Appendix

Normal values for vital clinical signs

Symptoms and signs for evaluating a patient in hospital
Is the patient alert, sleepy, irritable?
Is there an increased breathing rate?
Is there a rapid/ slow heart rate – is the pulse weak? Is it bounding?
Examine depth of breathing – is it shallow?
Is breathing noisy? stridor, wheezing, grunting?
Is there nasal flaring (nares moving in and out with breathing)?
Is there tracheal tug (marked inward movement at trachea when breathing) or the use of accessory muscles to help breathe or intercostal/subcostal recession?
Is the skin mottled?
Look at colour of skin, lips, nail beds for cyanosis
Check for capillary refill time
Check O2 saturations if possible

For patients with possible anaemia
Is there tiredness/lethargy?
Is there pallor of the skin, mucous membranes, gums, insides of eyelids, fingernails?
Is there shortness of breath?
Are the stools black? Blood or on iron supplements?

For patients with blood clotting disorders
Are there bleeding gums when eating/brushing teeth?
Are there nose bleeds?
Is there excessive bruising?
Is there bruising in unexpected places (consider non accidental injury)?
Are there petechiae? (tiny, flat, red or purple spots on skin or mucous membranes caused by local haemorrhage)

Estimating the weight of a child

Infant = up to 12 months old
Birth weight
- doubles by five months
- triples by one year
- quadruples by two years

After 12 months, the formula below can be applied, but may need to be modified according to whether the child is small or large compared with the average

Weight (kg) = 2 (age in years + 4)

Normal vital signs

Normal vital signs by age in a child and pregnant woman or girl

Age (years)	Heart rate (bpm)	Systolic BP (mmHg)	Respiratory rate (bpm)
<1	110-160	70-90	30-40
1-2	100-150	80-95	25-35
2-5	95-145	80-100	25-30
5-12	80-120	90-110	20-25
>12	60-100	100-120	15-20
Pregnancy	65-115	90-120	10-29

Awake and asleep heart rates

Normal heart rates at age:	**awake**	**asleep**
Newborn – 3 month	90 – 190	80 - 160
3 month to 2 yr	80 – 150	70 – 120
2 to 10 yr	70 – 120	60 - 90
10 yr – adult	55 – 90	50 – 90

Systolic and diastolic blood pressures

Normal blood pressure at age:	**Systolic**	**Diastolic**
Birth (12 hr, 3kg)	50-70	25-45
Neonate (96 hr)	60-90	20-60
Infant	87-105	53-66
2-4 years	95-105	53-66
7 years	97-112	57-71
15 years	112-128	66-80

Blood pressure is difficult to measure and interpret in infants and children under five years of age. Do not base decisions to treat hypertension on the results of electronic sphygmomanometers, they can be inaccurate. Always check with a hand pumped machine.

A quick formula for calculating normal systolic pressure in children is:

Normal systolic blood pressure in children = 80 + (2 x age in yrs)

Capillary refill time
The normal capillary refill time (CRT) is up to three (3) seconds. Be aware that in colder environments peripheral CRT is not a reliable test for perfusion.

Urine output
- Infants 2 mL / kg / hr
- Child 1 mL / kg /hr
- Pregnant adult >30 mL/hour or >100 mL every 4 hours (WHO)

Normal core (oral) body temperatures

Infant: 36.5 – 37.5 deg C 97.7 – 99.5 deg F
Child: 36.0 – 37.2 deg C 96.8 – 98.6 deg F
Estimate of Weight

Circulating blood volume
- 100 ml / kg at birth
- 80 ml / kg at 1 year
- 70 ml / kg at 12 years
- 100 ml / kg in pregnancy

Disability

A - ALERT
V - Responds to VOICE
P - Responds to PAIN = Glasgow Coma score 8 or less
U - UNRESPONSIVE

Blood glucose conversion 1 mmol/litre =19 mg/dl

Drop factor for IV infusions

Fluids can be calculated in drops/minute as follows. First identify from the IV giving set what the "drop factor" is (standard giving sets vary between 10, 15 and 20 drops = 1ml). For micro-drop systems, which often accompany giving sets with burettes, 1ml = 60 drops. When setting the infusion rate with the flow controller on the giving set below the chamber where the drops occur, always set and count the rate over a full 1 minute.

Calculating drip rates for a standard giving set with a drop factor of 20 drops/mL

- 1 ml = 20 drops in standard giving set
- drops/minute = ml /hour with a standard giving set divided by 3

Normal values for laboratory measurements

Haematology: normal laboratory values

Haemoglobin

Age		**Haemoglobin in g/dL**
1 – 3 days		14.5 – 22.5 g/dL
2 weeks		14.5 – 18.0 g/dL
6 months		10.0 – 12.5 g/dL
1 – 5 yr		10.5 – 13.0 g/dL
6 – 12 yr		11.5 – 15.0 g/dL
12 – 18 yr	male	13.0 – 16.0 g/dL
	female	12.0 – 16.0 g/dL

Platelets

Newborn	84 – 478	10^9/L
Child	150 – 400	10^9/L

White blood cells (WBC) and erythrocyte sedimentation rate (ESR)

	Age	**Values**
ESR	All ages	0-10 mm/hour
WBC	1-2 days	9.0 - 34.0 x 10^9/L

Neonate	6.0 – 19.5 x 10^9/L
1 – 3 yr	6.0 – 17.5 x 10^9/L
4 – 7 yr	5.5 – 15.5 x 10^9/L
8 – 13 yr	4.5 – 13.5 x 10^9/L
13 yr +	4.5 – 11.0 x 10^9/L

Lymphocytes over one year Median 4.1 – 6.0 x 10^9/L

Chemistry: normal laboratory values

Substance	Age	Value range
Albumin	Preterm	18 – 30 g/L
	Full term to 7 days	25-34 g/L
	< 5 years	39 – 50 g/L
	5 – 19 years	40 – 53 g/L
Amylase	All ages	30 – 100 units/L
ASO titre	2 – 5 years	120 – 160 Todd units
	6 – 9 years	240 Todd units
	10 – 12 years	320 Todd units
Bicarbonate	All ages	Arterial: 21 – 28 mmol/L Venous: 22 – 29 mmol/L
Bilirubin (conjugated)	> 1 year	0 – 3.4 micromol/L
Calcium	0-24 hours	2.3 – 2.65 mmol/L (1.07 – 1.27 ionised)
	24 hours to 4 days	1.75 – 3.00 mmol/L (1.00 – 1.17 ionised)
	4 – 7 days	2.25 – 2.73 mmol/L (1.12 – 1.23 ionised)
	child	2.15 - 2.70 mmol//L (1.12 – 1.23 ionised)
Chloride	Neonate	97 – 110 mmol/L
	Child	98 – 106 mmol/L
Creatinine	neonate	27- 88 micromol/L
	infant	18 – 35 micromol/L
	child	27 – 62 micromol/L
Glucose	preterm neonate	1.4 – 3.3 mmol/L
	0 – 24 hours	2.2 – 3.3 mmol/L
	infant	2.8 – 5.0 mmol/L
	child	3.3 – 5.5 mmol/L
Magnesium	0 – 7 days	0.48 – 1.05 mmol/L
	7 days – 2 years	0.65 – 1.05 mmol/L
	2 – 14 years	0.60 – 0.95 mmol/L
Osmolarity	child	276 – 295 mosmol/L (serum)

Potassium	<2 mths	3.0 – 7.0 mmol/L
	2-12 mths	3.6 – 6.0 mmol/L
	child:	3.5 – 5.0 mmol/L
Sodium	neonate:	136 – 146 mmol/L
	Infant	139 – 146 mmol/L
	child	138 – 146 mmol/L
Urea	neonate	1.0 – 5.0 mmol/L
	infant	2.5 – 8.0 mmol/L
	child:	2.5 – 6.6 mmol/L

Oxygen saturation SpO_2

95% - 100% (depends on altitude and corrections will be needed for those living > 1000 metres above sea level. The following table gives saturation levels in a number of differing geographical locations above sea level.)

SpO_2 levels at different altitudes

Altitude (m)	Location	N studied	Age	SpO_2 (%)	Author	Year
Sea level	UK	70	2-16 years Mean 8 yrs	Range 95.8-100 Median 99.5	Poets et al	1993
Sea level	Peru	189	2 m-5yrs	Range 96-100 Mean 98.7	Reuland Et al	1991
1610	colorado	150	<48hrs 3 months	95% Cl 88-97 Mean 93 95% Cl 86-97 Mean 92.2	Thilo et al	1991
1670	nairobi	87	7days-3 yrs	Range 89.3-99.3 Mean 95.7	Onyango Et al	1993
2640	bogota	189	5 days-2 yrs	Range 84-100 Mean 93.3	Lozano et al	1992
2800	colorado	72	3-670 days	Range 88-97 Mean 91.7	Nicholas Et al	1993
3100	colorado	14	6hrs-4 months 1 week 4 months	Range 81-91 Mean 80.6 +/- 5.3 Mean 86.1+/- 4.6	Niemeyer Et al	1993
3658	Tibet*	15	6hrs – 4 Months	Immigrant 76-90 Indigenous 86-94	Niemeyer Et al	1995
3750	peru	153	2 -60 months	Range 81-97 Mean 88.9	Reuland Et al	1991

Notes: Values given are those in quiet sleep.
**ranges born to immigrant Chinese mothers and for those indigenous babies whose families have lived at that altitude for innumerable generations*

Blood gases (normal arterial range)

pH	7.35 – 7.45
*P*CO2	4.5 – 6 kPa (35 -45 mmHg)
PO2	10 – 13 kPa (75 – 98 mmHg)

Airway equipment values

Un-cuffed tubes in children < 25 kg weight (aged six to seven years)

Endotracheal tubes (internal diameter mm)

- Full term baby size 3.0 – 3.5
- Infant (< 1year) size 4.0 – 4.5
- Over 1 year size of tube = Age / 4 + 4

Length of endotracheal tube

Age divided by 2 + 12 cm (length of oral tube)
+ 14 cm (length of nasal tube)

Fluid and electrolyte management

a) Normal requirements for fluid

Blood volume is about 100 mL/kg at birth falling to about 80 mL/kg at one year. Total body water varies from 800 mL/kg in the neonate to 600 mL/kg at one year and thereafter. Of this about two thirds (400 mL/kg) is intracellular fluid, the rest being extra cellular fluid. Thus initial expansion of vascular volume in a state of shock can be achieved with relatively small volumes of fluid: 20 mL/kg (a quarter of the blood volume) will usually suffice. However, this volume is only a fraction of that required to correct dehydration as the fluid has been lost from all body compartments in this condition. Clinically, dehydration is not detectable until above 3 to 5% (30-50mL/kg) of the body fluid has been lost.

It is important to remember that while fluid must be given quickly to correct loss of circulating fluid from the blood compartment (*shock* – except in malnutrition where it must be given slowly in dehydration.

Note: Fluids in neonates after the first three days of life are often prescribed upon the basis of 150 mL/kg/day but this is not related to fluid needs but is merely the volume of standard formula milk required to give an adequate protein and calorie intake.

Fluid requirement can be divided into four types:

1. For replacement of *insensible losses* through sweat, respiration, gastrointestinal loss etc.
2. For replacement of *essential urine output,* the minimal urine output to allow excretion of the products of metabolism etc.
3. Extra fluid to maintain a *modest state of diuresis.*
4. Fluid to replace *abnormal losses* such as blood loss, severe diarrhoea, diabetic polyuria losses etc.

A formula for calculating normal fluid requirement is given in table 9.5.below. It is useful because it is simple, can be applied to all age ranges and is easily subdivided. The formula gives total fluid requirements, that is, types 1 + 2 + 3 above.

Normal fluid requirements

Body weight	**Fluid /24 hrs**	**Fluid/hr**	**Na K mmol/24 hours/kg**		**Energy kcal/24hrs**	**Protein g/24hrs**
First 10 kg	100 mL	4 mL	2-4	1.5-2.5	110	3
Second 10 kg	50 mL	2 mL	1-2	0.5-1.5	75	1
Subsequent kg	20 mL	1 mL	0.5-1	0.2-0.7	30	0.75

For examples: 6 kg infant would require 600 mL per day
14 kg child would require 1000 + 200 = 1200 mL per day
25 kg child would require 1000 + 500 + 100 = 1600 mL per day

Or the following table can be used.

Fluid requirements

Weight of child	**Fluid in mL/day**
<10 kg	100/kg
10-19 kg	50/kg
>20 kg	20/ kg
For example	mL/day
2 kg	220
4 kg	440
6 kg	660
8 kg	900
10 kg	1100
12 kg	1300
14 kg	1400
16 kg	1600
18 kg	1700
20 kg	1800
22 kg	1900
24 kg	2000

In practice, the well child just drinks when thirsty, but it is useful to have an idea of how much fluid a child should be expected to need. Of course, if there are excess losses as in diarrhoea or fever or the ambient temperature is especially high leading to high insensible losses, then more fluid is required. Except in cardiac or renal disease, a good check on whether a child is having enough fluid is to see if they have a satisfactory urine output of at least 2 mL/kg/hour.

Average fluid requirements in pregnancy are: 1500 to 2500 mL/day. This depends on levels of activity, ambient temperature and whether or not there is a fever. Up to 6000 mL/day may be required.

Rehydration
Fluid deficit + normal fluid requirements + additional losses (sweat, diarrhoea, vomit etc)

Fluid deficit (mL) = % dehydration x weight (kg) x 10

On-going losses

- After each loose stool
  - age < 2 yrs; 50m – 100 ml
  - age ≥2 yrs ; 100-200 ml
- After each vomit – 2ml / kg body weight

Some useful information regarding biochemical measurements

1. Percentage solution = grams in 100 mL e.g. 10% dextrose = 10g in 100 mL

2. One millimole = molecular weight in milligrams

3. Some atomic weights:

hydrogen	1.0
carbon	12.0
nitrogen	14.0
oxygen	16.0
sodium	23.0
phosphorus	31.0
chlorine	35.5
potassium	39.1
calcium	40.1

therefore for example:
1mmol NaCl = 58.5 mg
1mmol $NaHCO_3$ = 84 mg
1mmol KCl = 74.6 mg

4. The equivalent weight of an electrolyte = molecular weight/valency e.g. Ca = 40/2

5. Useful figures to know:

30% NaCl = 5 mmol/mL each of Na and Cl
0.9% NaCl = 0.154 mmol/mL each of Na and Cl
15% KCl (15g/100mL) = 2 mmol/mL each of K and Cl (also called concentrated or *strong KCl)*
10% Ca Gluconate (10g/100mL) = 0.225 mmol/mL
(note 1mL of CaCl 10% is equivalent to 3mL of Ca gluconate 10%)

8.4% $NaHCO_3$ = 1 mmol Na and 1mmol HCO3 /mL
1 mL/h N saline = 3.7 mmol Na in 24h

6. Serum osmolarity = 2(Na + K) + glucose + urea (normally 285 – 295 mosmols/L)

Normal requirements for electrolytes (unless excessive losses)

There are obligatory losses of electrolytes in stools, urine, and sweat, and these require replacement. Any excess is simply excreted in the urine.

Electrolyte contents of body fluids

Fluid	Na (mmol/L	K (mmol/L)	Cl (mmol/L	HCO_3 mmol/L
Plasma	135-141	3.5-5.5	100-105	24-28
Gastric	20-80	5-20	100-150	0
Intestinal	100-140	5-15	90-130	13-65
Diarrhea	7-96	34-150	17-164	0-75
Sweat	<40	6-15	<40	0-10

Normal daily water, electrolyte, energy and protein requirements in children

Body weight	Water mL/kg/day	Sodium (Na) mmol/kg/day	Potassium (K) mmol/kg/day	Energy kcals/day	Protein g/day
First 10 kg	100	2-4	1.5-2.5	110	3.00
Second 10kg	50	1-2	0.5-1.5	75	1.50
Subsequent kg	20	0.5-1	0.2-0.7	30	0.75

Normal water and electrolyte requirements in pregnancy

Maintenance requirements/24 hours	Fluid/day	Sodium (mmol/day)	Potassium (mmol/day)
	1500-2500mL	150	100

Commonly available crystalloid fluids

Fluid	Na+ (mmol/L)	K+ (mmol/L)	Cl- (mmol/L)	Energy (kcal/L)
Isotonic crystalloid fluids				
Saline 0.9% (normal)	150	0	150	0
Glucose 5% (50mg/mL)	0	0	0	200
Hartmann's solution or Ringer's lactate **	131	5	111	0
Hypertonic crystalloid fluids				
Saline 0.45% glucose 5%	75	0	75	200
Glucose 10% (100mg/mL)	0	0	0	400
Glucose 50%	0	0	0	2000

** Hartmann's or Ringer's lactate also has HCO3- as lactate 29mmol/L and calcium 2 mmol/L

Commonly available colloid fluids

Colloid	**Na+ (mmol/l)**	**K+ (mmol/l)**	**Ca++ (mmol/l)**	**Duration of action (hours)**	**Comments**
Albumin 4.5%	150	1	0	6	Protein buffers
Gelofusin	154	<1	<1	3	Gelatine
Haemaccel	145	5	12.5	3	Gelatine
Pentastarch	154	0	0	7	Hydroxyethyl starch

Table weight to body surface area (Boyd's calculation)

Weight Kg	SA m2	Weight Kg	SA m2	Weight Kg	SA m2
0.7	0.07	12	0.56	38	1.23
1.0	0.10	13	0.59	40	1.27
1.6	0.14	14	0.62	42	1.32
2.0	0.16	15	0.65	44	1.36
2.6	0.19	16	0.68	46	1.40
3.0	0.21	17	0.71	48	1.44
3.6	0.24	18	0.74	50	1.48
4.0	0.26	19	0.77	52	1.52
4.5	0.28	20	0.79	54	1.56
5.0	0.30	22	0.85	56	1.60
5.5	0.33	24	0.90	58	1.63
6.0	0.35	26	0.95	60	1.67
7.0	0.38	28	1.00	65	1.76
8.0	0.42	30	1.05	70	1.85
9.0	0.46	32	1.09	75	1.94
10.0	0.49	34	1.14	80	2.03
11.0	0.53	36	1.19	90	2.19

Weight-for-Length Reference Card (below 87 cm)

Boys' weight (kg)					Length	Girls' weight (kg)				
-4 SD	-3 SD	-2 SD	-1 SD	Médian	(cm)	Médian	-1 SD	-2 SD	-3 SD	-4 SD
1.7	1.9	2.0	2.2	2.4	45	2.5	2.3	2.1	1.9	1.7
1.8	2.0	2.2	2.4	2.6	46	2.6	2.4	2.2	2.0	1.9
2.0	2.1	2.3	2.5	2.8	47	2.8	2.6	2.4	2.2	2.0
2.1	2.3	2.5	2.7	2.9	48	3.0	2.7	2.5	2.3	2.1
2.2	2.4	2.6	2.9	3.1	49	3.2	2.9	2.6	2.4	2.2
2.4	2.6	2.8	3.0	3.3	50	3.4	3.1	2.8	2.6	2.4
2.5	2.7	3.0	3.2	3.5	51	3.6	3.3	3.0	2.8	2.5
2.7	2.9	3.2	3.5	3.8	52	3.8	3.5	3.2	2.9	2.7
2.9	3.1	3.4	3.7	4.0	53	4.0	3.7	3.4	3.1	2.8
3.1	3.3	3.6	3.9	4.3	54	4.3	3.9	3.6	3.3	3.0
3.3	3.6	3.8	4.2	4.5	55	4.5	4.2	3.8	3.5	3.2
3.5	3.8	4.1	4.4	4.8	56	4.8	4.4	4.0	3.7	3.4
3.7	4.0	4.3	4.7	5.1	57	5.1	4.6	4.3	3.9	3.6
3.9	4.3	4.6	5.0	5.4	58	5.4	4.9	4.5	4.1	3.8
4.1	4.5	4.8	5.3	5.7	59	5.6	5.1	4.7	4.3	3.9
4.3	4.7	5.1	5.5	6.0	60	5.9	5.4	4.9	4.5	4.1
4.5	4.9	5.3	5.8	6.3	61	6.1	5.6	5.1	4.7	4.3
4.7	5.1	5.6	6.0	6.5	62	6.4	5.8	5.3	4.9	4.5
4.9	5.3	5.8	6.2	6.8	63	6.6	6.0	5.5	5.1	4.7
5.1	5.5	6.0	6.5	7.0	64	6.9	6.3	5.7	5.3	4.8
5.3	5.7	6.2	6.7	7.3	65	7.1	6.5	5.9	5.5	5.0
5.5	5.9	6.4	6.9	7.5	66	7.3	6.7	6.1	5.6	5.1
5.6	6.1	6.6	7.1	7.7	67	7.5	6.9	6.3	5.8	5.3
5.8	6.3	6.8	7.3	8.0	68	7.7	7.1	6.5	6.0	5.5
6.0	6.5	7.0	7.6	8.2	69	8.0	7.3	6.7	6.1	5.6
6.1	6.6	7.2	7.8	8.4	70	8.2	7.5	6.9	6.3	5.8
6.3	6.8	7.4	8.0	8.6	71	8.4	7.7	7.0	6.5	5.9
6.4	7.0	7.6	8.2	8.9	72	8.6	7.8	7.2	6.6	6.0
6.6	7.2	7.7	8.4	9.1	73	8.8	8.0	7.4	6.8	6.2
6.7	7.3	7.9	8.6	9.3	74	9.0	8.2	7.5	6.9	6.3
6.9	7.5	8.1	8.8	9.5	75	9.1	8.4	7.7	7.1	6.5
7.0	7.6	8.3	8.9	9.7	76	9.3	8.5	7.8	7.2	6.6
7.2	7.8	8.4	9.1	9.9	77	9.5	8.7	8.0	7.4	6.7
7.3	7.9	8.6	9.3	10.1	78	9.7	8.9	8.2	7.5	6.9
7.4	8.1	8.7	9.5	10.3	79	9.9	9.1	8.3	7.7	7.0
7.6	8.2	8.9	9.6	10.4	80	10.1	9.2	8.5	7.8	7.1
7.7	8.4	9.1	9.8	10.6	81	10.3	9.4	8.7	8.0	7.3
7.9	8.5	9.2	10.0	10.8	82	10.5	9.6	8.8	8.1	7.5
8.0	8.7	9.4	10.2	11.0	83	10.7	9.8	9.0	8.3	7.6
8.2	8.9	9.6	10.4	11.3	84	11.0	10.1	9.2	8.5	7.8
8.4	9.1	9.8	10.6	11.5	85	11.2	10.3	9.4	8.7	8.0
8.6	9.3	10.0	10.8	11.7	86	11.5	10.5	9.7	8.9	8.1

Weight-for-Height Reference Card (87 cm and above)

Boys' weight (kg)					Height	Girls' weight (kg)				
-4 SD	-3 SD	-2 SD	-1 SD	Médian	(cm)	Médian	-1 SD	-2 SD	-3 SD	-4 SD
8.9	9.6	10.4	11.2	12.2	87	11.9	10.9	10.0	9.2	8.4
9.1	9.8	10.6	11.5	12.4	88	12.1	11.1	10.2	9.4	8.6
9.3	10.0	10.8	11.7	12.6	89	12.4	11.4	10.4	9.6	8.8
9.4	10.2	11.0	11.9	12.9	90	12.6	11.6	10.6	9.8	9.0
9.6	10.4	11.2	12.1	13.1	91	12.9	11.8	10.9	10.0	9.1
9.8	10.6	11.4	12.3	13.4	92	13.1	12.0	11.1	10.2	9.3
9.9	10.8	11.6	12.6	13.6	93	13.4	12.3	11.3	10.4	9.5
10.1	11.0	11.8	12.8	13.8	94	13.6	12.5	11.5	10.6	9.7
10.3	11.1	12.0	13.0	14.1	95	13.9	12.7	11.7	10.8	9.8
10.4	11.3	12.2	13.2	14.3	96	14.1	12.9	11.9	10.9	10.0
10.6	11.5	12.4	13.4	14.6	97	14.4	13.2	12.1	11.1	10.2
10.8	11.7	12.6	13.7	14.8	98	14.7	13.4	12.3	11.3	10.4
11.0	11.9	12.9	13.9	15.1	99	14.9	13.7	12.5	11.5	10.5
11.2	12.1	13.1	14.2	15.4	100	15.2	13.9	12.8	11.7	10.7
11.3	12.3	13.3	14.4	15.6	101	15.5	14.2	13.0	12.0	10.9
11.5	12.5	13.6	14.7	15.9	102	15.8	14.5	13.3	12.2	11.1
11.7	12.8	13.8	14.9	16.2	103	16.1	14.7	13.5	12.4	11.3
11.9	13.0	14.0	15.2	16.5	104	16.4	15.0	13.8	12.6	11.5
12.1	13.2	14.3	15.5	16.8	105	16.8	15.3	14.0	12.9	11.8
12.3	13.4	14.5	15.8	17.2	106	17.1	15.6	14.3	13.1	12.0
12.5	13.7	14.8	16.1	17.5	107	17.5	15.9	14.6	13.4	12.2
12.7	13.9	15.1	16.4	17.8	108	17.8	16.3	14.9	13.7	12.4
12.9	14.1	15.3	16.7	18.2	109	18.2	16.6	15.2	13.9	12.7
13.2	14.4	15.6	17.0	18.5	110	18.6	17.0	15.5	14.2	12.9
13.4	14.6	15.9	17.3	18.9	111	19.0	17.3	15.8	14.5	13.2
13.6	14.9	16.2	17.6	19.2	112	19.4	17.7	16.2	14.8	13.5
13.8	15.2	16.5	18.0	19.6	113	19.8	18.0	16.5	15.1	13.7
14.1	15.4	16.8	18.3	20.0	114	20.2	18.4	16.8	15.4	14.0
14.3	15.7	17.1	18.6	20.4	115	20.7	18.8	17.2	15.7	14.3
14.6	16.0	17.4	19.0	20.8	116	21.1	19.2	17.5	16.0	14.5
14.8	16.2	17.7	19.3	21.2	117	21.5	19.6	17.8	16.3	14.8
15.0	16.5	18.0	19.7	21.6	118	22.0	19.9	18.2	16.6	15.1
15.3	16.8	18.3	20.0	22.0	119	22.4	20.3	18.5	16.9	15.4
15.5	17.1	18.6	20.4	22.4	120	22.8	20.7	18.9	17.3	15.6