

Table A1. Six possible sets of parameter values for thyroid biokinetic model for Marshallese and for American military personnel on Rongerik. Parameter sets 1b and 2b were preferred for Marshallese (see text).

Parameter sets	Water intake (L d ⁻¹)	Water loss via urine (L d ⁻¹)	Water loss via perspiration (L d ⁻¹)	Concentration of iodine in perspiration ($\mu\text{g L}^{-1}$)	Iodine loss via perspiration ($\mu\text{g d}^{-1}$)	Fractional uptake
Marshallese						
1a	1.5	0.5	1.0	37	37.0	0.35
1b (preferred)	2.0	0.5	1.5	37	55.5	0.32
1c	2.5	0.5	2.0	37	74.0	0.30
2a	1.5	0.5	1.0	37	37.0	0.42
2b (preferred)	2.0	0.5	1.5	37	55.5	0.42
2c	2.5	0.5	2.0	37	74.0	0.42
Average of data sets 1b and 2b (applied to Marshallese)	—	—	—	—	—	—
Military personnel (Rongerik Atoll)	2.0	1.1	0.9	37	33.3	0.30

Table A1. (Continued)

Parameter sets	Iodine intake ($\mu\text{g d}^{-1}$)	Iodine loss via feces ($\mu\text{g d}^{-1}$)	Iodine loss via urine ($\mu\text{g d}^{-1}$)	^{131}I urinary excretion day 16	^{131}I urinary excretion day 17	^{131}I urinary excretion day 19
Marshallese						
1a	158	15.2	105	2.32×10^{-4}	2.17×10^{-4}	1.88×10^{-4}
1b (preferred)	176	15.2	105	1.97×10^{-4}	1.85×10^{-4}	1.60×10^{-4}
1c	194	15.2	105	1.70×10^{-4}	1.59×10^{-4}	1.38×10^{-4}
2a	121	15.2	69	2.12×10^{-4}	1.98×10^{-4}	1.72×10^{-4}
2b (preferred)	121	15.2	51	1.55×10^{-4}	1.45×10^{-4}	1.26×10^{-4}
2c	121	15.2	32	9.84×10^{-5}	9.21×10^{-5}	7.99×10^{-5}
Average of data sets 1b and 2b (applied to Marshallese)	—	—	—	1.76×10^{-4}	1.65×10^{-4}	1.43×10^{-4}
Military personnel (Rongerik Atoll)	194	15.2	145	—	—	1.85×10^{-4}