



## APPENDICES

### APPENDIX A: Body surface area (BSA)

Wt (kg)	Height (cm)																
	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200
36	1.06	1.09	1.12	1.15	1.19	1.22	1.25	1.28	1.31	1.33	1.36	1.39	1.42	1.45	1.48	1.51	1.53
38	1.08	1.12	1.15	1.18	1.21	1.24	1.27	1.31	1.34	1.37	1.40	1.43	1.46	1.49	1.52	1.55	1.57
40	1.11	1.14	1.17	1.21	1.24	1.27	1.30	1.33	1.37	1.40	1.43	1.46	1.49	1.52	1.55	1.58	1.61
42	1.13	1.17	1.20	1.23	1.27	1.30	1.33	1.36	1.39	1.43	1.46	1.49	1.52	1.55	1.58	1.61	1.64
44	1.15	1.19	1.22	1.26	1.29	1.32	1.36	1.39	1.42	1.45	1.49	1.52	1.55	1.58	1.61	1.64	1.67
46	1.18	1.21	1.25	1.28	1.32	1.35	1.38	1.42	1.45	1.48	1.51	1.55	1.58	1.61	1.64	1.67	1.70
48	1.20	1.23	1.27	1.30	1.34	1.37	1.41	1.44	1.48	1.51	1.54	1.57	1.61	1.64	1.67	1.70	1.73
50	1.22	1.26	1.29	1.33	1.36	1.40	1.43	1.47	1.50	1.53	1.57	1.60	1.63	1.67	1.70	1.73	1.76
52	1.24	1.28	1.31	1.35	1.39	1.42	1.46	1.49	1.53	1.56	1.59	1.63	1.66	1.70	1.73	1.76	1.79
54	1.26	1.30	1.33	1.37	1.41	1.44	1.48	1.52	1.55	1.59	1.62	1.66	1.69	1.72	1.76	1.79	1.82
56	1.28	1.32	1.36	1.39	1.43	1.47	1.50	1.54	1.58	1.61	1.65	1.68	1.72	1.75	1.78	1.82	1.85
58	1.30	1.34	1.38	1.41	1.45	1.49	1.53	1.56	1.60	1.63	1.67	1.71	1.74	1.78	1.81	1.85	1.88
60	1.32	1.36	1.40	1.43	1.47	1.51	1.55	1.59	1.62	1.66	1.69	1.73	1.77	1.80	1.84	1.87	1.91
62	1.34	1.38	1.41	1.45	1.49	1.53	1.57	1.61	1.64	1.68	1.72	1.76	1.79	1.83	1.86	1.90	1.93
64	1.35	1.39	1.43	1.47	1.51	1.55	1.59	1.63	1.67	1.70	1.74	1.78	1.82	1.85	1.89	1.92	1.96
66	1.37	1.41	1.45	1.49	1.53	1.57	1.61	1.65	1.69	1.73	1.77	1.80	1.84	1.88	1.91	1.95	1.99
68	1.39	1.43	1.47	1.51	1.55	1.59	1.63	1.67	1.71	1.75	1.79	1.83	1.86	1.90	1.94	1.97	2.01
70	1.41	1.45	1.49	1.53	1.57	1.61	1.65	1.69	1.73	1.77	1.81	1.85	1.89	1.92	1.96	2.00	2.04
72	1.42	1.47	1.51	1.55	1.59	1.63	1.67	1.71	1.75	1.79	1.83	1.87	1.91	1.95	1.99	2.02	2.06
74	1.44	1.48	1.53	1.57	1.61	1.65	1.69	1.73	1.77	1.81	1.85	1.89	1.93	1.97	2.01	2.05	2.08
76	1.46	1.50	1.54	1.59	1.63	1.67	1.71	1.75	1.79	1.83	1.87	1.91	1.95	1.99	2.03	2.07	2.11
78	1.47	1.52	1.56	1.60	1.65	1.69	1.73	1.77	1.81	1.85	1.89	1.94	1.98	2.01	2.05	2.09	2.13
80	1.49	1.53	1.58	1.62	1.66	1.71	1.75	1.79	1.83	1.87	1.92	1.96	2.00	2.04	2.08	2.12	2.15
82	1.50	1.55	1.59	1.64	1.68	1.72	1.77	1.81	1.85	1.89	1.94	1.98	2.02	2.06	2.10	2.14	2.18
84	1.52	1.56	1.61	1.65	1.70	1.74	1.79	1.83	1.87	1.91	1.96	2.00	2.04	2.08	2.12	2.16	2.20
86	1.53	1.58	1.63	1.67	1.72	1.76	1.80	1.85	1.89	1.93	1.98	2.02	2.06	2.10	2.14	2.18	2.22
88	1.55	1.60	1.64	1.69	1.73	1.78	1.82	1.87	1.91	1.95	1.99	2.04	2.08	2.12	2.16	2.20	2.24
90	1.56	1.61	1.66	1.70	1.75	1.79	1.84	1.88	1.93	1.97	2.01	2.06	2.10	2.14	2.18	2.22	2.27
92	1.58	1.63	1.67	1.72	1.77	1.81	1.86	1.90	1.95	1.99	2.03	2.08	2.12	2.16	2.20	2.25	2.29
94	1.59	1.64	1.69	1.74	1.78	1.83	1.87	1.92	1.96	2.01	2.05	2.09	2.14	2.18	2.22	2.27	2.31
96	1.61	1.66	1.70	1.75	1.80	1.84	1.89	1.94	1.98	2.03	2.07	2.11	2.16	2.20	2.24	2.29	2.33
98	1.62	1.67	1.72	1.77	1.81	1.86	1.91	1.95	2.00	2.04	2.09	2.13	2.18	2.22	2.26	2.31	2.35
100	1.64	1.69	1.73	1.78	1.83	1.88	1.92	1.97	2.02	2.06	2.11	2.15	2.20	2.24	2.28	2.33	2.37
102	1.65	1.70	1.75	1.80	1.84	1.89	1.94	1.99	2.03	2.08	2.12	2.17	2.21	2.26	2.30	2.35	2.39
104	1.66	1.71	1.76	1.81	1.86	1.91	1.96	2.00	2.05	2.10	2.14	2.19	2.23	2.28	2.32	2.37	2.41
106	1.68	1.73	1.78	1.83	1.88	1.92	1.97	2.02	2.07	2.11	2.16	2.20	2.25	2.30	2.34	2.38	2.43
108	1.69	1.74	1.79	1.84	1.89	1.94	1.99	2.03	2.08	2.13	2.18	2.22	2.27	2.31	2.36	2.40	2.45
110	1.70	1.75	1.81	1.86	1.91	1.95	2.00	2.05	2.10	2.15	2.19	2.24	2.29	2.33	2.38	2.42	2.47
112	1.72	1.77	1.82	1.87	1.92	1.97	2.02	2.07	2.11	2.16	2.21	2.26	2.30	2.35	2.40	2.44	2.49
114	1.73	1.78	1.83	1.88	1.93	1.98	2.03	2.08	2.13	2.18	2.23	2.27	2.32	2.37	2.41	2.46	2.50

Calculated by the Dubois formula:

$$\text{Body surface area} = 0.007184 \times (\text{patient's height, cm})^{0.725} \times (\text{patient's weight, kg})^{0.425}$$



**APPENDIX B: Total body water (V) – adults**

Female  $V = -2.097 + [0.2456 \times Wt (kg)] + [0.1069 \times Ht (cm)]$

Female	Wt (kg)	Ht (cm)								
		120	130	140	150	160	170	180	190	200
	30	18.1	19.2	20.3	21.3	22.4	23.5	24.5	25.6	26.7
	40	20.6	21.7	22.7	23.8	24.9	25.9	27.0	28.1	29.1
	50	22.7	24.1	25.2	26.3	27.3	28.4	29.5	30.5	31.6
	60	25.5	26.6	27.7	28.7	29.8	30.9	31.9	33.0	34.1
	70	28.0	29.1	30.1	31.2	32.3	33.3	34.4	35.5	36.5
	80	30.5	31.5	32.6	33.7	34.7	35.8	36.9	37.4	39.0
	90	32.9	34.0	35.1	36.1	37.2	38.3	39.3	40.4	41.5
	100	35.4	36.5	37.5	38.6	39.7	40.7	41.8	42.9	43.9
	110	37.9	38.9	40.0	41.1	42.1	43.2	44.3	45.3	46.4
	120	40.3	41.4	41.5	43.5	44.6	45.7	46.7	47.8	48.9

Male  $V = 2.477 + [0.3362 \times Wt (kg)] + [0.1074 \times Ht (cm)] - [0.09516 \times age]$

Male	Wt (kg)	Ht (cm)								
		120	130	140	150	160	170	180	190	200
	30	25.4	26.6	27.6	28.7	29.7	30.8	31.9	33.0	34.0
	40	28.8	29.9	33.0	32.0	33.1	34.2	35.3	36.3	37.4
	50	32.2	33.2	34.3	35.4	36.5	37.5	38.6	39.7	40.8
	60	35.5	36.6	37.7	38.8	39.8	40.9	42.0	43.1	44.1
	70	38.9	40.0	41.0	42.1	43.2	44.3	45.3	46.4	47.5
	80	42.3	43.3	44.4	45.5	46.6	47.6	48.7	49.8	50.9
	90	45.6	46.7	47.8	48.8	49.9	51.0	52.1	53.1	54.2
	100	49.0	50.1	51.1	52.2	53.3	54.4	55.4	56.5	57.6
	110	52.3	53.4	54.5	55.6	56.6	57.7	58.8	59.9	60.9
	120	55.7	56.8	57.9	58.9	60.0	61.1	62.2	63.2	64.3

Use table, then subtract 1 for every decade of life (males only).



**APPENDIX C: Normalised protein catabolic rate (nPCR)**

Wt (kg)	Urea excretion (mmol/d)										
	100	150	200	250	300	350	400	450	500	550	600
30	1.22	1.57	1.92	2.27	2.61	2.96	3.31	3.66	4.01	4.36	4.70
40	0.91	1.17	1.44	1.70	1.96	2.22	2.48	2.74	3.01	3.27	3.53
50	0.73	0.94	1.15	1.36	1.57	1.78	1.99	2.20	2.40	2.61	2.82
60	0.61	0.78	0.96	1.13	1.31	1.48	1.66	1.83	2.00	2.18	2.35
70	0.52	0.67	0.82	0.97	1.12	1.27	1.42	1.57	1.72	1.87	2.02
80	0.46	0.59	0.72	0.85	0.98	1.11	1.24	1.37	1.50	1.63	1.76
90	0.41	0.52	0.64	0.76	0.87	0.98	1.10	1.22	1.34	1.45	1.57
100	0.37	0.47	0.57	0.68	0.78	0.89	0.99	1.10	1.20	1.31	1.41
110	0.33	0.43	0.52	0.62	0.71	0.81	0.90	1.00	1.09	1.19	1.29
120	0.30	0.39	0.48	0.57	0.65	0.74	0.83	0.91	1.00	1.09	1.18

**APPENDIX D: Ideal body weight**

Males and females > 18 years; based on BMI [wt (kg)/ht<sup>2</sup> (m<sup>2</sup>)]

Height (cm)	Body weight (kg)
140	44
145	47
150	51
155	54
160	58
165	61
170	65
175	69
180	73
185	77
190	81
195	86
200	90



## APPENDIX E: Subjective global assessment

### Scoring

A = normal

B = mild-moderate

C = severe malnourishment

1. **Percentage loss of dry weight in past 6 months:**  
A: < 5  
B: 5-10  
C: > 10.
2. **Dietary intake – overall change, type of change, severity of change.**
3. **Gastrointestinal symptoms daily for > 2 weeks**  
nausea, vomiting, diarrhoea, anorexia.
4. **Functional impairment – loss of strength or stamina.**
5. **Subcutaneous fat**  
infraorbital fatpads, triceps skinfold, biceps skinfold.
6. **Muscle wasting**  
temporalis, clavicle, acromion, scapula, ribs, first interosseous, quadriceps, knee, calf.
7. **Oedema.**

**Total score (A, B or C) is assigned based on the score for each component.**