

Table 5.2 List of source and target regions, their segmented volumes, and resulting masses compared with the reference masses (ICRP, 2002).

Organ	Male			Female		
	Volume (cm ³)	Mass (g)	Reference mass (g)	Volume (cm ³)	Mass (g)	Reference mass (g)
Adrenals	13.6	14.0	14	12.6	13.0	13
Blood (segmented vessels)*	973.7	1032.1	5600	807.4	855.8	4100
Brain	1381.0	1450.0	1450	1238.1	1300.0	1300
Breast	25.6	25.0	25	511.9	500.0	500
Eyes	14.3	15.0	15	14.3	15.0	15
Eye lenses	0.4	0.4	0.4	0.4	0.4	0.4
Gall bladder	66.0	68.0	68	54.3	56.0	56
Gall bladder wall	13.5	13.9	10	9.9	10.2	8
Gall bladder contents	52.5	54.1	58	44.4	45.8	48
Gastro-intestinal tract						
Stomach wall	144.2	150.0	150	134.6	140.0	140
Stomach contents	240.4	250.0	250	221.2	230.0	230
Small intestine wall	625.0	650.0	650	576.9	600.0	600
Small intestine contents	336.6	350.0	350	269.2	280.0	280
Right colon wall	144.2	150.0	150	139.4	145.0	145
Right colon contents	144.3	150.0	150	153.8	160.0	160
Left colon wall	144.2	150.0	150	139.4	145.0	145
Left colon contents	72.1	75.0	75	76.9	80.0	80
Recto-sigmoid colon wall	67.3	70.0	70	67.3	70.0	70
Sigmoid colon contents	72.1	75.0	75	76.9	80.0	80
Heart	795.4	840.0	840	587.2	620.0	620
Heart wall	314.3	330.0	330	238.1	250.0	250
Heart contents (blood)	481.1	510.0	510	349.1	370.0	370
Kidneys	295.3	310.0	310	261.9	275.0	275
Liver	1714.3	1800.0	1800	1333.3	1400.0	1400
Lungs	2891.3	1200.0	1200	2300.8	950.0	950
Lymphatic tissue [†]	134.0	138.0	730	76.8	79.1	600
Muscle tissue	27,619.0	29,000.0	29,000	16,666.7	17,500.0	17,500
Oesophagus	38.8	40.0	40	34.0	35.0	35
Ovaries				10.6	11.0	11
Pancreas	133.3	140.0	140	114.3	120.0	120
Pituitary gland	0.6	0.6	0.6	0.6	0.6	0.6
Prostate	16.5	17.0	17			
Residual (adipose) tissue	21,535.2	20,458.4	18,200	24,838.3	23,596.4	22,500
Salivary glands	82.5	85.0	85	68.0	70.0	70
Skin	3420.2	3728.0	3300	2496.8	2721.5	2300
Skeleton	7725.3	10,450.0	10,450	5767.4	7760.1	7760
Cortical bone [‡]	2291.7	4400.0	4400	1666.7	3200.0	3200
Trabecular bone [§]	572.9	1100.0	1100	416.7	800.0	800
Cartilage [¶]	1000.0	1100.0	1100	818.2	900.0	900
Active marrow [§]	1135.9	1170.0	1170	872.9	899.1	900
Inactive marrow [¶]	2530.6	2480.0	2480	1836.8	1800.1	1800
Miscellaneous [§]	194.2	200.0	200	155.3	160.0	160
Spleen	144.2	150.0	150	125.0	130.0	130
Teeth	18.2	50.0	50	14.6	40.0	40

Table 5.2 (continued)

Organ	Male			Female		
	Volume (cm ³)	Mass (g)	Reference mass (g)	Volume (cm ³)	Mass (g)	Reference mass (g)
Testes	33.7	35.0	35			
Thymus	24.3	25.0	25	19.4	20.0	20
Thyroid	19.2	20.0	20	16.4	17.0	17
Tongue	69.5	73.0	73	57.1	60.0	60
Tonsils	2.9	3.0	3	2.9	3.0	3
Ureters	15.5	16.0	16	14.6	15.0	15
Urinary bladder wall	48.1	50.0	50	38.5	40.0	40
Urinary bladder contents	192.3	200.0		192.3	200.0	
Uterus				77.7	80.0	80
Total body	71,109.9	73,000.0	73,000	59,258.0	60,000.0	60,000

Some of the reference values (e.g. blood and lymphatic tissue) duplicate other mass information and are, thus, not additive.

* Segmented blood vessels vs total blood (partly included in the organs).

† Segmented lymph nodes vs 'fixed' lymphatic tissue including lymphatic ducts and lymph.

‡ Segmented directly.

§ Incorporated in spongiosa regions.

¶ Partly segmented directly and partly incorporated in spongiosa regions.