

Iodine status of *Eeyou Istchee* community members of northern Quebec, Canada, and potential sources

Supplementary material

Table S1: Descriptive statistics of urinary iodine concentrations ($\mu\text{mol/L}$) and iodine-creatinine ratios ($\mu\text{mol/mol}$) by community of residence and sex

Dependent Variable	Community	Sex	Median ^a	Mean ^{a,b}	95% Confidence Interval ^a		
					Lower	Upper	
Urinary iodine concentration ($\mu\text{mol/L}$)	Community E	Female	0.87	1.00	0.86	1.16	
		Male	0.90	1.02	0.87	1.18	
	Community D	Female	0.96	1.02	0.87	1.18	
		Male	1.20	1.26	1.04	1.49	
	Community G	Female	0.87	0.99	0.83	1.17	
		Male	0.82	0.95	0.77	1.14	
	Community F	Female	0.81	0.79	0.69	0.91	
		Male	0.93	1.00	0.87	1.15	
	Community I	Female	0.94	0.88	0.74	1.04	
		Male	0.96	1.00	0.82	1.20	
	Community H	Female	0.93	1.05	0.88	1.24	
		Male	0.82	0.80	0.65	0.98	
	Iodine-creatinine ratios ($\mu\text{mol/mol}$)	Community E	Female	112.00	117.94	103.18	134.79
			Male	90.00	99.56	86.67	114.36
Community D		Female	122.67	132.57	115.64	151.96	
		Male	112.50	119.72	100.07	143.20	
Community G		Female	106.35	111.69	95.85	130.13	
		Male	81.92	88.53	74.73	104.84	
Community F		Female	94.60	97.03	86.60	108.71	
		Male	88.41	92.31	81.53	104.49	
Community I		Female	120.00	122.74	106.38	141.61	
		Male	109.05	104.72	88.22	124.26	
Community H		Female	129.71	139.75	119.78	163.01	
		Male	66.67	69.06	58.53	81.45	

a. Values were back-transformed from log scale by $10^x - 1$. b. Estimated marginal mean.

Table S2: Descriptive statistics of urinary creatinine levels (mmol/L) by community and sex

Community of residence	Sex	N	Median ^a	Mean ^a	Standard deviation
Community D	Female	70	8.60	9.77	6.72
	Male	41	10.00	10.70	5.34
	Total	111	9.50	10.12	6.24
Community E	Female	76	8.10	9.33	5.59
	Male	65	10.00	10.51	5.22
	Total	141	9.20	9.88	5.44
Community F	Female	103	8.60	10.05	6.91
	Male	80	11.00	11.79	6.73
	Total	183	10.00	10.81	6.87
Community G	Female	61	9.90	10.46	5.93
	Male	46	11.00	11.73	7.58
	Total	107	10.00	11.01	6.69
Community H	Female	54	6.95	8.00	4.99
	Male	47	12.00	12.03	6.32
	Total	101	9.00	9.88	5.97
Community I	Female	61	8.60	8.46	4.63
	Male	46	9.60	10.85	5.88
	Total	107	9.10	9.49	5.31
Total	Female	425	8.30	9.45	6.01
	Male	325	10.00	11.29	6.23
	Total	750	9.40	10.25	6.17

a. Values were back-transformed from log scale by 10^x-1 .

Table S3: Total serum Triiodothyronine (T₃) concentrations (nmol/L) by community, sex and age group^a

Community of residence	Sex	Age Group	N	Mean	Standard deviation
Community D	Female	15 - 39 y	44	2.39	0.40
		> 39 y	26	2.26	0.35
		Total	70	2.34	0.39
	Male	15 - 39 y	26	2.40	0.23
		> 39 y	15	2.37	0.29
		Total	41	2.39	0.25
	Total	15 - 39 y	70	2.40	0.35
		> 39 y	41	2.30	0.33
		Total	111	2.36	0.34
Community E	Female	15 - 39 y	49	2.47	0.33
		> 39 y	27	2.32	0.39
		Total	76	2.42	0.36
	Male	15 - 39 y	37	2.29	0.35
		> 39 y	27	2.21	0.36
		Total	64	2.26	0.35
	Total	15 - 39 y	86	2.39	0.35
		> 39 y	54	2.27	0.37
		Total	140	2.34	0.36
Community F	Female	15 - 39 y	65	2.28	0.38
		> 39 y	38	2.10	0.39
		Total	103	2.21	0.39
	Male	15 - 39 y	43	2.35	0.34
		> 39 y	38	2.23	1.27
		Total	81	2.29	0.90
	Total	15 - 39 y	108	2.31	0.36
		> 39 y	76	2.17	0.94
		Total	184	2.25	0.66
Community G	Female	15 - 39 y	42	2.16	0.45
		> 39 y	20	2.07	0.25
		Total	62	2.13	0.39
	Male	15 - 39 y	29	2.09	0.27
		> 39 y	18	2.04	0.32
		Total	47	2.07	0.29
	Total	15 - 39 y	71	2.13	0.38
		> 39 y	38	2.05	0.28
		Total	109	2.11	0.35
Community H	Female	15 - 39 y	33	2.06	0.34
		> 39 y	22	1.82	0.26
		Total	55	1.97	0.33
	Male	15 - 39 y	29	2.02	0.25
		> 39 y	19	1.85	0.23
		Total	48	1.96	0.26

	Total	15 - 39 y	62	2.04	0.30
		> 39 y	41	1.84	0.24
		Total	103	1.96	0.30
Community I	Female	15 - 39 y	35	2.18	0.32
		> 39 y	26	2.00	0.31
		Total	61	2.10	0.33
	Male	15 - 39 y	30	2.20	0.23
		> 39 y	17	2.06	0.35
		Total	47	2.15	0.28
	Total	15 - 39 y	65	2.19	0.28
		> 39 y	43	2.02	0.32
		Total	108	2.12	0.31
Total of communities	Female	15 - 39 y	268	2.27	0.39
		> 39 y	159	2.10	0.37
		Total	427	2.21	0.39
	Male	15 - 39 y	194	2.23	0.32
		> 39 y	134	2.14	0.74
		Total	328	2.20	0.53
	Total	15 - 39 y	462	2.26	0.36
		> 39 y	293	2.12	0.57
		Total	755	2.20	0.46

a. The total serum T3 was determined by routine clinical chemistry methods.

Table S4: Descriptive statistics of urinary iodine concentrations ($\mu\text{mol/L}$) by water source in the bush

Water source	Response category	<i>n</i>	Mean ^{a,b}	95% Confidence Interval ^a	
				Lower	Upper
Store bought bottled water	All or most of the time	156	0.96	0.85	1.06
	Sometimes/ rarely	215	1.08	0.98	1.17
	Never	370	0.90	0.85	0.96
Local spring	All or most of the time	281	0.90	0.83	0.97
	Sometimes/ rarely	140	0.92	0.82	1.03
	Never	321	1.04	0.97	1.11
Lake or river	All or most of the time	256	0.94	0.87	1.01
	Sometimes/ rarely	140	1.00	0.88	1.13
	Never	342	0.96	0.89	1.03
Melted ice or snow	All or most of the time	182	1.08	0.98	1.18
	Sometimes/ rarely	211	0.98	0.89	1.07
	Never	346	0.89	0.84	0.95
Tap water	All or most of the time	42	0.86	0.70	1.04
	Sometimes/ rarely	65	0.92	0.79	1.06
	Never	633	0.97	0.92	1.02
Rain	All or most of the time	34	1.01	0.80	1.25
	Sometimes/ rarely	99	1.06	0.92	1.20
	Never	604	0.94	0.90	0.99

a. Values were back-transformed from log scale by 10^x-1 . b. Estimated marginal mean.

Table S5: Descriptive statistics of iodine-creatinine ratios ($\mu\text{mol/mol}$) by water source in the bush

Water source	Response category	<i>n</i>	Mean ^{a,b}	95% Confidence Interval ^a	
				Lower	Upper
Store bought bottled water	All or most of the time	156	106.28	95.97	117.68
	Sometimes/ rarely	215	101.92	93.14	111.53
	Never	370	101.42	95.90	107.25
Local spring	All or most of the time	281	94.82	88.81	101.23
	Sometimes/ rarely	140	100.53	90.65	111.48
	Never	321	110.78	103.37	118.73
Lake or river	All or most of the time	256	104.97	97.34	113.19
	Sometimes/ rarely	140	96.56	86.46	107.83
	Never	342	103.36	97.20	109.90
Melted ice or snow	All or most of the time	182	114.46	104.07	125.87
	Sometimes/ rarely	211	101.69	93.32	110.80
	Never	346	97.54	91.96	103.45
Tap water	All or most of the time	42	88.94	74.88	105.60
	Sometimes/ rarely	65	96.01	82.49	111.72
	Never	633	104.20	99.38	109.25
Rain	All or most of the time	34	109.23	85.05	140.21
	Sometimes/ rarely	99	103.35	89.26	119.64
	Never	604	102.13	97.53	106.94

a. Values were back-transformed from log scale by 10^x-1 . b. Estimated marginal mean.