	232	228	199
10th	228	224	250	230	268	228	247	249	226	244	247	228
15th	267	260	272	249	281	248	277	269	233	256	261	251
20th	273	279	281	262	294	257	285	276	252	269	264	264
25th	280	282	287	286	303	270	291	285	254	281	281	268
30th	292	298	300	295	309	274	306	291	267	291	283	273
50th	320	333	338	323	337	299	337	320	300	319	308	315
70th	376	366	369	357	368	339	371	374	350	358	368	336
75th	388	375	380	374	380	346	383	391	372	369	377	342
80th	414	388	388	398	397	364	386	400	384	383	380	354
85th	418	395	400	402	413	372	396	404	387	432	400	392
90th	430	414	435	416	429	390	435	416	427	452	446	412
95th	451	491	453	433	445	405	470	465	476	469	466	438
97th	490	498	477	454	501	422	476	491	515	513	466	467
99th	493	571	518	596	529	422	581	506	515	529	521	594

Table 16A. Age-, Sex- specific percentile values for leukocyte count (/mm³), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9
Number	69	106	90	96	91	100	50	74	80	86	90	81
1th	4.3	4.2	3.7	3.8	3.5	3.3	4.3	4.3	3.2	3.4	3.4	3.5
3th	4.3	4.5	4.0	4.1	4.2	4.0	5.2	4.4	3.7	4.0	3.9	3.9
5th	4.7	4.7	4.2	4.3	4.6	4.4	5.3	4.6	4.1	4.4	4.1	4.0
10th	4.7	5.0	4.9	4.8	5.3	4.7	5.4	4.6	4.3	4.8	4.1	4.2
15th	4.8	5.2	5.3	5.3	5.4	5.2	5.5	4.9	4.8	5.1	4.3	4.5
20th	5.4	5.4	5.5	5.4	5.5	5.3	5.7	5.0	5.2	5.5	4.5	4.7
25th	5.5	5.5	5.7	5.7	5.5	5.5	5.8	5.3	5.3	5.6	4.8	5.0
30th	6.0	5.7	5.9	5.8	5.6	5.9	5.9	5.7	5.4	5.7	5.0	5.2
50th	6.8	6.5	6.2	6.4	6.4	6.6	6.9	6.2	6.1	6.3	6.1	5.8
70th	8.1	7.3	7.1	7.5	7.6	7.3	7.6	7.5	7.1	7.1	7.2	6.8
75th	8.2	7.6	7.4	7.6	8.1	7.6	8.0	7.6	7.1	8.0	7.7	6.8
80th	8.7	7.8	7.5	8.0	8.2	7.8	8.6	8.0	7.3	8.3	7.8	7.0
85th	9.2	8.4	7.9	8.3	8.7	7.9	8.7	8.4	7.3	8.4	8.2	7.3
90th	10.1	8.6	8.7	8.9	8.9	8.4	9.7	8.8	8.3	9.5	8.6	7.6
95th	13.7	9.2	9.8	10.5	10.1	9.7	11.5	11.5	9.3	9.7	10.4	8.2
97th	18.5	9.5	10.1	11.3	10.6	10.0	12.7	12.3	9.6	10.7	10.4	8.3
99th	18.5	10.5	10.3	13.6	17.6	12.2	12.7	13.8	14.0	13.4	10.4	10.3

Table 16B. Age-, Sex- specific percentile values for leukocyte count (/mm³), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	106	89	102	79	106	68	67	82	76	91	75	75
1th	3.2	4.0	3.7	4.0	3.3	3.9	4.4	4.1	3.2	3.4	3.9	3.5
3th	4.3	4.2	3.8	4.1	4.1	4.0	4.7	4.1	3.7	4.0	4.0	3.9
5th	4.7	4.5	4.1	4.3	4.3	4.4	4.8	4.6	3.7	4.0	4.0	4.1
10th	4.7	5.3	4.9	5.0	5.2	4.7	5.0	4.8	4.3	4.1	4.3	4.6
15th	4.9	5.5	5.1	5.3	5.4	4.8	5.3	5.2	4.8	4.3	4.5	4.9
20th	5.2	5.7	5.5	5.3	5.5	4.9	5.4	5.2	5.1	4.8	4.5	5.3
25th	5.4	5.9	5.6	5.4	5.7	5.3	5.7	5.3	5.4	4.9	5.0	5.4
30th	5.5	6.0	5.7	5.5	5.9	5.4	5.8	5.7	5.6	5.1	5.1	5.5
50th	6.7	6.4	6.7	6.2	6.7	6.2	7.1	6.2	6.0	6.1	6.4	6.0
70th	7.5	7.5	7.3	7.1	7.6	7.1	7.8	7.1	7.1	6.9	7.0	6.8
75th	8.2	7.6	7.9	7.5	7.8	7.3	8.1	7.4	7.3	7.0	7.3	7.0
80th	8.4	7.8	8.1	7.6	7.9	7.7	8.6	7.5	7.5	7.6	7.6	7.1
85th	9.1	8.3	8.7	7.9	8.4	7.9	9.0	7.7	8.3	7.9	7.9	7.5
90th	9.5	8.5	9.0	8.2	8.7	8.3	11.5	8.4	9.3	8.3	8.2	8.1
95th	10.8	9.2	9.8	9.6	9.8	8.4	12.7	9.0	9.7	9.3	10.4	8.3
97th	13.7	10.1	10.5	9.6	10.1	11.6	12.7	9.6	10.3	10.1	10.4	10.3
99th	18.5	10.3	11.7	13.6	11.3	12.2	13.8	14.0	13.4	10.7	10.4	11.9

Table 17A. Age-, Sex- specific percentile values for erythrocyte count (million/mm³), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9
Number	70	106	92	97	92	101	52	75	82	86	94	82
1th	3.72	3.90	3.93	4.01	3.87	2.52	3.82	3.84	3.93	4.01	4.05	3.81
3th	3.72	4.06	4.03	4.09	4.23	4.14	3.82	4.08	4.11	4.01	4.18	4.10
5th	4.04	4.13	4.17	4.19	4.25	4.32	3.82	4.13	4.13	4.03	4.25	4.10
10th	4.16	4.23	4.29	4.37	4.40	4.39	4.22	4.19	4.17	4.14	4.33	4.18
15th	4.30	4.34	4.38	4.47	4.43	4.50	4.29	4.29	4.18	4.26	4.41	4.37
20th	4.32	4.42	4.41	4.58	4.47	4.55	4.30	4.37	4.23	4.35	4.47	4.43
25th	4.35	4.53	4.47	4.63	4.51	4.64	4.37	4.41	4.33	4.42	4.51	4.47
30th	4.41	4.56	4.54	4.66	4.53	4.67	4.44	4.45	4.37	4.49	4.52	4.55
50th	4.59	4.72	4.77	4.85	4.80	4.76	4.65	4.64	4.58	4.60	4.70	4.71
70th	4.74	4.95	4.97	5.02	5.05	5.11	4.82	4.85	4.71	4.76	4.95	4.83
75th	4.79	5.01	5.01	5.07	5.10	5.23	4.88	4.90	4.73	4.90	4.97	4.86
80th	4.90	5.23	5.05	5.13	5.18	5.29	4.91	5.02	4.85	4.94	5.15	5.04
85th	5.05	5.41	5.08	5.22	5.27	5.40	4.99	5.07	4.90	4.99	5.26	5.10
90th	5.14	5.53	5.18	5.26	5.56	5.53	5.22	5.23	4.97	5.16	5.80	5.44
95th	5.39	5.75	5.44	5.41	5.94	5.88	5.31	5.82	5.26	5.35	5.99	5.71
97th	5.55	5.86	5.60	5.64	6.40	6.32	5.53	5.87	5.58	5.58	6.06	5.88
99th	5.84	7.72	5.70	6.22	6.99	6.52	5.73	5.98	5.62	6.01	6.52	5.96

Table 17B. Age-, Sex- specific percentile values for erythrocyte count (million/mm³), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	106	90	103	81	107	68	70	82	78	94	76	76
1th	3.72	3.93	4.13	3.87	2.52	4.14	3.82	3.84	3.93	4.01	4.04	3.81
3th	3.90	4.03	4.18	4.01	4.23	4.14	3.82	4.13	4.01	4.03	4.10	4.16
5th	4.05	4.06	4.31	4.21	4.31	4.32	4.02	4.13	4.11	4.14	4.10	4.20
10th	4.23	4.22	4.37	4.40	4.39	4.50	4.15	4.20	4.14	4.28	4.18	4.31
15th	4.32	4.34	4.47	4.44	4.43	4.60	4.24	4.23	4.18	4.33	4.35	4.39
20th	4.35	4.38	4.53	4.51	4.47	4.64	4.31	4.39	4.26	4.41	4.43	4.43
25th	4.41	4.43	4.56	4.55	4.52	4.67	4.37	4.41	4.33	4.47	4.49	4.54
30th	4.47	4.50	4.65	4.60	4.59	4.72	4.43	4.47	4.40	4.52	4.52	4.58
50th	4.63	4.80	4.86	4.79	4.75	4.90	4.60	4.61	4.56	4.79	4.67	4.77
70th	4.84	4.99	5.02	5.00	5.11	5.19	4.89	4.84	4.68	4.95	4.75	4.86
75th	4.95	5.01	5.05	5.06	5.18	5.25	4.91	4.90	4.71	4.99	4.85	4.94
80th	4.98	5.10	5.12	5.08	5.23	5.29	4.99	4.92	4.74	5.15	4.87	5.04
85th	5.11	5.28	5.18	5.26	5.33	5.49	5.10	5.05	4.85	5.28	5.03	5.12
90th	5.34	5.53	5.25	5.37	5.46	5.63	5.25	5.23	4.92	5.53	5.16	5.57
95th	5.41	5.75	5.47	6.22	5.56	6.52	5.53	5.50	5.16	6.01	5.44	5.83
97th	5.45	5.86	5.69	6.40	6.06	6.52	5.87	5.62	5.26	6.06	5.80	5.88
99th	5.83	7.72	5.94	6.52	6.99	6.70	5.98	6.62	5.61	6.52	5.99	5.96

Table 18A. Age-, Sex- specific percentile values for hemoglobin concentration (g/dL), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9
Number	70	106	92	97	92	101	52	75	82	86	94	82
1th	10.1	9.9	11.2	11.1	11.3	7.5	10.3	10.1	11.2	11.0	10.7	10.1
3th	10.1	10.5	11.2	11.6	11.3	10.9	10.4	10.7	11.4	11.1	10.9	11.1
5th	11.2	10.7	11.5	11.7	11.5	11.2	10.9	10.8	11.4	11.4	11.4	11.1
10th	11.5	11.1	11.8	12.0	12.1	12.0	11.0	11.4	11.7	11.6	11.6	11.9
15th	11.8	11.5	12.2	12.2	12.3	12.2	11.8	12.2	12.0	11.9	11.8	12.1
20th	12.0	11.9	12.4	12.4	12.4	12.3	11.9	12.3	12.0	11.9	12.1	12.2
25th	12.1	12.2	12.6	12.8	12.6	12.6	12.0	12.4	12.1	12.3	12.5	12.4
30th	12.2	12.2	12.8	12.9	12.7	12.7	12.3	12.4	12.3	12.4	12.7	12.6
50th	12.5	12.9	13.1	13.3	13.2	13.2	12.5	12.9	12.6	12.8	13.1	13.1
70th	13.0	13.3	13.7	13.8	13.8	13.6	13.3	13.4	13.1	13.5	13.6	13.7
75th	13.1	13.4	13.7	13.9	13.9	13.8	13.4	13.5	13.4	13.5	13.8	13.8
80th	13.2	13.5	13.9	14.2	14.0	14.2	13.4	13.5	13.6	13.6	13.8	13.8
85th	13.7	13.8	14.0	14.3	14.3	14.4	13.6	13.8	13.7	13.9	14.2	13.9
90th	13.8	14.1	14.3	14.5	14.5	14.4	13.7	14.3	14.0	14.0	14.5	14.2
95th	14.7	14.9	15.1	14.9	14.9	15.7	14.0	15.1	14.3	14.2	15.7	14.4
97th	15.2	14.9	15.3	15.1	15.3	15.8	14.5	15.1	14.5	14.3	15.7	14.4
99th	15.4	22.2	16.7	15.7	17.5	16.3	14.5	17.0	17.0	15.3	19.1	15.8

Table 18B. Age-, Sex- specific percentile values for hemoglobin concentration (g/dL), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	106	90	103	81	107	68	70	82	78	94	76	76
1th	10.1	9.9	11.1	11.1	7.5	11.1	10.1	10.6	11.1	10.9	10.3	10.1
3th	10.3	10.8	11.7	11.3	10.9	11.6	10.4	11.2	11.3	11.0	10.9	11.1
5th	10.7	11.2	11.8	11.3	11.2	11.7	10.4	11.4	11.6	11.4	11.1	11.8
10th	11.1	11.6	11.9	12.0	11.9	12.2	11.0	11.6	11.9	11.6	11.8	12.0
15th	11.5	11.8	12.2	12.4	12.1	12.6	11.8	12.0	12.0	11.8	12.0	12.1
20th	11.8	12.1	12.4	12.6	12.2	12.7	12.2	12.3	12.1	11.9	12.2	12.3
25th	12.1	12.2	12.7	12.7	12.3	13.0	12.3	12.4	12.1	12.4	12.4	12.6
30th	12.2	12.4	12.8	12.8	12.7	13.0	12.3	12.4	12.4	12.5	12.6	12.8
50th	12.8	13.0	13.2	13.1	13.2	13.4	12.7	13.0	12.8	13.0	13.2	13.3
70th	13.2	13.4	13.7	13.7	13.6	14.2	13.4	13.4	13.2	13.5	13.6	13.8
75th	13.4	13.7	13.9	13.8	13.8	14.4	13.4	13.5	13.5	13.8	13.7	13.8
80th	13.5	13.9	14.0	13.9	14.0	14.5	13.6	13.5	13.5	13.9	13.8	13.9
85th	13.7	14.2	14.2	14.2	14.4	14.6	13.7	13.8	13.6	14.0	13.9	14.1
90th	13.8	14.3	14.5	14.4	14.8	15.3	14.3	13.9	13.7	14.2	14.2	14.4
95th	14.6	15.3	14.9	14.5	15.4	16.6	14.5	15.1	14.3	14.6	14.5	15.1
97th	14.7	15.4	15.1	14.7	15.7	16.6	14.7	15.1	14.3	15.0	15.7	15.8
99th	15.2	22.2	16.7	15.7	16.3	17.3	17.0	17.6	16.7	16.9	19.1	16.5

Table 19A. Age-, Sex- specific percentile values for hematocrit (%), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9
Number	70	106	92	97	92	101	52	75	82	86	94	82
1th	31.7	32.8	34.8	36.8	35.3	23.2	33.5	32.7	34.9	36.5	34.6	33.9
3th	31.7	34.5	36.5	37.6	37.2	36.3	33.5	35.5	34.9	36.6	36.7	36.8
5th	36.0	34.8	36.6	37.9	37.9	36.5	34.6	35.5	36.3	36.6	37.2	37.0
10th	36.7	36.0	37.9	38.4	38.3	37.9	36.6	36.8	37.4	37.3	38.4	37.9
15th	37.3	37.0	39.1	38.8	38.9	39.0	36.9	37.7	38.1	37.7	38.6	38.7
20th	38.1	37.6	39.4	39.7	39.4	39.3	37.7	38.6	38.3	38.3	38.7	38.7
25th	38.4	38.2	39.7	40.7	39.8	39.9	38.3	38.8	38.6	38.9	39.5	39.6
30th	38.6	39.0	40.0	41.0	40.7	40.3	39.0	39.4	39.0	39.3	39.7	40.0
50th	39.6	40.2	41.6	41.9	42.3	41.6	39.8	40.6	39.9	40.8	41.5	42.1
70th	41.6	42.1	42.6	43.6	43.3	43.3	41.7	42.2	41.4	42.4	42.6	43.0
75th	41.7	42.4	42.8	43.7	43.9	44.0	42.0	42.7	42.6	42.6	43.0	43.4
80th	41.8	42.8	43.0	44.4	44.2	44.2	42.7	43.5	43.0	42.7	43.5	43.4
85th	42.8	43.1	43.6	44.7	44.8	45.2	43.0	43.7	43.2	43.3	43.6	43.5
90th	43.3	44.0	44.2	45.5	45.0	45.6	43.7	44.1	44.1	43.9	44.6	43.9
95th	46.0	46.5	45.2	46.8	47.8	46.8	44.9	45.5	45.3	44.0	46.6	45.0
97th	49.2	47.7	46.5	47.4	48.0	47.8	47.0	45.8	46.7	44.4	47.0	45.5
99th	49.5	67.7	53.0	50.0	48.1	52.3	47.0	53.6	50.4	46.6	54.3	51.1

Table 19B. Age-, Sex- specific percentile values for hematocrit (%), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	106	90	103	81	107	68	70	82	78	94	76	76
1th	31.7	32.8	36.8	35.3	23.2	36.3	32.7	33.4	35.7	36.7	34.6	33.9
3th	34.5	34.4	37.2	37.8	36.5	36.5	33.5	34.9	36.3	36.7	36.4	36.8
5th	35.2	34.8	37.8	37.9	37.0	37.7	34.5	36.3	36.5	37.3	37.2	37.0
10th	36.0	37.0	38.2	38.7	37.9	39.2	36.6	37.1	37.4	38.0	37.9	38.4
15th	36.7	37.6	38.7	39.3	38.3	39.9	37.1	38.2	38.1	38.4	38.7	38.9
20th	37.5	38.2	39.4	39.7	38.9	40.3	37.7	38.3	38.8	38.7	38.7	39.4
25th	38.2	39.1	39.8	40.9	39.4	40.6	38.3	39.2	39.0	38.9	39.5	40.0
30th	38.8	39.7	40.6	40.9	40.2	41.5	38.6	39.4	39.2	39.3	39.6	40.6
50th	39.9	40.9	41.6	42.1	41.8	43.1	39.9	40.9	40.5	41.3	41.5	42.1
70th	41.7	42.3	42.8	43.3	43.3	44.2	41.7	42.4	41.4	42.4	43.0	43.2
75th	41.9	42.6	43.4	43.6	43.9	44.9	42.0	42.9	41.9	43.0	43.4	43.4
80th	42.5	43.0	43.8	43.7	44.2	45.6	42.8	43.2	42.6	43.4	43.4	43.6
85th	42.8	43.6	44.5	44.2	45.0	46.1	43.7	43.7	43.0	43.8	43.5	44.0
90th	43.3	44.4	44.8	44.9	46.7	46.5	44.1	44.1	43.0	44.0	43.9	44.7
95th	45.3	47.7	45.6	46.6	47.8	48.5	45.5	45.5	45.1	44.4	45.5	46.8
97th	46.0	48.1	46.8	47.4	48.0	50.0	47.0	45.8	46.7	47.0	46.0	50.7
99th	49.5	67.7	53.0	50.0	53.2	50.9	53.6	56.1	50.4	51.9	54.3	51.1

Table 20A. Age-, Sex- specific percentile values for mean corpuscular hemoglobin (pg), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	97	208	193	192	200	213	81	81	159	169	172	181	170	89
1th	20.3	18.7	19.6	19.1	18.7	18.9	22.3	19.5	19.0	20.1	19.9	18.9	19.9	17.0
3th	24.9	19.7	20.8	20.4	19.7	19.8	24.7	20.7	19.3	24.5	19.9	19.5	20.4	18.9
5th	25.4	20.1	24.2	21.9	19.8	20.9	24.9	22.8	20.5	25.6	21.4	20.2	21.6	21.2
10th	25.9	20.9	25.3	25.7	24.0	24.7	26.0	25.5	25.0	25.9	25.7	24.2	26.4	24.8
15th	26.3	25.1	26.5	26.0	25.6	25.8	26.3	25.9	26.1	26.3	26.0	26.3	26.8	26.5
20th	26.4	25.7	26.8	26.3	26.1	26.2	26.9	26.3	26.5	26.8	26.9	26.8	27.0	26.7
25th	26.7	26.0	27.1	26.7	27.0	26.7	27.1	26.5	27.1	27.3	27.1	27.1	27.3	27.3
30th	26.8	26.3	27.2	26.9	27.2	27.0	27.4	26.9	27.3	27.4	27.4	27.2	27.5	27.8
50th	27.7	27.3	27.9	27.6	28.0	28.0	28.2	27.5	28.1	28.2	28.3	28.2	28.4	28.6
70th	28.4	28.1	28.7	28.4	28.8	28.6	28.8	28.0	28.7	29.0	28.9	29.1	29.3	29.5
75th	28.5	28.4	28.8	28.6	29.0	28.8	29.4	28.6	28.9	29.2	29.0	29.4	29.5	30.2
80th	28.5	28.6	29.2	28.8	29.2	29.0	29.7	28.9	29.3	29.3	29.1	29.6	29.8	30.3
85th	28.9	28.9	29.5	29.1	29.4	29.5	29.9	29.5	29.4	29.6	29.5	29.8	30.2	30.6
90th	29.2	29.2	29.9	29.5	29.9	29.8	30.3	29.7	29.9	29.9	29.7	30.0	30.4	30.9
95th	29.7	29.8	30.7	30.1	30.3	30.6	32.5	30.8	30.2	30.5	30.4	31.3	30.8	31.1
97th	30.7	30.3	31.1	30.1	30.6	31.9	34.0	32.6	30.4	30.8	30.7	31.7	31.5	31.3
99th	31.0	30.8	32.7	30.3	31.5	35.1	35.3	38.6	31.3	32.5	33.2	32.8	36.2	33.2

Table 20B. Age-, Sex- specific percentile values for mean corpuscular hemoglobin (pg), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	186	183	205	187	218	173	135	182	156	175	164	172
1th	18.7	19.3	19.1	19.7	18.5	18.9	19.0	19.2	21.4	18.9	20.0	18.9
3th	20.1	20.0	19.6	19.8	19.7	21.2	20.5	20.1	25.8	19.5	22.0	20.4
5th	20.2	20.5	21.7	20.8	20.5	21.8	20.7	21.1	25.9	19.5	23.3	20.7
10th	25.6	24.3	24.6	25.1	25.2	25.1	25.0	25.5	26.9	23.5	25.9	26.2
15th	25.9	25.3	25.9	26.1	25.8	26.0	25.9	25.9	27.3	25.7	26.7	26.7
20th	26.1	25.6	26.4	26.5	26.2	26.3	26.3	26.4	27.6	26.4	27.0	27.1
25th	26.4	26.3	26.8	26.9	26.7	27.0	26.7	26.8	27.7	26.7	27.2	27.4
30th	26.7	26.7	27.0	27.1	27.0	27.3	27.0	27.2	27.8	27.0	27.8	27.6
50th	27.5	27.5	27.7	27.8	28.0	28.1	27.7	28.0	28.6	27.8	28.4	28.5
70th	28.3	28.3	28.7	28.4	28.7	28.7	28.6	28.7	29.0	28.8	29.2	29.3
75th	28.5	28.7	28.8	28.7	28.9	29.1	28.8	29.0	29.1	29.0	29.6	29.6
80th	28.6	28.9	29.1	29.0	29.1	29.5	29.1	29.3	29.3	29.4	29.7	29.8
85th	28.9	29.2	29.4	29.2	29.4	29.9	29.3	29.6	29.6	29.5	30.0	30.4
90th	29.2	29.7	29.6	29.4	29.7	30.3	30.0	29.9	29.7	29.9	30.2	30.8
95th	29.6	30.4	30.1	30.1	30.3	31.9	30.3	30.4	30.4	30.8	30.8	31.3
97th	30.3	30.9	30.5	30.2	30.6	34.0	31.3	30.9	30.8	31.1	31.0	31.6
99th	31.0	32.0	32.2	31.8	31.9	35.4	34.1	32.6	33.2	32.8	31.9	36.2

Table 21A. Age-, Sex- specific percentile values for mean corpuscular hemoglobin concentration (%), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	97	208	193	192	200	213	81	81	159	169	173	181	169	89
1th	29.7	28.7	27.8	28.7	26.6	28.5	29.4	28.4	26.2	27.9	28.9	28.6	29.5	25.0
3th	29.9	29.5	29.4	29.7	29.2	29.8	30.2	29.8	29.1	30.3	29.4	29.1	29.7	28.2
5th	30.2	29.7	29.8	29.9	29.5	29.9	30.6	30.1	29.8	30.4	29.4	29.7	29.8	28.4
10th	30.6	30.2	30.8	30.4	30.3	30.6	30.8	30.3	30.8	30.7	30.1	30.0	30.6	30.5
15th	30.8	30.6	31.2	30.7	30.7	30.8	30.9	30.9	30.9	30.8	30.9	30.3	30.9	30.7
20th	31.1	30.7	31.3	31.0	30.9	31.0	31.4	31.0	31.3	31.1	31.0	30.6	31.0	31.0
25th	31.2	31.1	31.5	31.1	31.3	31.4	31.8	31.1	31.4	31.2	31.3	30.9	31.3	31.2
30th	31.3	31.3	31.7	31.3	31.4	31.5	32.1	31.2	31.6	31.6	31.4	31.3	31.4	31.3
50th	31.8	31.9	32.2	31.9	32.1	32.2	32.7	31.4	32.1	32.1	32.0	32.0	32.0	32.1
70th	32.3	32.8	33.2	32.8	32.9	33.1	33.7	31.9	33.0	33.1	32.8	32.8	32.7	33.1
75th	32.3	33.0	33.5	33.1	33.4	33.4	34.3	32.2	33.2	33.4	33.0	33.0	33.3	33.2
80th	32.8	33.4	33.8	33.4	33.8	33.8	34.4	32.6	33.3	33.7	33.1	33.3	33.7	33.6
85th	33.4	33.6	34.2	33.9	34.0	34.1	34.5	33.2	33.6	34.0	33.6	34.1	33.9	33.8
90th	33.9	34.0	34.6	34.3	34.4	34.6	34.9	34.1	33.8	34.7	34.1	34.8	34.4	34.3
95th	34.7	34.5	35.2	34.8	35.1	35.8	35.9	34.7	34.8	35.5	34.3	35.6	35.2	34.8
97th	35.9	34.9	35.6	35.3	35.5	36.0	39.6	36.1	35.6	36.0	34.6	36.1	35.2	34.8
99th	36.7	35.3	37.2	36.3	36.4	39.6	40.4	50.5	36.5	36.7	39.0	36.6	40.8	36.8

Table 21B. Age-, Sex- specific percentile values for mean corpuscular hemoglobin concentration (%), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	186	183	205	187	218	173	135	182	156	176	163	172
1th	28.9	29.3	26.4	26.6	28.5	28.5	26.2	26.2	29.4	26.2	28.0	28.2
3th	29.9	29.4	28.7	29.4	29.8	30.2	29.8	28.6	30.0	29.3	29.7	28.8
5th	30.1	29.7	29.5	29.7	29.9	30.4	29.8	30.1	30.3	29.4	30.0	29.5
10th	30.4	30.3	30.6	30.3	30.4	30.7	30.3	30.7	30.8	29.8	30.3	30.5
15th	30.7	30.7	31.0	30.7	30.8	30.9	30.8	30.9	31.0	30.3	30.6	30.9
20th	31.0	31.0	31.1	30.9	31.1	31.0	31.0	31.2	31.2	30.8	30.8	31.0
25th	31.1	31.3	31.3	31.3	31.3	31.4	31.1	31.3	31.4	31.0	31.0	31.2
30th	31.3	31.5	31.4	31.4	31.5	31.7	31.3	31.5	31.6	31.3	31.3	31.4
50th	31.9	32.0	32.0	32.0	32.1	32.5	31.8	32.1	32.1	32.0	32.0	32.0
70th	32.8	33.0	33.2	32.8	32.9	33.5	32.8	32.9	33.1	32.7	32.9	32.8
75th	33.1	33.2	33.4	33.0	33.3	33.8	33.2	33.1	33.3	32.9	33.3	33.2
80th	33.4	33.5	33.8	33.4	33.8	34.3	33.3	33.3	33.5	33.1	33.7	33.6
85th	33.6	33.9	34.2	33.8	33.9	34.5	33.7	33.8	33.8	33.6	34.1	33.9
90th	33.9	34.5	34.7	34.1	34.1	35.0	34.2	34.3	34.1	34.3	34.5	34.6
95th	34.5	35.0	35.3	34.6	34.8	36.0	34.8	35.6	35.0	34.8	35.2	35.2
97th	34.9	35.1	35.6	35.5	35.5	39.6	35.5	36.1	35.5	36.1	35.3	35.3
99th	36.7	35.6	36.9	36.4	36.5	40.4	39.9	37.4	39.0	36.5	35.8	40.8

Table 22A. Age-, Sex- specific percentile values for mean corpuscular volume (fL), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	97	208	193	191	200	213	81	81	159	169	173	181	170	89
1th	68.9	63.3	63.0	64.6	61.1	60.4	77.6	62.9	62.3	64.8	67.9	63.4	66.5	67.2
3th	77.0	65.0	67.6	66.7	65.4	66.4	77.6	69.4	66.6	78.3	67.9	65.1	67.5	68.2
5th	80.2	65.4	75.3	72.2	67.0	68.5	78.5	75.5	68.0	80.9	70.8	68.2	69.5	70.1
10th	80.8	70.7	79.3	80.0	78.9	77.2	80.0	81.3	78.3	82.2	81.9	79.3	81.0	81.5
15th	82.7	77.3	81.8	81.1	81.5	80.3	80.8	83.0	80.9	83.1	82.9	81.8	84.0	83.2
20th	83.9	80.4	82.7	82.1	82.7	81.4	82.3	83.4	82.3	83.6	84.2	83.6	84.9	83.6
25th	84.0	82.0	83.4	82.8	83.2	83.0	83.7	83.6	83.7	84.2	85.0	84.6	85.7	84.6
30th	84.6	83.1	84.0	84.0	83.9	83.9	84.5	84.8	84.6	84.7	85.6	84.9	86.3	86.0
50th	86.3	85.3	85.8	86.5	86.3	86.3	85.7	86.5	87.1	87.0	87.6	87.9	88.0	88.9
70th	88.5	87.0	87.8	87.6	88.2	88.2	87.6	88.1	88.9	89.2	89.3	90.0	89.9	91.2
75th	88.6	88.0	88.1	87.9	88.8	88.5	88.2	88.1	89.6	89.9	90.0	90.4	90.5	91.4
80th	89.0	88.4	89.0	88.6	89.8	89.1	88.7	89.4	90.1	90.4	90.4	91.0	90.8	91.9
85th	89.2	89.0	90.0	89.0	90.2	89.5	89.1	89.6	90.6	90.8	91.0	91.6	91.8	92.8
90th	89.7	89.6	90.6	90.2	91.2	90.5	91.3	91.1	91.5	91.4	91.9	92.6	93.9	94.5
95th	91.1	91.3	91.9	92.3	92.3	91.5	92.1	92.4	93.1	92.5	92.5	93.5	94.7	95.5
97th	93.0	92.0	93.2	93.3	92.5	92.5	93.3	93.1	93.5	92.7	92.9	93.6	95.2	95.7
99th	95.2	93.2	97.3	95.0	93.1	93.9	94.1	98.3	96.9	94.9	98.4	95.3	96.7	96.0

Table 22B. Age-, Sex- specific percentile values for mean corpuscular volume (fL), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	186	183	204	187	218	173	135	182	156	176	164	172
1th	63.7	63.9	63.0	65.6	60.0	63.9	62.9	62.3	70.8	62.7	67.0	66.5
3th	65.1	65.4	66.2	67.4	64.1	66.4	66.6	68.0	81.9	65.1	71.0	67.3
5th	67.6	67.2	68.6	70.8	68.5	68.6	69.0	70.3	82.4	67.9	75.5	68.4
10th	79.7	76.2	79.1	80.0	79.1	78.5	78.3	80.7	83.6	73.2	81.3	80.9
15th	81.2	78.8	81.0	81.3	81.0	80.7	80.9	81.7	83.9	81.8	83.3	83.6
20th	82.3	80.6	82.1	82.7	82.4	81.4	82.1	82.7	84.7	82.8	84.6	84.8
25th	83.2	83.0	82.7	83.0	83.3	83.0	83.6	83.6	85.2	84.1	85.4	85.8
30th	83.9	83.4	83.4	84.0	84.1	83.8	84.6	84.4	85.9	84.6	86.3	86.2
50th	85.4	85.4	85.6	86.5	86.3	86.2	86.6	86.8	87.9	87.2	88.2	88.2
70th	87.3	87.3	87.5	87.9	88.0	88.2	88.1	88.4	90.1	88.8	90.5	90.2
75th	88.4	88.0	87.8	88.6	88.6	88.6	89.2	89.2	90.5	89.7	90.8	90.9
80th	88.8	88.2	88.2	89.5	89.1	89.1	89.6	89.6	91.0	90.3	91.6	91.4
85th	89.2	89.2	89.3	90.2	89.7	89.6	90.0	90.4	91.4	90.5	93.0	92.0
90th	89.7	90.0	90.3	91.2	90.5	91.0	91.2	90.8	92.0	91.1	93.0	94.1
95th	91.3	91.5	91.8	92.4	92.1	92.0	92.4	93.1	92.5	92.5	94.3	95.3
97th	92.4	92.8	92.6	92.7	92.9	92.5	92.7	93.5	93.1	92.7	94.3	95.7
99th	93.2	97.2	93.9	95.0	93.9	93.3	96.6	94.9	98.4	94.1	95.7	96.7

Table 23A. Age-, Sex- specific percentile values for serum creatinine (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	99	213	192	193	202	215	82	81	160	171	174	181	172	90
1th	0.3	0.2	0.4	0.4	0.4	0.4	0.0	0.1	0.3	0.4	0.0	0.0	0.4	0.4
3th	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.3	0.4	0.4	0.4	0.4	0.4	0.4
5th	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.3	0.4	0.4	0.4	0.4	0.4	0.5
10th	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5
15th	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.4	0.4	0.4	0.5	0.5	0.5	0.5
20th	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.4	0.5	0.5	0.5	0.5	0.5	0.5
25th	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6
30th	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6
50th	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.6
70th	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7
75th	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7
80th	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7
85th	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.6	0.6	0.7	0.7	0.7	0.7	0.7
90th	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7
95th	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.9	0.9
97th	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.8	0.7	0.8	1.3	0.7	0.9	1.1
99th	3.6	0.9	0.8	0.8	0.9	0.9	1.1	0.9	1.1	0.9	1.5	0.7	0.9	1.7

Table 23B. Age-, Sex- specific percentile values for serum creatinine (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	190	184	206	189	221	174	136	183	157	177	166	173
1th	0.2	0.3	0.4	0.4	0.4	0.4	0.1	0.3	0.0	0.4	0.0	0.4
3th	0.4	0.4	0.4	0.4	0.4	0.5	0.3	0.4	0.4	0.4	0.4	0.4
5th	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4
10th	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5
15th	0.4	0.5	0.5	0.5	0.5	0.6	0.4	0.4	0.5	0.5	0.5	0.5
20th	0.5	0.5	0.5	0.5	0.5	0.6	0.4	0.5	0.5	0.5	0.5	0.5
25th	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5
30th	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6
50th	0.5	0.5	0.6	0.6	0.6	0.7	0.5	0.5	0.6	0.6	0.6	0.6
70th	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7
75th	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.7
80th	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7
85th	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7
90th	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7
95th	0.7	0.7	0.7	0.8	0.7	0.9	0.7	0.7	0.7	0.7	0.7	0.7
97th	0.7	0.7	0.7	0.8	0.8	0.9	0.7	0.7	0.7	1.3	0.9	0.8
99th	0.9	1.0	0.8	0.9	0.9	1.1	1.1	0.8	1.0	1.5	0.9	0.9

Table 24A. Age-, Sex- specific percentile values for serum glutamate oxaloacetate transaminase (U/L), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	99	214	192	193	202	215	82	81	160	171	174	181	172	90
1th	0	5	4	13	2	11	10	8	3	12	8	0	7	10
3th	1	15	15	14	12	12	13	16	14	15	13	10	11	12
5th	2	16	16	15	12	13	13	17	15	16	15	13	12	12
10th	16	17	17	16	15	15	15	18	17	17	16	14	13	12
15th	18	18	17	17	16	15	15	18	18	18	16	15	14	13
20th	18	18	18	17	17	16	16	19	18	18	17	15	15	13
25th	19	19	18	18	18	17	16	19	19	18	17	16	15	13
30th	21	19	19	18	18	18	17	19	19	19	18	16	15	14
50th	22	22	22	22	21	19	18	23	22	22	21	18	17	16
70th	25	24	24	24	23	22	22	25	24	24	22	21	19	18
75th	26	25	25	25	23	23	22	26	24	25	24	22	19	19
80th	27	27	26	26	25	23	23	26	25	25	25	23	21	19
85th	29	28	27	28	26	25	24	28	25	26	25	24	21	21
90th	30	29	28	32	27	26	27	28	27	28	27	25	22	22
95th	35	32	32	36	28	28	28	32	29	33	30	35	26	35
97th	43	34	34	45	32	32	29	34	30	39	68	38	28	37
99th	43	38	51	83	35	33	70	37	36	57	71	58	43	46

Table 24B. Age-, Sex- specific percentile values for serum glutamate oxaloacetate transaminase (U/L), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	190	185	206	189	221	174	136	183	157	177	166	173
1th	1	3	4	12	2	10	3	12	15	5	2	7
3th	15	15	15	14	12	12	12	15	15	11	12	11
5th	15	15	16	15	12	13	14	16	15	14	13	12
10th	17	16	17	15	14	15	17	17	16	15	14	12
15th	18	17	17	16	15	16	18	18	17	16	15	13
20th	19	18	18	17	16	16	18	18	17	16	15	13
25th	19	19	18	18	17	17	19	19	18	17	16	14
30th	21	19	18	18	18	18	21	19	18	17	16	15
50th	23	22	22	21	21	19	23	22	22	18	18	16
70th	25	24	24	23	22	22	25	24	24	22	21	18
75th	26	25	25	24	23	23	25	24	25	22	21	18
80th	28	27	25	25	23	24	26	25	25	24	22	19
85th	28	27	26	26	25	25	27	25	26	24	23	21
90th	32	29	28	28	26	27	28	26	28	25	25	22
95th	35	32	32	34	27	29	32	30	30	32	35	27
97th	38	32	34	45	32	32	36	36	39	38	35	37
99th	43	47	51	83	32	38	48	57	68	71	58	46

Table 25A. Age-, Sex- specific percentile values for serum glutamate pyruvate transaminase (U/L), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	99	214	192	193	202	215	82	81	160	171	174	181	172	90
1th	0	0	5	4	0	4	2	1	3	2	0	1	1	2
3th	2	2	6	6	5	5	5	2	4	4	0	3	4	5
5th	3	6	7	6	6	6	5	3	5	5	2	5	4	5
10th	6	8	7	8	7	7	7	5	7	7	6	6	5	6
15th	7	8	8	8	8	8	8	6	8	8	7	7	6	7
20th	8	8	8	8	8	9	9	7	8	8	7	8	7	8
25th	8	9	9	9	9	9	10	8	8	8	8	8	8	8
30th	8	9	9	10	10	10	10	9	8	9	8	8	8	8
50th	10	11	11	11	11	11	11	10	10	10	10	10	9	9
70th	12	13	12	14	14	16	13	11	11	12	12	12	11	11
75th	12	14	14	14	14	16	14	12	12	12	13	12	11	12
80th	13	14	14	17	18	18	16	13	12	13	14	13	11	13
85th	14	16	16	19	19	21	20	14	14	14	16	14	13	13
90th	18	18	18	20	21	24	24	17	14	16	19	18	14	17
95th	24	21	21	28	29	30	30	18	18	18	20	23	21	18
97th	31	21	25	33	38	41	48	25	21	21	28	28	29	23
99th	33	29	43	53	54	48	142	30	29	55	30	71	44	42

Table 25B. Age-, Sex- specific percentile values for serum glutamate pyruvate transaminase (U/L), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	190	185	206	189	221	174	136	183	157	177	166	173
1th	0	2	5	4	0	4	1	3	0	0	1	2
3th	2	6	6	5	5	4	4	6	2	1	1	5
5th	3	7	7	6	6	5	4	6	4	3	4	5
10th	7	8	8	7	7	8	6	7	7	6	4	6
15th	8	8	8	8	8	8	8	8	7	7	6	7
20th	8	8	9	8	8	9	8	8	8	7	7	8
25th	8	9	9	9	9	9	8	8	8	8	8	8
30th	9	9	9	10	10	10	8	9	8	8	8	8
50th	11	10	11	12	11	11	10	11	10	10	9	9
70th	13	13	12	14	14	14	11	12	11	12	11	11
75th	14	13	13	16	16	16	11	12	12	13	11	11
80th	14	14	14	19	18	19	13	13	13	14	12	12
85th	17	16	14	19	20	22	14	14	14	16	14	13
90th	19	18	17	21	22	25	17	14	16	20	17	14
95th	21	21	21	30	27	33	18	18	18	25	22	17
97th	23	25	27	35	29	45	21	23	18	30	30	23
99th	36	43	33	53	48	51	30	31	24	30	71	44

Table 26A. Age-, Sex- specific percentile values for serum total cholesterol* (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	83	180	169	175	189	195	76	67	124	153	161	162	157	85
1th	105	122	133	126	123	102	115	113	120	127	113	38	88	118
3th	121	124	141	134	126	111	124	125	130	129	120	123	126	118
5th	123	135	143	137	131	117	130	125	135	133	126	126	132	118
10th	137	140	147	144	141	133	137	136	142	137	138	140	140	142
15th	140	144	154	147	149	140	146	138	151	140	149	144	148	146
20th	145	148	158	151	155	147	151	151	157	143	153	148	151	148
25th	158	152	160	156	158	150	155	155	160	150	157	153	155	158
30th	160	155	163	162	161	154	157	156	165	153	161	156	159	160
50th	173	173	177	173	173	170	174	169	174	173	175	174	171	170
70th	184	186	191	195	189	185	189	180	194	191	199	192	187	179
75th	192	193	194	202	193	189	194	190	197	200	205	196	193	191
80th	194	197	200	206	199	199	195	192	206	205	211	202	201	196
85th	199	203	206	211	209	208	200	199	211	209	220	211	206	200
90th	207	216	212	223	222	221	203	204	215	213	225	218	215	203
95th	238	226	226	229	233	239	214	208	232	228	239	220	231	212
97th	252	255	238	243	238	282	224	215	233	239	254	222	231	227
99th	252	305	274	261	268	310	245	230	239	252	342	295	247	238

*Non-fasting subjects were excluded

Table 26B. Age-, Sex- specific percentile values for serum total cholesterol* (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	164	150	187	178	202	158	108.0	153.0	144.0	163.0	148.0	160.0
1th	119	120	134	123	102	115	113	127	120	113	38	88
3th	122	125	137	126	111	117	134	129	129	123	123	118
5th	127	133	141	131	129	123	135	134	131	125	132	127
10th	139	142	146	142	138	137	145	137	138	136	137	142
15th	144	144	152	148	143	147	155	141	149	143	147	148
20th	150	148	156	152	148	151	157	142	151	150	153	151
25th	158	152	162	157	155	155	158	150	153	155	156	156
30th	160	155	163	160	158	157	166	153	159	160	164	158
50th	175	172	176	173	171	172	174	170	174	176	180	170
70th	191	183	192	190	189	185	191	187	197	199	195	183
75th	194	192	198	195	198	188	196	193	202	204	200	192
80th	199	196	202	203	211	192	200	200	205	206	204	197
85th	205	199	210	208	220	199	208	206	211	213	211	201
90th	225	206	223	213	229	204	214	213	222	220	219	209
95th	238	219	229	226	238	214	220	228	239	237	230	221
97th	254	250	243	239	268	239	233	232	245	258	231	227
99th	298	305	274	261	282	310	239	252	278	342	254	247

*Non-fasting subjects were excluded

Table 27A. Age-, Sex- specific percentile values for serum high density lipoprotein cholesterol* (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	83	178	168	175	188	195	75	67	121	152	157	162	156	84
1th	29	40	35	37	35	31	34	36	36	33	27	18	34	30
3th	33	41	41	39	38	36	35	37	40	37	38	34	40	36
5th	42	45	45	41	39	40	36	41	40	40	38	39	40	40
10th	44	47	46	44	44	43	45	42	45	46	42	42	45	42
15th	47	48	50	46	47	46	46	43	46	47	44	43	48	45
20th	49	50	52	48	48	47	46	45	49	49	47	46	50	47
25th	50	52	54	51	49	48	50	46	51	51	48	49	52	48
30th	52	54	56	53	51	51	51	48	53	51	48	53	53	51
50th	60	59	62	58	61	57	54	56	59	58	57	57	56	57
70th	63	66	69	65	66	63	61	60	67	63	64	65	62	62
75th	65	67	71	66	70	65	61	67	68	65	66	68	65	63
80th	67	70	73	69	74	67	63	68	70	67	68	71	67	66
85th	70	77	75	72	75	69	64	70	75	70	74	74	70	68
90th	74	84	80	76	82	72	66	75	80	74	77	76	76	72
95th	76	90	86	81	87	77	72	77	93	80	82	80	81	80
97th	76	95	86	83	91	81	81	83	94	83	86	82	86	80
99th	83	111	90	97	97	83	91	87	109	88	88	88	100	89

*Non-fasting subjects were excluded

Table 27B. Age-, Sex- specific percentile values for serum high density lipoprotein cholesterol* (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	163	149	186	178	201	157	106	152	142	160	148	158
1th	33	40	35	37	31	34	27	36	33	19	34	34
3th	41	44	39	39	38	35	37	39	36	35	39	40
5th	43	46	43	41	39	36	41	40	40	39	40	41
10th	46	47	45	43	45	41	43	45	46	43	43	45
15th	48	48	49	47	46	45	46	46	47	44	48	47
20th	50	51	51	48	47	47	48	47	49	45	52	49
25th	51	52	52	50	50	48	49	49	50	47	53	50
30th	54	54	54	52	52	50	52	51	51	48	53	52
50th	60	60	60	58	60	54	59	58	57	57	58	56
70th	65	66	68	65	66	61	67	64	64	63	66	62
75th	66	68	71	66	67	63	68	66	66	65	69	64
80th	68	70	72	70	71	64	70	70	68	68	72	66
85th	74	76	75	73	75	66	74	72	72	72	76	70
90th	77	79	79	77	77	68	78	75	80	74	80	74
95th	86	86	82	86	83	71	93	79	83	79	81	79
97th	92	90	86	91	85	72	102	81	86	81	88	80
99th	98	111	87	97	105	91	109	89	87	88	100	86

*Non-fasting subjects were excluded

Table 28A. Age-, Sex- specific percentile values for serum low density lipoprotein cholesterol* (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	83	178	168	175	188	195	75	67	122	152	157	162	156	84
1th	52	57	66	63	53	49	44	66	60	55	54	26	28	64
3th	65	62	69	69	64	52	63	72	65	64	59	63	63	65
5th	66	65	72	74	66	62	64	72	66	71	64	68	65	68
10th	78	71	80	80	75	71	75	75	73	75	74	72	77	73
15th	85	78	83	85	78	78	80	81	83	80	80	75	82	78
20th	92	80	88	90	85	81	85	88	86	83	85	79	85	81
25th	95	81	91	93	89	86	89	95	94	84	92	83	88	87
30th	96	90	94	96	93	89	91	97	96	88	95	87	90	90
50th	106	105	106	106	105	104	99	106	104	103	108	102	101	98
70th	117	117	121	124	115	119	115	116	129	127	126	117	119	110
75th	119	119	123	128	121	124	120	119	132	128	134	121	124	112
80th	128	124	131	133	129	127	131	121	136	133	137	124	126	119
85th	137	127	138	138	136	134	132	130	140	138	141	137	139	121
90th	149	135	143	146	148	150	140	138	148	143	148	143	143	125
95th	185	159	151	154	162	174	145	143	158	156	164	146	150	130
97th	185	177	170	164	164	219	163	155	174	157	168	151	156	133
99th	204	210	225	180	179	238	196	161	200	185	176	245	174	145

*Non-fasting subjects were excluded

Table 28B. Age-, Sex- specific percentile values for serum low density lipoprotein cholesterol* (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	163	149	186	178	201	157	107	152	142	160	148	158
1th	53	58	56	53	49	46	52	55	54	58	26	28
3th	65	63	70	64	63	54	65	64	67	64	65	63
5th	65	67	77	74	65	62	66	66	71	67	65	72
10th	78	70	81	77	74	68	77	72	78	72	72	77
15th	80	72	87	79	80	80	83	76	83	77	78	81
20th	85	78	92	85	83	86	91	82	88	81	83	85
25th	90	81	94	90	87	89	95	83	92	85	86	88
30th	95	89	96	93	89	92	96	86	95	92	89	90
50th	110	101	107	103	106	105	109	100	108	108	105	98
70th	118	112	121	119	121	117	119	122	126	124	119	112
75th	122	116	126	124	129	119	129	129	128	129	124	117
80th	127	122	134	129	136	124	133	134	130	137	125	122
85th	134	129	138	132	147	127	137	139	138	142	137	127
90th	138	142	146	143	157	132	143	150	143	146	142	131
95th	167	151	154	154	174	143	150	158	156	163	150	145
97th	185	163	170	164	183	169	161	161	176	168	156	149
99th	204	210	225	179	228	238	200	174	190	245	157	174

*Non-fasting subjects were excluded

Table 29A. Age-, Sex- specific percentile values for serum triglyceride* (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	83	180	169	175	189	195	76	67	125	153	161	162	157	85
1th	31	26	31	28	29	24	37	33	26	30	32	28	33	30
3th	31	32	32	30	32	30	37	33	32	33	32	32	37	32
5th	31	36	34	32	33	33	38	33	33	35	39	37	41	36
10th	39	41	36	37	38	36	43	39	39	38	42	41	48	46
15th	40	44	39	41	40	39	48	41	42	40	48	44	51	50
20th	42	47	41	44	42	42	50	43	43	44	50	48	53	56
25th	42	49	44	46	45	44	52	44	47	47	52	51	55	59
30th	43	52	46	48	48	47	53	45	49	49	54	53	55	66
50th	54	62	54	58	60	63	61	50	60	57	65	69	63	80
70th	68	77	67	78	78	82	80	74	74	78	86	93	82	109
75th	74	82	74	81	87	87	86	86	80	80	94	97	91	113
80th	78	88	77	85	97	92	99	88	86	84	108	103	98	119
85th	83	102	87	94	110	101	103	97	92	95	124	111	103	122
90th	89	105	94	102	118	111	121	114	94	109	133	130	118	128
95th	135	123	125	129	156	132	133	121	100	118	149	156	131	148
97th	141	139	139	167	163	141	133	133	114	119	177	224	147	148
99th	520	175	237	203	205	193	173	163	136	145	207	232	171	269

*Non-fasting subjects were excluded

Table 29B. Age-, Sex- specific percentile values for serum triglyceride* (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	164	150	187	178	202	158	109	153	144	163	148	160
1th	27	26	29	20	27	25	33	26	30	28	38	32
3th	31	32	32	31	31	34	35	33	32	32	41	33
5th	32	34	33	32	33	37	37	33	35	37	42	37
10th	40	36	39	39	36	42	40	41	39	42	48	45
15th	42	40	40	42	38	44	42	45	40	45	51	48
20th	43	44	42	44	40	48	43	47	41	51	54	51
25th	47	45	45	46	42	51	44	49	46	53	55	54
30th	49	48	46	48	45	57	47	51	48	56	56	57
50th	59	58	56	59	61	68	56	64	57	69	67	72
70th	75	74	70	75	84	86	72	80	76	90	93	95
75th	77	76	76	80	90	96	76	84	79	102	95	104
80th	87	81	79	83	97	103	84	89	84	110	98	113
85th	92	97	91	94	105	108	88	95	95	124	109	119
90th	104	111	94	100	114	124	94	99	110	131	127	125
95th	135	133	117	124	133	141	114	118	136	154	153	142
97th	141	140	133	178	150	175	120	127	145	207	180	148
99th	175	237	167	203	186	193	121	136	185	232	224	171

*Non-fasting subjects were excluded

Table 30A. Age-, Sex- specific percentile values for blood glucose* (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	77	170	166	172	185	191	75	64	125	148	158	160	155	84
1th	67	83	77	81	81	78	85	83	3	81	79	82	83	83
3th	73	85	79	85	83	87	85	83	73	82	83	84	86	83
5th	73	86	84	86	84	89	85	84	80	84	85	86	87	85
10th	87	88	88	89	87	91	88	86	81	86	87	87	89	88
15th	88	88	90	90	90	93	89	88	85	87	88	89	91	90
20th	90	89	92	91	91	93	90	88	87	89	90	91	92	91
25th	91	90	93	92	92	94	91	89	88	91	92	92	93	92
30th	92	92	93	93	94	95	93	90	89	92	92	93	94	94
50th	95	96	97	96	97	98	98	93	94	95	95	97	97	97
70th	100	98	101	100	102	101	106	96	97	98	100	100	100	101
75th	101	100	101	101	103	102	107	97	99	98	101	101	101	101
80th	103	100	103	102	104	103	108	98	100	100	101	102	102	102
85th	105	102	105	104	105	105	109	100	101	102	103	104	102	105
90th	107	105	106	106	106	106	111	101	102	104	104	106	104	105
95th	112	109	109	109	111	108	115	104	104	107	107	108	106	107
97th	112	110	110	110	112	111	117	104	107	110	109	110	111	112
99th	130	117	170	116	137	116	133	111	108	112	127	114	149	112

*Non-fasting subjects were excluded

Table 30B. Age-, Sex- specific percentile values for blood glucose* (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	155	142	185	174	196	157	107	151	141	159	146	158
1th	67	84	77	81	81	78	3	81	79	76	81	83
3th	79	87	81	84	84	85	73	81	81	84	86	86
5th	83	87	86	85	87	86	80	84	83	85	87	87
10th	86	89	89	89	89	89	82	86	86	86	90	89
15th	88	90	90	91	91	91	85	87	88	89	91	91
20th	89	92	90	91	93	92	87	87	89	90	93	91
25th	90	92	92	92	94	93	88	89	91	91	94	92
30th	91	93	93	93	95	93	89	90	92	92	95	93
50th	95	97	96	96	99	97	94	93	95	96	98	97
70th	99	100	101	100	102	104	99	96	98	100	101	100
75th	100	100	101	101	103	105	100	98	100	101	101	101
80th	102	101	102	102	104	106	101	99	101	102	102	102
85th	103	103	105	104	105	107	102	100	102	103	104	104
90th	107	105	107	105	106	108	104	101	104	105	106	105
95th	109	109	109	109	111	112	104	104	107	107	109	106
97th	112	110	109	116	111	116	104	108	110	109	112	108
99th	117	117	170	137	115	124	108	112	127	115	149	112

*Non-fasting subjects were excluded

Table 31A. Age-, Sex- specific percentile values for serum uric acid (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	99	214	192	193	202	215	82	81	160	171	174	181	172	90
1th	3.3	3.3	2.8	0.0	3.4	3.6	3.4	2.7	3.2	2.8	2.8	0.5	3.5	3.8
3th	3.7	3.6	3.4	3.2	3.5	3.9	4.2	3.1	3.4	3.6	3.3	3.4	3.6	3.9
5th	3.8	3.7	3.7	3.7	3.8	4.2	4.2	3.7	3.8	3.8	3.4	3.9	3.6	4.1
10th	4.0	4.2	4.2	4.2	4.3	4.7	4.7	4.0	4.0	4.0	4.0	4.1	4.2	4.4
15th	4.3	4.4	4.4	4.6	4.6	4.9	5.7	4.1	4.1	4.3	4.2	4.2	4.3	4.7
20th	4.5	4.6	4.6	4.8	4.7	5.1	6.0	4.5	4.5	4.4	4.4	4.5	4.5	4.8
25th	4.7	4.7	4.8	4.9	4.9	5.3	6.2	4.6	4.6	4.6	4.6	4.7	4.9	5.1
30th	4.7	5.0	4.8	5.1	5.1	5.5	6.4	4.7	4.8	4.7	4.7	4.8	5.1	5.3
50th	5.2	5.6	5.3	5.7	6.0	6.3	7.1	5.4	5.3	5.4	5.5	5.6	5.8	6.1
70th	6.3	6.3	6.2	6.5	6.6	7.4	7.8	6.2	6.0	6.5	6.2	6.6	6.7	6.6
75th	6.5	6.4	6.3	6.6	6.9	7.7	8.1	6.3	6.1	6.6	6.4	6.7	6.9	6.8
80th	7.0	7.2	6.6	6.8	7.3	8.1	8.7	6.6	6.4	7.0	6.7	6.9	7.2	6.9
85th	7.2	7.4	7.0	7.2	7.6	8.6	8.9	7.0	6.7	7.4	7.0	7.2	7.8	7.2
90th	8.8	7.9	7.3	7.8	7.9	8.8	9.4	7.3	7.0	7.9	7.4	7.5	8.5	8.1
95th	9.1	8.3	7.9	8.5	8.6	9.9	10.1	7.9	7.6	8.4	8.2	8.4	8.8	9.7
97th	9.1	8.4	8.3	8.9	9.5	10.0	11.1	8.8	7.7	8.4	8.5	8.6	9.3	9.9
99th	9.4	9.5	8.9	10.6	11.3	10.3	12.4	9.1	8.6	9.5	9.0	9.1	9.8	10.5

Table 31B. Age-, Sex- specific percentile values for serum uric acid (mg/dL), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	190	185	206	189	221	174	136	183	157	177	166	173
1th	3.3	2.7	2.5	0.0	2.9	3.4	3.1	2.8	3.4	0.4	0.5	3.5
3th	3.6	3.4	3.4	3.5	3.7	4.1	3.2	3.4	3.6	3.3	3.4	3.8
5th	3.7	3.7	3.8	4.0	3.9	4.2	3.6	3.8	3.8	3.7	3.6	3.9
10th	4.1	4.1	4.3	4.3	4.4	4.7	3.9	4.0	4.0	4.2	4.1	4.2
15th	4.4	4.4	4.6	4.6	4.7	5.1	4.1	4.2	4.1	4.5	4.2	4.4
20th	4.5	4.5	4.7	4.8	4.9	5.5	4.5	4.4	4.4	4.6	4.4	4.8
25th	4.7	4.7	4.8	4.9	5.1	5.7	4.6	4.7	4.6	4.7	4.6	5.0
30th	4.8	4.8	5.0	5.1	5.3	6.0	4.7	4.8	4.7	4.8	4.8	5.2
50th	5.4	5.4	5.6	5.7	6.2	6.8	5.3	5.3	5.4	5.6	5.6	6.0
70th	6.5	6.0	6.5	6.5	7.0	8.0	6.0	6.3	6.4	6.4	6.5	6.6
75th	7.1	6.1	6.6	6.6	7.3	8.3	6.2	6.4	6.5	6.7	6.7	6.8
80th	7.3	6.3	6.9	6.9	7.6	8.7	6.4	6.5	6.8	7.1	6.9	7.0
85th	7.7	6.7	7.2	7.2	7.8	9.0	7.0	6.9	7.4	7.2	7.3	7.3
90th	8.1	7.4	7.7	7.6	8.1	9.7	7.1	7.3	7.8	7.4	8.3	8.0
95th	9.0	8.0	8.4	8.5	8.7	10.3	7.6	7.9	8.4	8.4	8.8	8.6
97th	9.1	8.3	8.5	9.9	9.0	10.3	7.9	8.3	8.5	8.5	8.8	9.7
99th	9.5	8.8	9.8	10.6	10.1	11.1	8.6	9.5	9.0	9.1	9.3	9.9

Table 32A. Age-, Sex- specific percentile values for broadband ultrasound attenuation Z-score*, NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	97	224	208	188	204	206	78	84	163	177	173	179	168	94
1th	-1.08	-1.36	-1.51	-1.78	-1.91	-2.26	-2.31	-0.82	-1.75	-1.52	-1.58	-1.92	-2.15	-1.73
3th	-1.06	-1.15	-1.34	-1.64	-1.68	-2.04	-2.19	-0.80	-0.96	-1.22	-1.36	-1.61	-1.67	-1.63
5th	-0.85	-1.10	-1.28	-1.57	-1.61	-1.73	-2.05	-0.78	-0.90	-1.12	-1.26	-1.55	-1.65	-1.53
10th	-0.78	-0.95	-1.13	-1.40	-1.42	-1.61	-1.87	-0.63	-0.82	-0.98	-1.13	-1.25	-1.46	-1.26
15th	-0.63	-0.87	-1.07	-1.35	-1.35	-1.47	-1.75	-0.59	-0.74	-0.84	-0.96	-1.04	-1.40	-1.03
20th	-0.58	-0.79	-0.97	-1.22	-1.21	-1.41	-1.60	-0.57	-0.62	-0.72	-0.87	-0.94	-1.13	-0.97
25th	-0.52	-0.72	-0.90	-1.10	-1.13	-1.37	-1.48	-0.48	-0.50	-0.59	-0.82	-0.85	-1.02	-0.76
30th	-0.43	-0.66	-0.82	-1.01	-1.03	-1.25	-1.41	-0.34	-0.46	-0.52	-0.71	-0.72	-0.89	-0.71
50th	-0.19	-0.36	-0.51	-0.66	-0.78	-0.93	-0.83	-0.13	-0.25	-0.18	-0.32	-0.37	-0.57	-0.32
70th	0.15	-0.15	-0.24	-0.32	-0.38	-0.47	-0.42	0.15	0.01	0.09	-0.04	0.01	-0.03	0.43
75th	0.28	-0.07	-0.07	-0.15	-0.24	-0.35	-0.21	0.18	0.10	0.13	0.18	0.04	0.04	0.54
80th	0.49	0.01	0.05	-0.06	-0.10	-0.17	-0.08	0.29	0.20	0.30	0.33	0.14	0.40	0.77
85th	0.68	0.08	0.15	0.25	0.08	-0.01	0.09	0.50	0.35	0.38	0.39	0.31	0.59	0.98
90th	1.03	0.20	0.31	0.41	0.25	0.26	0.26	0.52	0.67	0.51	0.55	0.42	0.71	1.22
95th	1.04	0.46	0.80	0.67	0.53	0.41	0.47	0.70	0.91	0.61	0.99	0.72	1.00	1.44
97th	1.33	0.79	0.95	1.06	0.63	0.55	0.75	0.74	1.09	0.65	1.62	0.97	1.68	1.48
99th	1.68	1.22	2.08	1.36	1.40	0.97	2.07	1.75	1.63	1.41	1.67	1.38	1.87	1.61

*The average of three measurements

Table 32B. Age-, Sex- specific percentile values for broadband ultrasound attenuation Z-score*, NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	191	200	211	193	213	168	145	177	164	175	165	172
1th	-1.32	-1.47	-1.68	-1.91	-2.20	-2.29	-1.75	-1.43	-1.52	-1.64	-1.92	-2.07
3th	-1.10	-1.28	-1.51	-1.68	-1.84	-2.13	-0.96	-1.12	-1.30	-1.39	-1.76	-1.67
5th	-1.09	-1.20	-1.40	-1.61	-1.68	-1.90	-0.85	-0.92	-1.21	-1.26	-1.64	-1.63
10th	-0.96	-1.07	-1.34	-1.40	-1.49	-1.73	-0.73	-0.84	-1.04	-1.23	-1.46	-1.40
15th	-0.85	-0.93	-1.26	-1.34	-1.41	-1.54	-0.62	-0.78	-0.96	-1.05	-1.25	-1.13
20th	-0.78	-0.87	-1.10	-1.21	-1.35	-1.47	-0.57	-0.60	-0.80	-0.92	-1.07	-1.00
25th	-0.71	-0.76	-0.98	-1.15	-1.16	-1.37	-0.47	-0.53	-0.72	-0.87	-0.95	-0.87
30th	-0.63	-0.67	-0.90	-1.09	-1.07	-1.33	-0.41	-0.48	-0.62	-0.82	-0.86	-0.74
50th	-0.34	-0.36	-0.61	-0.71	-0.81	-0.83	-0.20	-0.18	-0.26	-0.36	-0.42	-0.42
70th	-0.06	-0.12	-0.31	-0.34	-0.39	-0.38	0.03	0.09	0.08	-0.04	-0.06	0.12
75th	0.05	-0.03	-0.16	-0.19	-0.31	-0.13	0.08	0.13	0.18	0.06	0.04	0.49
80th	0.13	0.02	-0.07	-0.09	-0.15	0.04	0.18	0.27	0.35	0.19	0.12	0.59
85th	0.26	0.14	0.06	0.08	-0.04	0.26	0.40	0.45	0.40	0.30	0.39	0.70
90th	0.66	0.21	0.31	0.31	0.23	0.30	0.58	0.59	0.61	0.38	0.70	0.97
95th	1.04	0.50	0.82	0.47	0.46	0.55	0.86	0.91	0.92	0.54	1.07	1.22
97th	1.15	0.79	1.06	0.67	0.63	0.76	0.93	1.18	1.62	0.72	1.59	1.28
99th	1.41	1.22	2.08	1.33	1.40	1.59	1.75	1.41	1.67	1.04	1.87	1.72

*The average of three measurements

Table 33A. Age-, Sex- specific percentile values for broadband ultrasound attenuation* (dB/MHz), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	97	224	208	188	204	206	78	84	163	177	173	179	168	94
1th	23.9	25.8	28.2	29.4	32.9	32.9	37.6	27.1	17.7	25.0	28.2	27.4	28.1	38.3
3th	24.3	29.1	30.9	31.6	36.6	35.4	39.4	27.4	29.5	29.5	31.5	31.9	35.1	39.7
5th	27.4	29.6	31.8	33.3	37.6	40.3	44.1	27.7	30.1	30.9	32.9	32.7	35.4	41.1
10th	28.6	31.7	34.2	35.7	40.3	43.1	45.6	29.8	31.1	32.8	34.8	37.1	38.1	45.0
15th	30.8	33.2	35.1	37.2	41.7	45.2	46.4	30.5	32.3	34.9	37.2	39.4	40.5	48.4
20th	31.7	34.0	36.6	38.8	44.0	46.2	48.8	30.7	34.1	36.5	38.5	41.6	43.8	50.1
25th	32.7	35.2	37.6	40.5	45.2	46.9	50.6	32.0	35.7	38.6	39.3	43.1	45.3	52.4
30th	34.1	35.9	39.0	41.5	46.7	48.8	51.8	34.0	36.3	39.5	40.7	44.8	46.4	53.1
50th	37.8	40.7	43.9	47.8	50.5	53.7	57.6	37.1	39.7	44.4	46.4	49.9	50.9	57.8
70th	43.4	44.0	47.9	52.3	56.9	60.5	67.3	41.3	43.3	49.0	50.2	55.3	58.8	69.6
75th	45.5	45.2	50.8	55.0	59.2	62.3	70.0	41.7	44.6	50.6	52.6	55.9	60.8	71.2
80th	48.3	46.6	52.1	56.4	61.3	65.1	71.9	43.4	46.0	52.1	56.0	57.2	65.3	74.6
85th	51.7	47.9	54.3	61.5	64.3	67.8	74.6	46.4	48.3	52.9	57.3	59.8	67.9	77.6
90th	57.1	49.8	56.9	63.6	67.0	72.1	76.7	46.6	52.8	54.6	60.3	61.4	69.6	81.0
95th	57.3	54.2	64.2	68.1	71.4	74.8	81.4	49.2	56.5	56.1	65.7	65.7	73.9	84.2
97th	61.9	58.9	67.0	74.2	72.9	76.3	85.9	49.9	59.5	59.1	74.7	69.4	83.6	84.8
99th	63.4	65.6	84.7	78.9	85.0	83.8	106.7	64.5	66.7	67.6	75.4	75.3	86.4	86.6

*The average of three measurements

Table 33B. Age-, Sex- specific percentile values for broadband ultrasound attenuation* (dB/MHz), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	224	208	188	204	206	78	163	177	173	179	168	94
1th	25.8	28.2	29.4	32.9	32.9	37.6	17.7	25.0	28.2	27.4	28.1	38.3
3th	29.1	30.9	31.6	36.6	35.4	39.4	29.5	29.5	31.5	31.9	35.1	39.6
5th	29.6	31.8	33.3	37.6	40.3	44.1	30.1	30.9	32.9	32.7	35.4	41.1
10th	31.7	34.2	35.7	40.3	43.1	45.6	31.1	32.8	34.8	37.1	38.1	45.0
15th	33.2	35.1	37.2	41.7	45.2	46.4	32.3	34.9	37.2	39.4	40.5	48.4
20th	34.0	36.6	38.8	44.0	46.2	48.8	34.1	36.5	38.5	41.6	43.8	50.1
25th	35.2	37.6	40.5	45.2	46.9	50.6	35.7	38.6	39.3	43.1	45.3	52.4
30th	35.9	39.0	41.5	46.7	48.8	51.8	36.3	39.5	40.7	44.8	46.4	53.1
50th	40.7	43.9	47.8	50.5	53.7	57.6	39.7	44.4	46.4	49.9	50.9	57.8
70th	44.0	47.9	52.3	56.9	60.5	67.3	43.3	49.0	50.2	55.3	58.8	69.6
75th	45.2	50.8	55.0	59.2	62.3	70.0	44.6	50.6	52.6	55.9	60.8	71.2
80th	46.6	52.1	56.4	61.3	65.1	71.9	46.0	52.1	56.0	57.2	65.3	74.6
85th	47.9	54.3	61.5	64.3	67.8	74.6	48.3	52.9	57.3	59.8	67.9	77.6
90th	49.8	56.9	63.6	67.0	72.1	76.7	52.8	54.6	60.3	61.4	69.6	81.0
95th	54.2	64.2	68.1	71.4	74.8	81.4	56.5	56.1	65.7	65.7	73.9	84.2
97th	58.9	67.0	74.2	72.9	76.3	85.9	59.5	59.1	74.7	69.4	83.6	84.8
99th	65.6	84.7	78.9	85.0	83.8	107.0	66.7	67.6	75.4	75.3	86.4	86.6

*The average of three measurements

Table 34A. Age-, Sex- specific percentile values for trunk flexibility*, NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	112	244	227	211	223	229	85	99	181	189	189	196	182	99
1th	9.8	7.1	9.5	2.0	6.8	4.1	3.5	9.8	10.0	10.7	8.5	10.2	7.0	6.9
3th	11.0	10.0	10.0	7.5	8.2	7.0	6.5	11.0	10.6	11.6	9.0	10.5	9.8	9.0
5th	12.0	11.2	10.7	9.0	9.1	7.2	9.5	13.1	13.0	12.0	10.5	11.5	10.6	11.3
10th	14.8	13.5	13.2	11.8	11.8	9.2	12.3	15.6	15.0	14.0	12.9	14.5	13.7	13.3
15th	15.2	15.5	15.0	13.2	13.0	10.8	12.8	18.4	17.1	15.6	14.5	15.1	15.2	15.1
20th	16.8	16.8	16.0	14.1	14.0	12.0	13.2	18.9	19.0	16.8	15.2	16.2	17.0	16.7
25th	18.0	17.5	16.6	15.3	15.2	12.8	14.5	20.2	19.4	17.9	16.1	17.0	17.8	17.0
30th	18.9	17.7	17.2	16.5	15.8	14.5	15.4	21.2	20.0	18.2	17.0	17.8	18.7	17.2
50th	21.0	20.4	20.2	18.2	19.1	17.8	18.3	22.6	22.5	20.7	20.2	19.8	21.2	20.3
70th	23.5	22.7	23.5	21.7	22.0	21.5	22.5	24.5	25.0	23.5	23.0	23.2	24.0	23.7
75th	24.0	23.5	24.2	22.3	22.6	22.2	23.0	25.2	25.6	24.6	24.0	23.8	24.6	24.1
80th	24.6	24.6	25.2	23.3	23.0	23.3	23.1	26.0	26.8	25.7	24.2	24.5	25.9	26.2
85th	26.2	25.0	26.3	24.1	23.8	24.8	23.5	27.5	27.5	26.7	25.0	25.5	26.6	28.3
90th	27.2	26.5	27.5	25.5	24.7	25.5	24.6	28.0	28.7	28.0	26.2	26.8	28.0	32.1
95th	28.0	29.8	29.0	26.8	26.3	26.8	27.8	30.1	30.5	30.0	28.0	28.1	30.2	35.0
97th	28.6	30.5	30.1	28.7	27.3	27.8	28.1	32.0	32.0	30.7	28.5	29.0	32.3	35.0
99th	30.1	31.3	31.0	29.2	29.0	29.8	30.6	34.0	34.1	32.7	31.0	34.8	33.7	36.7

*The highest value of the three measurements

Table 34B. Age-, Sex- specific percentile values for trunk flexibility*, NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	236	208	237	185	160	198	179	190	176	185
1th	7.1	8.0	7.2	6.5	7.5	3.5	9.2	10.6	8.5	8.5	8.0	3.5
3th	11.0	10.1	8.2	8.5	8.0	5.0	10.1	12.0	11.5	9.2	11.3	9.0
5th	12.0	11.5	9.7	10.0	9.0	7.0	11.0	12.3	11.6	10.5	12.1	10.2
10th	14.1	13.5	11.5	13.0	11.1	9.5	15.6	14.0	14.0	14.0	14.0	12.7
15th	15.4	15.5	13.7	13.6	12.1	11.0	18.0	16.1	15.0	14.7	15.0	15.1
20th	17.0	16.1	15.4	14.9	12.8	12.7	19.0	18.0	16.0	16.1	16.2	16.9
25th	17.8	17.2	16.3	15.8	13.5	13.2	19.5	19.1	16.6	17.0	17.8	17.2
30th	18.2	17.5	17.0	16.5	15.0	14.5	20.2	19.5	17.0	17.2	18.1	18.4
50th	20.8	19.5	19.8	18.7	18.4	17.5	22.3	22.1	20.0	19.7	20.8	20.7
70th	23.0	23.5	22.7	21.2	22.0	20.6	24.8	24.6	22.7	23.0	23.5	24.0
75th	23.5	24.3	23.5	22.3	22.7	22.5	25.3	25.7	24.0	23.5	24.1	25.3
80th	24.6	25.3	24.2	23.0	23.5	23.0	26.2	26.5	24.3	24.4	24.8	26.2
85th	25.1	27.0	25.3	23.6	24.7	24.1	27.2	28.2	25.5	25.2	26.0	27.2
90th	26.2	28.7	26.2	24.5	25.2	25.0	28.1	29.0	26.2	26.8	27.6	30.2
95th	28.0	30.5	27.9	26.3	26.7	27.5	30.5	30.7	28.3	28.0	29.5	33.1
97th	28.6	31.2	28.7	27.0	27.8	28.1	32.7	31.5	29.3	28.1	30.0	33.7
99th	29.8	32.0	30.3	29.2	29.1	30.6	34.1	32.0	32.7	31.0	34.8	35.0

*The highest value of the three measurements

Table 35A. Age-, Sex- specific percentile values for muscle strength of right elbow flexor* (lb), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	111	243	227	212	223	229	85	96	179	188	190	195	182	98
1th	7.2	7.0	8.2	10.0	10.0	11.0	12.5	6.8	6.8	7.0	8.0	8.5	10.5	10.8
3th	7.5	9.0	10.0	10.0	11.5	13.2	17.5	7.0	7.2	9.8	9.8	11.2	12.2	13.0
5th	8.0	9.2	11.0	11.5	12.2	14.5	18.5	8.0	7.5	9.8	10.0	12.2	12.8	13.8
10th	9.0	10.0	11.5	13.0	14.0	15.8	19.0	8.0	9.2	10.0	11.2	13.0	14.0	15.2
15th	9.2	10.5	12.5	13.8	14.8	16.5	19.5	9.0	10.0	11.8	12.5	14.0	15.0	16.2
20th	9.8	11.0	13.0	14.2	15.2	17.5	21.0	9.2	10.5	12.2	13.0	14.8	15.8	16.5
25th	10.0	11.5	13.5	14.8	16.0	18.2	21.5	9.5	11.0	13.0	13.5	15.0	16.0	18.5
30th	10.0	12.0	13.8	15.0	17.0	19.0	23.0	10.0	11.0	13.0	13.8	15.8	16.8	19.0
50th	11.8	13.8	15.8	17.2	19.2	22.2	27.5	10.0	13.0	14.5	15.0	17.5	19.2	22.0
70th	13.2	15.2	18.0	19.8	22.5	26.2	32.5	12.5	14.2	16.8	17.8	20.0	22.0	24.8
75th	13.8	15.8	18.5	20.8	23.8	27.8	33.2	13.2	15.0	17.0	19.0	20.8	22.5	26.0
80th	15.2	16.2	20.0	21.2	24.5	28.8	35.5	13.5	15.8	17.5	19.8	21.5	23.2	27.5
85th	16.0	17.5	21.2	22.0	26.0	30.0	36.2	13.8	17.0	17.8	20.2	22.8	24.2	27.8
90th	17.0	18.5	22.2	23.2	27.8	32.5	39.5	14.8	18.5	19.0	21.5	23.5	26.0	31.0
95th	18.0	20.5	25.2	25.2	30.0	37.0	48.0	15.8	20.0	20.8	23.5	25.5	30.2	32.8
97th	18.0	22.0	28.0	26.5	33.5	38.5	51.8	17.2	20.2	21.2	24.0	28.0	33.8	36.2
99th	19.8	23.2	29.8	29.8	37.8	41.8	62.0	22.5	24.0	24.0	26.5	30.8	36.8	38.0

*The closest two of the three measurements were averaged.

Table 35B. Age-, Sex- specific percentile values for muscle strength of right elbow flexor* (lb), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	212	218	236	208	238	185	158	199	179	190	176	185
1th	6.5	9.5	10.0	11.8	12.0	8.5	7.5	7.5	8.0	9.0	10.0	9.0
3th	7.0	9.8	11.5	12.2	12.8	14.2	8.0	8.0	10.0	9.8	12.0	12.8
5th	8.0	10.5	12.5	12.8	14.2	15.8	8.0	9.0	10.2	10.0	13.0	14.0
10th	9.0	11.0	13.5	14.2	15.8	16.8	9.0	10.0	11.0	12.2	13.5	15.2
15th	9.8	11.8	13.8	15.0	17.0	18.5	9.2	10.0	11.5	13.0	15.0	16.0
20th	10.0	12.5	14.0	16.0	17.8	19.5	9.5	11.0	12.2	14.2	15.8	17.0
25th	10.2	12.8	14.2	16.2	18.2	20.5	10.0	11.0	12.8	15.0	16.0	17.8
30th	11.0	13.8	15.0	17.2	19.0	21.8	10.0	11.8	13.2	15.5	16.8	18.5
50th	12.8	15.0	17.5	19.5	22.0	25.8	11.2	13.0	14.8	17.2	19.0	20.8
70th	14.5	17.5	19.2	22.2	25.2	31.2	12.8	15.0	16.8	19.2	21.5	24.0
75th	15.0	17.5	20.0	23.5	27.0	32.0	13.5	15.8	17.0	20.0	22.0	25.2
80th	15.8	18.0	20.8	24.0	28.2	34.2	14.0	16.2	17.5	20.2	22.2	26.0
85th	16.2	19.5	22.0	25.0	31.0	35.0	15.5	17.5	18.0	21.2	23.0	27.2
90th	17.0	20.5	23.8	26.8	34.5	37.5	16.2	18.5	19.8	23.2	24.8	30.0
95th	20.0	23.0	27.0	29.5	36.8	45.8	19.5	20.2	22.0	24.8	26.2	33.2
97th	21.0	23.2	27.8	32.2	39.2	47.0	20.0	22.2	23.0	25.8	27.5	35.8
99th	22.8	25.2	30.0	35.5	40.2	52.0	24.0	27.0	27.0	27.0	32.2	38.8

*The closest two of the three measurements were averaged.

Table 36A. Age-, Sex- specific percentile values for muscle strength of left elbow flexor* (lb), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	111	243	227	212	223	229	85	96	179	188	190	195	182	98
1th	7.2	7.0	8.2	10.0	10.0	11.0	12.5	6.8	6.8	7.0	8.0	8.5	10.5	10.8
3th	7.5	9.0	10.0	10.0	11.5	13.2	17.5	7.0	7.2	9.8	9.8	11.2	12.2	13.0
5th	8.0	9.2	11.0	11.5	12.2	14.5	18.5	8.0	7.5	9.8	10.0	12.2	12.8	13.8
10th	9.0	10.0	11.5	13.0	14.0	15.8	19.0	8.0	9.2	10.0	11.2	13.0	14.0	15.2
15th	9.2	10.5	12.5	13.8	14.8	16.5	19.5	9.0	10.0	11.8	12.5	14.0	15.0	16.2
20th	9.8	11.0	13.0	14.2	15.2	17.5	21.0	9.2	10.5	12.2	13.0	14.8	15.8	16.5
25th	10.0	11.5	13.5	14.8	16.0	18.2	21.5	9.5	11.0	13.0	13.5	15.0	16.0	18.5
30th	10.0	12.0	13.8	15.0	17.0	19.0	23.0	10.0	11.0	13.0	13.8	15.8	16.8	19.0
50th	11.8	13.8	15.8	17.2	19.2	22.2	27.5	10.0	13.0	14.5	15.0	17.5	19.2	22.0
70th	13.2	15.2	18.0	19.8	22.5	26.2	32.5	12.5	14.2	16.8	17.8	20.0	22.0	24.8
75th	13.8	15.8	18.5	20.8	23.8	27.8	33.2	13.2	15.0	17.0	19.0	20.8	22.5	26.0
80th	15.2	16.2	20.0	21.2	24.5	28.8	35.5	13.5	15.8	17.5	19.8	21.5	23.2	27.5
85th	16.0	17.5	21.2	22.0	26.0	30.0	36.2	13.8	17.0	17.8	20.2	22.8	24.2	27.8
90th	17.0	18.5	22.2	23.2	27.8	32.5	39.5	14.8	18.5	19.0	21.5	23.5	26.0	31.0
95th	18.0	20.5	25.2	25.2	30.0	37.0	48.0	15.8	20.0	20.8	23.5	25.5	30.2	32.8
97th	18.0	22.0	28.0	26.5	33.5	38.5	51.8	17.2	20.2	21.2	24.0	28.0	33.8	36.2
99th	19.8	23.2	29.8	29.8	37.8	41.8	62.0	22.5	24.0	24.0	26.5	30.8	36.8	38.0

*The closest two of the three measurements were averaged.

Table 36B. Age-, Sex- specific percentile values for muscle strength of left elbow flexor* (lb), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	211	218	237	208	237	185	157	196	179	190	176	184
1th	7.0	8.2	10.0	10.0	10.0	11.0	7.0	7.0	7.8	9.2	8.5	10.5
3th	7.5	9.5	11.0	11.5	13.8	15.0	7.2	7.0	10.0	10.0	12.2	11.5
5th	8.0	10.0	11.5	12.2	14.2	15.5	7.5	8.0	10.0	11.0	12.5	12.8
10th	9.2	10.8	12.2	13.2	15.2	16.8	8.0	10.0	11.2	12.8	13.5	14.2
15th	10.0	11.5	13.0	14.2	16.0	17.5	9.0	10.2	12.0	13.2	14.8	15.8
20th	10.0	11.8	13.8	15.0	16.8	19.0	9.5	11.0	12.8	14.0	15.2	16.2
25th	10.2	12.5	14.0	15.5	18.0	19.8	10.0	11.5	13.0	14.0	15.5	16.5
30th	10.8	13.0	14.8	16.0	18.5	20.8	10.0	12.0	13.5	14.5	16.0	17.8
50th	12.8	14.5	16.5	18.0	21.5	24.2	12.0	13.8	14.5	17.0	17.8	20.2
70th	14.5	16.8	18.5	20.8	25.0	29.0	13.5	15.0	16.5	19.0	21.0	23.2
75th	15.0	17.5	20.0	21.5	26.0	29.8	14.0	15.8	17.0	20.0	21.8	24.0
80th	15.8	18.0	21.0	22.5	27.2	31.0	14.8	17.0	17.5	20.5	22.2	25.0
85th	16.0	18.5	22.0	23.5	28.5	33.2	15.5	17.5	18.0	21.5	23.0	27.0
90th	17.2	20.2	24.0	24.5	30.5	36.2	17.2	18.5	20.0	22.8	24.2	29.2
95th	19.0	22.0	27.8	27.2	33.8	39.5	18.5	20.0	21.2	23.5	25.8	33.8
97th	20.2	22.5	29.2	28.8	38.0	45.5	20.2	21.2	23.8	24.0	28.2	36.2
99th	22.0	24.8	32.5	30.2	40.5	48.0	22.5	24.0	24.0	26.5	31.0	37.0

*The closest two of the three measurements were averaged.

Table 37A. Age-, Sex- specific percentile values for muscle strength of right knee extensor* (lb), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	112	244	227	211	223	230	85	98	181	190	189	196	182	99
1th	7.8	11.8	12.2	12.0	12.2	16.0	18.5	10.0	10.0	11.8	10.0	13.5	10.8	15.2
3th	9.5	12.8	14.2	14.5	14.2	20.0	22.2	11.0	11.8	13.2	13.2	15.0	14.5	18.0
5th	10.0	13.5	15.0	15.5	15.5	21.0	22.8	12.0	12.8	14.0	15.0	15.8	16.8	20.0
10th	12.0	15.0	17.5	19.0	19.8	22.5	24.0	13.2	14.0	15.0	16.0	17.2	19.0	20.0
15th	13.0	15.8	18.0	20.5	21.8	23.5	26.2	14.0	16.0	16.8	18.0	18.5	20.5	21.8
20th	15.0	16.5	20.0	21.0	22.8	24.2	27.2	14.8	17.0	18.0	19.0	20.2	21.8	22.8
25th	15.5	17.2	20.2	22.0	23.8	25.8	29.5	15.0	17.5	18.2	20.2	22.0	23.0	23.8
30th	16.0	18.0	21.2	22.5	25.5	27.0	30.5	15.8	18.5	19.2	21.8	23.0	24.0	24.8
50th	19.5	20.5	24.0	24.5	29.2	32.2	34.8	18.0	21.2	22.0	24.5	25.2	26.5	31.5
70th	23.0	23.8	28.2	30.5	33.5	37.8	39.2	20.2	23.5	26.2	28.2	29.0	33.8	35.0
75th	23.8	25.0	29.2	31.5	34.8	39.2	40.8	21.0	24.5	27.5	29.2	30.5	34.5	36.0
80th	24.8	25.8	31.0	33.0	36.2	40.5	42.0	22.2	26.0	28.5	31.2	31.5	37.5	39.0
85th	25.5	26.8	32.2	33.5	38.5	42.0	43.8	23.5	26.8	30.2	33.8	35.2	38.0	41.8
90th	26.0	28.5	34.5	34.5	40.2	44.8	44.2	24.2	27.5	32.5	35.2	37.5	39.0	43.5
95th	28.0	30.5	37.8	38.0	42.5	48.2	46.5	25.8	28.5	36.5	40.0	38.8	41.8	44.0
97th	30.2	31.2	38.8	42.0	42.8	51.5	47.2	28.5	29.5	40.5	42.0	40.5	43.2	45.0
99th	40.2	33.0	41.2	44.2	48.2	52.5	54.2	29.2	32.2	43.2	42.8	46.8	49.2	48.8

*The closest two of the three measurements were averaged.

Table 37B. Age-, Sex- specific percentile values for muscle strength of right knee extensor* (lb), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	236	208	238	185	159	199	179	190	176	185
1th	9.2	12.5	12.2	10.8	14.5	16.8	10.0	10.0	10.0	14.2	13.2	11.0
3th	10.0	13.5	14.2	14.2	17.0	20.0	11.0	12.0	12.0	15.0	15.0	16.5
5th	11.8	14.2	14.5	15.5	19.5	21.5	13.0	13.2	14.0	15.8	16.8	19.5
10th	13.0	16.0	16.0	19.0	21.8	23.8	13.8	14.5	15.5	17.5	17.8	20.5
15th	15.0	17.5	19.8	21.5	22.5	24.2	14.5	16.0	17.5	18.5	19.0	21.5
20th	15.8	17.8	20.2	22.5	23.5	25.8	15.2	17.5	18.0	19.8	20.2	22.0
25th	16.0	18.5	20.5	23.0	24.2	27.8	16.0	18.0	19.5	21.5	22.5	23.0
30th	16.8	19.5	21.2	23.8	26.0	29.2	16.5	19.0	20.2	22.5	23.0	24.0
50th	19.5	22.2	24.0	28.0	31.0	33.2	19.2	21.5	22.5	25.5	26.2	27.0
70th	23.5	25.8	28.5	31.8	36.0	38.8	23.0	24.8	27.0	29.2	30.5	33.8
75th	24.2	26.8	29.8	33.0	37.5	40.5	24.0	26.0	28.2	30.8	32.2	34.2
80th	25.5	28.0	31.2	34.0	38.8	41.5	24.5	26.5	30.8	33.2	35.2	35.0
85th	26.5	29.2	33.2	35.0	40.2	43.5	26.0	27.5	33.0	35.0	37.5	38.8
90th	28.0	31.0	35.5	38.8	42.5	44.2	27.5	28.5	35.2	37.0	38.0	41.5
95th	30.2	33.0	37.8	42.0	48.0	47.0	28.5	32.2	38.0	39.5	39.5	43.2
97th	32.0	34.5	39.5	42.8	48.2	50.5	29.0	32.8	42.8	41.8	41.8	44.0
99th	32.8	38.5	43.2	45.5	52.5	53.2	30.5	40.5	43.2	46.8	45.0	49.5

*The closest two of the three measurements were averaged.

Table 38A. Age-, Sex- specific percentile values for muscle strength of left knee extensor* (lb), NAHSIT Children 2001-2002

Age (years)	Boys							Girls						
	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9	6-6.9	7-7.9	8-8.9	9-9.9	10-10.9	11-11.9	12-12.9
Number	111	244	227	211	223	230	85	97	181	190	190	195	182	99
1th	9.0	10.5	11.0	13.8	11.5	15.5	17.5	10.0	9.5	11.0	11.0	13.0	10.0	14.5
3th	9.5	12.0	12.5	14.5	13.0	16.5	19.8	11.0	10.0	12.5	13.2	13.5	13.8	17.0
5th	10.0	12.8	14.0	15.8	14.0	17.5	20.0	13.2	12.0	13.5	14.5	14.8	16.0	17.5
10th	11.5	14.0	14.8	17.0	18.0	19.0	21.8	13.2	12.8	14.2	15.0	16.5	18.0	19.0
15th	12.2	14.8	16.5	17.8	19.5	20.0	24.0	14.0	14.0	15.5	16.2	17.8	19.0	19.8
20th	13.8	15.0	17.8	19.0	20.5	22.0	25.2	14.5	14.8	16.0	16.8	19.0	20.2	20.5
25th	14.8	15.5	18.0	20.2	21.0	23.5	26.2	14.8	15.5	17.2	17.8	20.5	21.8	21.8
30th	15.2	16.0	19.0	20.8	22.5	24.2	27.5	15.5	16.0	18.0	18.5	21.5	22.2	22.5
50th	17.0	19.0	22.2	23.0	26.5	29.2	32.0	16.8	19.5	21.0	23.0	24.2	24.5	27.0
70th	20.2	21.2	25.5	26.5	30.2	33.5	35.5	18.5	21.8	23.8	27.0	27.0	29.0	33.0
75th	22.0	22.0	25.8	27.8	32.0	34.5	36.2	19.0	22.5	25.2	28.0	28.2	30.8	34.0
80th	22.5	22.8	27.0	29.0	33.5	35.2	37.5	20.2	23.2	25.8	28.2	30.2	31.8	35.0
85th	23.2	23.8	28.2	29.5	35.5	37.2	38.2	21.0	24.5	28.2	29.5	32.0	33.0	36.5
90th	23.8	25.2	29.8	31.8	37.2	39.8	39.5	22.8	25.5	31.0	32.0	34.0	34.2	39.8
95th	25.0	28.8	36.8	34.0	41.8	42.8	46.0	23.8	26.0	35.2	33.2	37.0	39.2	40.8
97th	27.2	30.5	39.2	36.5	42.8	45.0	48.8	25.8	26.8	35.5	34.8	37.5	40.0	42.5
99th	32.8	31.8	44.0	41.5	43.5	48.2	49.0	25.8	32.0	37.0	37.0	40.2	42.5	44.2

*The closest two of the three measurements were averaged.

Table 38B. Age-, Sex- specific percentile values for muscle strength of left knee extensor (lb), NAHSIT Children 2001-2002

Age (years)	Boys						Girls					
	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4	6.5-7.4	7.5-8.4	8.5-9.4	9.5-10.4	10.5-11.4	11.5-12.4
Number	213	218	236	208	238	185	158	199	179	191	175	185
1th	9.5	10.0	12.0	11.5	13.2	16.5	10.0	9.8	9.5	13.5	12.8	12.2
3th	10.0	12.5	13.5	14.0	15.5	17.5	11.5	12.2	11.2	14.8	13.8	14.5
5th	11.2	13.2	14.0	14.8	16.8	19.0	12.0	12.5	12.8	15.0	15.0	17.8
10th	12.2	14.5	15.5	17.5	18.5	19.8	13.0	14.2	14.8	16.5	17.5	19.2
15th	14.0	15.2	16.8	18.8	20.2	20.8	14.0	14.5	15.8	17.5	18.0	20.0
20th	14.8	16.8	17.5	20.0	21.8	23.5	14.5	15.0	16.5	18.5	19.8	21.0
25th	15.0	17.8	18.0	20.8	23.2	24.2	15.5	16.2	17.0	19.8	20.8	22.0
30th	15.2	18.0	19.5	21.2	24.0	25.5	15.8	17.0	18.0	21.0	21.8	22.8
50th	18.0	20.8	22.2	25.0	28.2	30.2	17.8	20.0	21.5	24.5	24.0	25.8
70th	20.8	23.0	25.5	28.5	32.0	34.5	20.5	22.5	25.5	28.0	28.0	29.2
75th	22.0	23.8	26.0	29.5	33.5	35.5	21.2	23.0	27.2	28.2	29.5	31.5
80th	22.8	24.8	27.2	30.8	34.5	36.2	22.8	23.5	28.2	29.2	31.0	33.2
85th	23.5	25.8	29.2	33.0	37.0	37.5	23.5	24.8	31.0	30.8	32.2	35.0
90th	24.8	27.0	32.2	34.0	38.8	39.5	25.8	25.5	33.2	32.2	34.2	37.0
95th	27.2	29.2	36.8	37.2	43.0	43.0	26.0	28.0	35.5	36.5	37.0	40.0
97th	30.5	30.2	38.5	40.0	43.8	45.0	26.8	30.0	35.5	37.0	39.5	40.8
99th	30.8	36.5	44.0	42.8	48.5	47.5	32.0	33.5	37.8	40.2	41.2	44.8

*The closest two of the three measurements were averaged.

ACKNOWLEDGEMENTS

Data analyzed in this paper were collected for the research project "Nutrition and Health Survey in Taiwan (NAHSIT)" sponsored by the Department of Health in Taiwan (DOH-88-FS, DOH89-88shu717, DOH90-FS-5-4, DOH91-FS-5-4). The project was carried out by the Institute of Biomedical Sciences and the Research Center for Humanities and Social Sciences, Center for Survey Research, both at Academia Sinica, and directed by Dr. Wen-Harn Pan and Dr. Su-Hao Tu. The Center for Survey Research of Academia Sinica is responsible for data distribution. The assistance provided by the institutes and their staffs is greatly appreciated. The authors acknowledge all the persons involved in the field work, especially the schoolchildren. We also thank Ms. Wen-Ting Yeh, Ms. Nai-Hua Yeh and Mr. Cheng Chen for their assistance with statistical analyses and tabulation of the reference values.

AUTHOR DISCLOSURES

Wen-Harn Pan and Meei-Shyuan Lee, no conflicts of interest.

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Original Article

The double malnutritional burden and regional disparities in Taiwan elementary school children: survey database and reference values

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臺灣地區國小學童之雙重營養不良負擔及區域不平等：調查資料與參考值

這個國小學童國民營養健康狀況變遷調查 2001-2002 (NAHSIT Children 2001-2002)專刊，包含針對兒童之飲食特性、營養相關知識、態度及行為、營養補充劑使用、營養生化、及不同的飲食、營養、行為、健康及安適觀點等議題的文章，描繪目前臺灣地區兒童所謂的「雙重營養負擔」的困境。這種臺灣兒童雙重健康負擔問題的浮現，以弱勢及都市化程度較低的社區較之都會地區來得普遍。NAHSIT Children 2001-2002 同時提供了體位測量、生理變項（如體適能、血壓及脈搏、呼吸功能及骨密度）、營養血液及生化之年齡別及性別百分位值。為了國際間的比較，這些參考值均附錄在本報告中，調查數據則保存在中央研究院調查工作研究室所維護的資料庫系統中，供學界申請使用。

關鍵字：國小學童國民營養健康狀況變遷調查 2001-2002、NAHSIT Children 2001-2002、雙重營養不良負擔、資料庫、參考值。